# · 1911. NEW ZEALAND.

# MENTAL HOSPITALS OF THE DOMINION

(REPORT ON) FOR 1910.

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

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The Hon. the Minister in Charge of Mental Hospitals to His Excellency the Governor.

Wellington, 31st July, 1911.

I have the honour to submit to Your Excellency the report of the Inspector-General of Mental Hospitals on the mental hospitals of the Dominion for the year 1910.

I have the honour to be,

Your Lordship's most obedient servant,

GEO. FOWLDS, Minister in Charge of Mental Hospitals.

The Inspector-General to the Hon, the Minister in Charge of Mental Hospitals.

Sir,— Wellington, 21st July, 1911.

I have the honour to present the statutory report on the mental hospitals of the Dominion for the year ended 31st December, 1910.

The number of patients at the beginning of the year was 3,548 (males, 2,083; females, 1,465), and at the end 3,670 (m., 2,160; f., 1,510), an increase of 122 (m., 77; f., 45). The average increase during the former five years was 102. The total number under care was 4,558 (m., 2,722; f., 1,836), against 4,237 in the previous year, and the average number resident during the year was 3,473 (m., 2,028; f., 1,445), against 3,374 in 1909, or 99 more in the year under review.

Distribution.—Counting 124 (m., 91; f., 33) absent on leave as still resident in the mental hospital whence they left, the 3,670 patients on the register at the end of the year were distributed as follows:—

					Males.	Females.	Total.
Auckland				• • •	 492	298	790
Christchurch	• • •		• • •		 362	317	679
Dunedin (Sea	cliff and	Orokoni	ni)		 542	338	880
Hokitika`			,		 135	57	192
Nelson					 93	97	190
Porirua					 513	384	897
Ashburn Hall	(private	mental	hospital)		 23	19	42
					2,160	1,510	3,670

Of those technically on leave, 56 men were resident at the Camp, near Dunedin, and 17 boys at the Home for Feeble-minded at Richmond.

Ratio to Population.—The following calculations show the ratio of patients on the register at the end of the year to the estimated general population, both exclusive and inclusive of the Native race. The number of Maoris on the register was 42 only (m. 28; f., 14).

The proportion of the total in	sane to the	total pop	ulation	was,		
Exclusive of Maoris					r 10,000,	or 1 in 276
Inclusive of Maoris		• • •		34.94	"	1 in 286
The proportion of the male in	sane to the	male por	pulation	n,—		
Exclusive of Maoris					,,	1 in 249
Inclusive of Maoris				38.89	,,	1 in 257
The proportion of the female	insane to th	ie female	popula	tion,-		
Exclusive of Maoris		• • •		31.64	,,	1 in 316
Inclusive of Maoris						1 in 398

When quoting last year from an article by Dr. Urquhart which stated that out of 4,082 patients suffering from general diseases, and 873 from nervous diseases, at the Edinburgh Royal Infirmary, 55.5 and 69.3 per cent. respectively were discharged as unrecovered, I remarked that ratios of patients to population in the records of mental hospitals "would find their parallel in general hospitals if those patients only were discharged who were apparently restored to the state of bodily health and integrity which preceded the disorder or accident for which they were admitted." While in no way wishing to belittle the meaning of these figures brought home to us by the accumulation of unrecovered patients in mental hospitals, I would point out the sentiment of physical degeneracy which would take hold of the population if each year the general hospitals were enlarged to accommodate those who had not recovered and had not died. Obviously, the sentiment would be unjust, the more so because in many of the diseases the hereditary factor would not enter; but the contemplation should temper the feeling of uneasiness produced by statements of ratio of insane to population when it is remembered that the insane are a sick folk whose span of life is lengthened by being kept in a suitable environment.

Admissions.—Exclusive of 222 patients (m. 165; f., 57) transferred from one institution to another, the admissions numbered 788 (m., 474; f., 314), as against 716 (m., 419; f., 297) in the previous year, an increase of 72 (m., 55; f., 17). Of the 788, those admitted for the first time numbered 660 (m., 409; f., 251), the remainder, 128 (m., 65; f., 63), representing patients who had previously been in one or other of the mental hospitals. Towards the first admissions,

immigrants who became insane within a year of landing here contributed 23. The United Kingdom contributed 12, Australia 5 (one of whom had had a previous attack of insanity), other parts of the Empire 2, foreign countries 3, and the twenty-third was a New-Zealander returning after absence abroad.

Ratio of Admissions to Population.—Excluding the Native race (13 male and 3 female patients) and all transfers, the proportion of admissions (whether first or not) and first admissions to the estimated general population stands respectively at 7.70 and 6.23 per 10,000, or, in other words, every 1,299 persons in the general population contributed an admission and every 1,604 a first admission.

Hereunder are tabulated the returns since 1900:-

	••	•	Ratio to 10,0	000 of Population of	Number of Persons in	Population contributing
	Year.	:	Admissions.	First Admissions.	One Admission.	One First Admission.
1900		T	6.39	5.02	1,565	1,990
1901			6.83	5·61	1,464	1,774
1902			6.48	5.∪7	1,542	1,971
1903		:	6.78	5.60	1,473	1,783
1904	• • •		6.55	<b>5·4</b> 2	1,526	1,844
Quinqu	ennial av	erage	6.61	5.36	1,513	1,866
1905	***		6.76	5.59	1,478	1,786
1906			7.16	5.82	1,396	1,718
1907			6.39	5.04	1,567	1,982
1908			7.63	6.24	1,311	1,604
1909			7.15	5.76	1,398	1,737
Quinqu	ennial av	erage	7:04	5.70	1,421	1,754
Decenn	ial averag	ge	6.84	5.24	1,462	1,804
1910		• • • •	7.70	6.23	1,299	1,604

This table, especially the part dealing with first admissions, is important, as it deals with occurring insanity and not with the surviving accumulation of years; but in making deductions it must be remembered that our population is yearly augmented by ready-made adults, persons who do not dilute the ratio during the immune period of their lives. Ignoring the irregularities, there is undoubtedly a tendency towards an increasing ratio, and 1910 with its 72 admissions in excess of the previous year stands higher for all admissions (7.70 to 10,000) than any previous year since 1900, and shares, with 1908, a similar position with respect to first admissions. It will be seen that while in the average of the ten previous years every 1,462 persons in the population contributed an inmate to the mental hospitals, in the year under review an inmate was contributed by every 1,299; and, with regard to persons whose insanity was for the first time brought under the notice of the Department, every 1,604 persons in the general population contributed one in 1910, and every 1,804 persons one in the average of the ten previous years.

In this connection, the following quotations from the Report of the Royal Commission on the Care and Control of the Feeble-minded will be of interest, especially so at this time when the matters referred to have been kept in mind during the framing of the Mental Defectives Bill which was circulated last year, and which you have expressed your intention to introduce in the coming session of Parliament: Sir Edward Fry stated in evidence,—

"The ranks of the insane, as well as of the imbecile, are recruited from the children of the feeble-minded. . . . In the ruder state of society which has passed away, little heed was taken of these unfortunate children, and many of them, no doubt, died comparatively early in the struggle for existence. But we have learned to think more tenderly of the inferior members of the race, and we seek to protect them from the calamities and sufferings to which they are naturally exposed, and to preserve their lives to the utmost. But in so doing, and so doing rightly, we incur, it appears to me, another responsibility—namely, that of preventing, so far as we reasonably can, the perpetuation of a low type of humanity, for otherwise the beneficence of one generation becomes the burden and injury of all succeeding ones."

The Commissioners came to the following conclusion :-

"In our opinion, the general feeling of the people would at present rightly condemn any legislation directed chiefly or exclusively to the prevention of hereditary transmission of mental defect by surgical or other artificial means. The evidence strongly supports measures, which on other grounds are of pressing importance, for placing mentally defective persons, men and women, who are living at large and uncontrolled, in institutions where they will be employed and detained; and in this, and in other ways, kept under effectual supervision as long as may be necessary."

Deaths and Discharges.—Out of 4,558 cases (m., 2,722; f., 1,836) representing the total under care during the year, the number discharged (omitting transfers, where discharge from one institution is coincident with admission into another) was 383 (m., 211; f., 172), and 283 patients

(m., 186; f., 97) died. Had last year's relation of discharges and deaths to the total number under care been maintained, there would have been 22 more discharges and 65 fewer deaths. careful analysis shows the difference to be due to the quality of the admissions and the increasing age of the permanent inmates, a factor which some years ago was pointed out as likely in the future to raise the low death-rate. Added to these is a non-recurring item of 11 deaths from influenza, against 1 in the previous year, and was commented upon in the last report. The epidemic was at the Nelson Mental Hospital,

The percentage of deaths calculated on the average number resident was 8.15 (m., 9.17; f., 6.71), against 6.05 (m., 6.90; f., 4.84) in 1909. Contrasting the proportions per cent. on the

total number of cases under care, the figures are respectively 6.2 and 4.8.

The percentage of the principal contributing factors calculated on the total number of deaths is hereunder contrasted with the returns of the previous year:-

General diseases	 	 20.84	against	22.06
Including tuberculosis	 	 8.13	,,	13.23
Diseases of the nervous system	 	 $34 \cdot 24$	,,	33.33
Including general paralysis	 	 14.14	,,	13.23
Senile decay	 	 21.91	• •	18.63

It will be seen that the above causes account for three-fourths of the deaths. Table XII, giving the causes of death, should be read in conjunction with Table VI, giving the ages at death, and Table X, giving the length of residence at death. In 1909 the patients over sixty years of age who died numbered 80; last year they numbered 124, one being a centenarian Again, as giving an indication of the quality of admissions with respect to general health and condition, in 1909 the patients who died after a residence of nine months and under numbered 62; last year they numbered 98. Apart from the proportion of deaths contributed by the number of senile patients admitted, many of whom were little other than "indigent faint souls past corporal toil," three being over ninety, and one over a hundred years of age (vide Table III), that the death of permanent residents of increasing age is beginning to tell may be inferred from the fact that 48 of the patients who died had been in residence over fifteen years, against 28 in the year previous.

The deaths due to accident or violence were investigated at the time, and members of the staff

fully exonerated from blame.

Of the patients discharged, 327 (m., 182; f., 145) were classed as recovered, and 278 (m., 194; f., 84) unrecovered, 222 of which number (m. 165; f., 57) were transfers. The large number of transfers is accounted for by the closing of the Wellington Mental Hospital, familiarly known as Mount View," which formed a subject of comment in the last report.

The quality of admissions touched upon above as tending to increase the death-rate also tends to reduce the recovery-rate, and there are other factors which influence the latter without markedly interfering with the expectancy of life. The percentage of recoveries calculated on admissions was 41.50 (m., 38.40; f., 46.18), against 48.74 (m., 42.72; f., 57.24) in the previous year, the actual number of persons discharged recovered being 327 and 349 respectively. In the summary of total admissions since the year 1876, the percentage of recovery works out at 40.23

(m., 38.05; f., 43.49).

The Mental Defectives Bill, before referred to, has a provision, adapted from the procedure in Great Britain, for medical officers to send a yearly certificate regarding patients under their care, stating that their further detention is necessary for their own good or in the public interest, and thus the reception order, now current till discharge, is to be kept alive. A similar procedure, though not statutory, has been in operation for some years: the medical officers divide the patients into "curable" and "incurable," and further divide the "curable" into those for whom there is a chance of recovery, which they estimate as over or under a 40-per-cent. chance. This estimate is made as soon after admission as possible, and is reviewed at the end of each year.

The results will be found embodied in the following table, which is a better guide to the value of treatment than percentage ratios on admissions, which vary with the quality of the

admissions, whereas, in the table, patients deemed to be incurable are excluded.

	Of	3,548 n 18 <b>t</b>	Pat: Jan	ients uary,	reaid 191	lent 0.	Of 1		Pati uring			ltted				1	[otal	B.			
Showing as on 31st December, 1910, the Discharges, Deaths, and Length of Residence of those remaining, after the Exclusion of all Cases deemed incurable on 1st January, 1910, or on Admission in Cases admitted during the Year.	Nur pect disch	ass and the contract of the co	ex- o be d as	Ren	The nain after cludi urab	der,	Nu peo disci		ex- o be ed as	Rer	lass The nain after cludi urab	der,		Clas and			Class and		G	enera	d.
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
	71	69	140	93	96	189	146	123	269	97	82	179	217	192	409	190	178	368	407	370	777
Discharged recovered	57	49	106		37				126				137		232				182		1
Died		i	i	16 3	7	23 10			4	6 2		8		3 1	1	22 5				12 9	
Remaining, residence 1 month or less							10	17													
Ditto 2 to 3 months			• •		٠.	• • •		18													
, 3 to 6 ,	•••	. ••		• •	• •	••	16 14	15 18			16 13										
0 to 19	1		1	• •			7				13			6					1		
,, over 12 ,,	14	19	33	44				•					14	1 -							122
Total remaining	14	19	33	44	45	89	65	74	139	74	66	140	79	93	172	118	111	229	197	204	401

5 H.—7.

Analysing this table, it will be seen that Class A, numbering 140, must be made up chiefly of those patients belonging to Class C of the previous year who were in residence on the 1st January, 1910. They, as a matter of fact, numbered 105, whereas those left over from Class A numbered 18, making a total of 123, or 17 short of the estimate of patients with a 40-per-cent. chance of recovery. Doubtless, some of the 105, and almost certainly some of the 18, sunk into Class B; but it is clear when the time came for the condition of the patients to be reviewed the results of treatment were manifested by the promotion of some of the 129 left over of D, and possibly some of the 66 left over from B, to the more hopeful class. Subtracting the 140 estimated in 1910 as belonging to Class A from the general total of patients in the table remaining at the end of last year, one gets 178 persons who have to be accounted for. Some of these may have dropped out of the table, but the fact remains that the estimate for Class B, which is comprised of patients who on the 1st of January, 1910, were deemed to have a chance of recovery under 40 per cent., is 189, or 11 in excess of last year's residuum. Thus there has not only been a promotion from a lower to a higher class, but some of the seemingly incurable have so far responded to treatment that they have been promoted to the curable class. This table shows in a manner that ordinary returns do not show the skill and care which has been exercised in the study and treatment of the patients.

Turning to the admissions, one notes that about 44 per cent. are classed as curable, and about 26 per cent. only are placed in the more hopeful class. Here, then, is a measure of the quality of the admissions. In this table, also, is a measure, good enough for all practical purposes, of the proportion of patients in an average mental hospital who at any one time may be regarded as curable, and as such get special treatment. On the 1st January, 1909, the proportion under Classes A and B was 8.52 per cent. of the patients resident, and under Class A 4.42 per cent., the figures for the corresponding date of the year under review are 9.27 and 3.95 per cent. respectively.

Causes of Insanity.—For the purposes of treatment, the causes as given on the admission-papers have, for the most part, to be set aside. In about 10 per cent. of the admissions the cause is entered as unknown, or is so classed after admission because the ascribed causes are obviously incorrect or insufficient; and, doubtless, further investigation of causes which have been provisionally accepted would add to that proportion. There has been no opportunity, so far, to follow up a sufficient number of cases to set forth a table with cross references giving for each case all the factors contributing. Neither of the certificates accompanying a patient on admission is, as a rule, given by his ordinary medical attendant, with the result that, while fulfilling legal obligations, such certificates are of very little assistance to the medical staff. In the Bill there is a direction that one of the certifiers should be the usual medical attendant of the patient, and among other advantages one may expect to get thereby will be trustworthy information with respect to causation, and perhaps something more definite on the question of heredity. For practical purposes, one has to assume, first that there has been some tendency to mental disorder, and next that the unstable organism has been subjected to some toxic influence, either introduced or a fault in the chemical laboratory within the body, and thus arrive at indications for restoring the physical and thereby the mental well-being.

Hereunder Table XIII in the Appendix is summarized with the proportions per cent. under each heading. The transfers are excluded:—

Heredity					Males. 8.65	Females. 12:42	Total. 10 <sup>,</sup> 15
Congenital mental					6.99	11.11	8.63
Previous attack					7· <b>3</b> 8	9.24	8 12
Critical periods					19.20	21.66	20.18
Alcohol					16.67	4.14	11.68
Other toxins					7.17	1.60	4.95
Mental stress					5.06	13.06	8.25
Disease of nervous	system				4.85	5.42	5.08
Other bodily disor	ders				5.48	5.42	5.46
Child-bearing, &c.						7.97	3.17
Physiological defec	et or er	ror			3.28	0.32	2.28
Traumatic					2.32	0.35	1.52
Unknown			•••		12.65	$7 \cdot 32$	10.23
				-	100:00	100:00	100:00

Under the heading of "Admissions" the question of heredity was introduced, and, lest it should be supposed that the pronouncement there was too strong in view of the proportion above given, it is well to state that 10 per cent. represents facts obtainable and not the actual incidence.

Popular talk in recent years on the subject of heredity, at a time when the phases of opinion held by scientists have been under discussion and less dogmatic views are expressed by publicists, has left the man in the street wondering if there is anything in it after all. There being so many men in the street, it is well that they should be told that the leaders of all the schools are agreed that commonly the important factor which makes the difference when one individual does and another does not become insane under a like stress is a tendency which may be and commonly is transmitted by heredity. In this connection it may not be out of place to express a hope that the community will take full advantage of the Eugenics Education Societies which have been founded. The mating of individuals, as matters are, is thought to be the outcome of free choice; but to the right and left are artificial barriers which few overleap—such as social position and religion—and eyes are not turned from the path which leads to limited selection. With the spread of knowledge and higher ideals, it is not too much to hope that in time there will arise the eugenic barrier which will as naturally exclude from selection the palpably unfit.

Weekly Reports. - Last year mention was made of the initiation of a system of weekly reports sent to the Head Office from each mental hospital. In these is embodied the medical journal, and some further information which permits of the different hospitals being compared, and by addition to arrive at certain facts with regard to the whole body of patients. Hereunder are some gleanings :-

The proportional average of patients under special-observation notices in the year under review was 2.86 per cent. (males, 2.49; females, 3.38). The supervision of these patients, who are for the most part actively suicidal, is one of the most anxious duties the staff has to perform. The notice issued by the medical officer contains a statement giving reasons necessitating such observation, and this notice has to be read and signed by each relieving attendant before he takes

over duty.

The proportion of those who were classed as more or less dangerous was 6.75 per cent. (m., 3.92; f., 10.80). These patients require careful observation, but, as a rule, not to the extent of those above, because when by themselves they are harmless, and many give indications when they cannot be trusted. It will be noted how largely women preponderate in this class. To account for this, apart from periodicity of outbreaks and some other factors influencing the type of mental disorder, an explanation may be found in the form of occupation. Men take readily to outdoor work on the farm, and are, so to speak, subdued by the environment; whereas it is difficult to lead women to adopt an unaccustomed occupation. They perform domestic duties in the kitchen, laundry, and sewing-room, and for obvious reasons it would be unwise to let them work about a farm where they cannot be distinctly separated from other workers. Under the new hospital scheme of separate buildings, each in its own ground, flower and kitchen garden plots will be tried to give women open-air occupation for some period of the day.

Epileptics, owing to their impulsiveness and the occasional outbreaks of violence associated with fits, to some extent coincide with the above class. The proportion of epileptics was 7.27 per

cent. (m., 6.64; f., 8.02).

Patients who labour under general paralysis of the insane, a fatal malady, pass through phases in which they need varying attention. They are liable to be injured—their bones fracture easily, they require supervision when taking their food, and in the last stages need careful nursing. The disease is conspicuously less prevalent here than in Great Britain, and in each country the proportion of women attacked is considerably fewer. The proportion under care was as follows: 1 45 per cent. (m., 2 11; f., 0 53).

The proportion of patients who were kept in bed in the daytime from whatever cause, whether

as a form of treatment for mental disorder or for physical enfeeblement or sickness, was 3.04 per

cent. (m., 2.21; f., 4.08).

The above groups comprise patients who are the particular care of the nursing staff. On the other hand, the proportion of patients who were usefully employed according to their capacity was 65 43 per cent. (m., 70.84; f., 57.85). Work, while promoting the cure of the curable, is a great factor in bringing about contentment. Were it not for employment, the attitude of the patients towards the staff would make their care and control more anxious and costly, would engender a feeling of discontent, and would cause a decline in the recovery-rate. The men, as before stated, are principally employed upon the farm. As showing how the unfit now outside institutions may, under proper guidance, add to the wealth of the country, the farm returns may be studied.

The Staff .- Though not falling within the year under review, I cannot, writing after the event, fail to record with deep regret the death of Mr. Chapman, the Superintendent of the Nelson Mental Hospital. Mr. Chapman had had a long, useful, and honourable career in the service before taking up the work at Nelson, and the experience and enthusiasm he brought to bear in the management of that institution were apparent to all. He was a large-hearted, kindly man, of whom it would not be saying too much to say he was beloved by the patients, and possessed withal His untimely death was a great loss to the Nelson Mental Hospital, with a rigid sense of duty. which he had completely identified himself, and to the whole service.

Death has also taken Mr. Newport, head attendant at the Sunnyside Mental Hospital, a man whose influence for good during twenty-six years' service could not easily be overrated -- of whom I for one felt that under any given circumstances he would have done what was just and right. His early military training made order and discipline almost an instinct, but the exercise of

authority was tempered by geniality, tact, and sound common-sense.

I have to thank you, sir, for so readily agreeing, when representations were made, to the appointment of Dr. Gribben to assist me, and for the appointment of an additional Assistant Medical Officer for the Mental Hospitals at Auckland, Seacliff, and Porirua. The vacancies have been advertised in Great Britain, and I am pleased to state that Sir James Moody, Medical Super-

intendent of the Cane Hill Asylum, has consented to make a selection.

The nursing staff continues to receive instruction in their work by lectures and demonstrations. The first year of service is probationary. At the end of this time there is an examination in elementary anatomy and physiology, and the duty of an attendant or nurse in certain emergencies. On passing this examination probationers are appointed to the staff as juniors, and so continue for two years, during which time instruction is given in their special work, including, as it does, the nursing care of patients suffering from mental and bodily disorders. The aim of the teaching is to deal with the subjects from the practical side. At the end of this period the candidates sit for a written examination, the papers being set in and returned to the Head Office for correction. I then hold in each institution an oral examination, with the Medical Superintendent as coadjutor, and Miss Maclean examines in nursing. The candidates who pass are registered, and become senior nurses and attendants. Those who do not pass have to put in another year's service before attaining the rank and pay of seniors.

The following is the list of those who passed at the last examination: Dorothea B. Browne. Michael John Cooney, Thomas L. Cooney, Mary Cruickshank, Christina Drummond, Annie E. Johnston, Miriam Mayze, Ethel Naylor, Arthur Albert O'Donnell, David Riddle, Ellen Mary Sadler, George Shand, Isabel Stuart, John D. Woods, Sloan B. Woods, John Wright.

Financial Results.—The details of expenditure are given in Tables XX and XXI.

The expenditure in different institutions must perforce vary according to circumstances—
r.g., local prices, freights on supplies, climate governing fuel and nature of clothing, scattered or
concentrated buildings and farm lands, number of patients entailing proportionately more or
less paid labour, and so forth. But in each hospital expenditure is carefully considered, and
economy—that is, a providing for all that is necessary without waste—enforced. What has been
said regarding vital statistics refers equally to expenditure, too much must not be inferred in
comparing one year with another:—

			19	910.			į		19	09.				1910	).		1910	0.
Mental Hospital.		al C Pati		Pat Rec Mai Sale	ient, eipt nten	less for ance, Pro-		tal C Pat	lost ient.	Pati Rec Mair Sale	ent, eipt iten	st per less s for ance, Pro-	D	ecre	sse.	. In	crea	sé.
Auckland Christchurch Seacliff Hokitika Nelson Porirua Wellington*	£ 26 34 40 25 29	1 15 7	d. 9 6 7 2 3 1 10	19 22 27 22 23 25	s. 15 15 14 6 10 5	d. 7 7 6 2½ 3	£ 25 38 42 26 30 33	s. 15 2 4 4 4 19	d. 1134 94 1 44 5	£ 17 23 29 23 22 25	s. 13 2 2 9 15 1	11½ 3¾ 10 10¾	£ 0 1 1 1	s 6 8 3	d. 8½ 4 8½	£ 2	s. 1  14 3	7 <del>1</del> 10 <del>1</del>
Averages	33	9	01/2	24	1	83	34	13	31	24	2	10 <del>1</del>	0	1	11/2		• • • •	

<sup>\*</sup> Closed 8th June, 1910.

In this table Head Office salaries and expenses (£2,146 3s. 10d.) and medical fees (£1,346 16s.) are omitted. Giving these value, the net annual cost per patient is £25 2s.  $1\frac{1}{4}$ d., as against £25 0s.  $9\frac{1}{4}$ d. for 1909, an increase of 1s. 4d.

In stating the cost per patient above, interest on capital expenditure is omitted, and also for repairs charged to the Public Works Consolidated Fund. Adding these items, the approximate full cost per annum will be—

	s. d.  12 6 <del>1</del> 7 10 <del>1</del>	33	s. 9	d. O <del>3</del>
,, 1000 101 1110111011 001011011, 1010		1.	0	41
interest (averaged at 4 per cent.) on Public Works expenditure from July, 1877, to 31st March, 1911 Proportion of interest (averaged at 4½ per cent.) for capital		6	19	-2 4 <del>1</del>
cost previous to above period		0	14	6
Parameter state of the				
Gross cost		42 9	3	31
Less receipts for maintenance and sale of produce	•••	9	7	3 <del>3</del>
Net cost		£32	15	11 <u>1</u>

In 1909 the full cost so reckoned was £42 8s. 94d., and the net £31 18s. 44d.

It will be seen that in the aggregate there has been a decrease of 1s. 1½d. per patient in the institutions, but when the entire expenditure is taken into account there has been an increase of 1s. 4d. per head. We must look forward to a further increase, because the expense is disproportionate when development is taking place, and the increase in numbers has necessitated the appointment of additional officers.

Farming Operations.—Hereunder is the statement of expenditure and receipts, &c., in connection with the farms at the mental hospitals:—

Dr.		£	8.	đ.	Cr.	£	8.	d
To Salaries and wages					By Cash sales of produce, &c	5,695	17	7
Feed					Value of produce grown on farms and			
Seeds, &c., manures		865	14	4	consumed in the mental hospitals	12,106	17	5
Implements, harness, repairs,	&c	683	9	5				
Stock		523	5	2				
Rent, rates, &c				7				
Fencing, roading, &c	٠	189	8	3				
Harvesting, threshing, &c			12					
Railages		125	19	10				
Buildings		63	12	5				
Sundries		157						
Balance		8,900	1	4				
		£17,802	15	0	£	17,802	15	0

This is a very satisfactory statement. Compared with 1909, the cash sales have increased by £5 6s. 8d., and the value of produce consumed has increased by £569 2s. 9d.

The expenditure at the individual farms is given in the following table:-

								1	Mer	tal H	овр	ital	В.											
	Auc	klar	d.	Christc	hurc	h.	Seac	liff.		Hok	itik	а.	Nel	lson		Pori	rua.		Welli	ngt	on.		tal.	
	£	8.	d.	£	8.	d.	£	8.			s.	đ.	£		d	£	8.		£		d.	£		đ.
Salaries and wages	441		0			0	1,034					4			10					2	6			10
Feed	168		5			4	1,269	0	0		19	4	101	8	8	1,028	17	11	49	6	4	2,843	16	C
Seeds, &c., manures	163	16	7	99	17	0						1				257		4			i	865		
Implements, har- ness, repairs, &c.	57	12	3	134	15	9	377	14	4	15	10	3	46	10	8	51	6	2		• •		683	9	5
Stock	30	4	9	325	16	1	110	7	9	2	10	0	5	19	2	48	7	5				523	5	2
Rent, rates, &c				391	3	8	267	7	11	1		- 1									- 1	658	11	7
Fencing, roading,	21	12	2	72	16	8	94	19	10		• •	-					•			•	!	189	8	9
Harvesting, thresh- ing, &c.		• •	İ	92	12	4	•	•				ļ					•			•	į	92	12	4
Railage						- 1	125	19	10												- 1	125	19	10
Buildings					17	3	22	15	2			į		•								63	12	5
Sundries		19	2			4	•							0	0							157		
Totals	907	2	4	2,087	18	0	3,633	1	4	110	12	0	362	12	4	1,698	18	10	102	8	10	8,902	13	8

Hereunder is extended the statement of receipts:-

	Menta	al Hospital			Produce Cas		for	Value of Produce consu	med.	Tot	al.	
					£	8.	d.		d.	£	8,	đ.
Auckland	• • •		•••	• • •	502	1	1	2,278 12	11	_,	14	0
Christchurch	l				1,573	16	0	2,336 0	1	3,909	16	1
Seacliff					2,101	14	6	4,284 10	8	6,386	5	2
Hokitika								328 15	9		15	9
Nelson		• • •	,.,		254		4	659 18	1	914	8	5
Porirua					1,139	11	4	2,218 19	11	3.358	11	3
Wellington		•••	•••		124	4	4			124	4	4
Total			• • •		5,695	17	7	12,106 17	5	17,802	15	0

Of the 187 acres at Auckland, about 40 are taken up with buildings, plantations, &c.; the rest, except 60 acres grassed for grazing, is brought under close cultivation. The farm is compact. At Christchurch £391 is spent on rent and rates for 200 acres leased. The Mental Hospital land is of similar area. The shorthorn dairy herd is promising excellently, and £103 was received for the sale of young bulls. The largest individual item in the cash sales is £685 for rams. At Seacliff the available land is scattered, making the farming relatively expensive, and the bush, comprising some 430 acres, which is the glory of the place, and of incalculable benefit to the patients, does not bulk largely in farm returns. At Waitati the extent of bush is approximately 800 acres. Feed formed a large item in the expenditure. There is not sufficient good land in these large estates, and hence the item £267 for rent and rates. Among the outstanding items sold for cash were potatoes, £511, and eggs, £430. I might parenthetically state that at Seacliff, though not included in these returns, there is a considerable harvest from the sea. The fish caught during the year meant, in terms of food-supply, 270,000 lb., of which 80,000 lb. was distributed gratis to other public institutions, Government and otherwise. Dr. King draws attention to this in his report, and claims that some adjustment should be made whereby Seacliff would receive credit for the fish supplied to other institutions. Most of the land at Hokitika is poor, and, were it not for the benefit received by patients in working it, would not pay to improve. Firewood, which does not, of course, show in this return, is about the most profitable product of the estate, as may be gleaned from Table XXI in the appendix. At Nelson there are 208 acres, of which about 140 are in grass and 8 acres in plantation, leaving 60 acres which are under cultivation. The largest item among the cash sales was £215 for pigs. At Porirua, of the 889 acres, the watershed absorbs 541, and the buildings and plantations 60. The land produces to the best of its ability. The largest item of expenditure was for feed—namely, £1,028. For cash sale of poultry and eggs £448 was received, and £344 for the sale of pigs.

Accommodation.—The Wolfe Bequest Hospital at Auckland is completed and in occupation. At Porirua the extensive additions were filled by transfers from Mount View; and it may reasonably be anticipated that the admission rate at both these institutions will continue to rise—in Auckland as a result of the large settlement taking place in the province, and at Porirua because it now gets the admissions which went to Mount View. To these particular instances of anticipating a larger admission rate must be added the general rise in admissions which is to be expected from an increasing population, and one may fairly assume an annual expenditure of from £12,000 to £15,000 in buildings to keep pace with this increase. But for the next two years a sum largely in excess of this is necessary, especially as surplus accommodation was one of the features of the classification scheme we considered. The first instalment of this relief should by now have been

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almost ready for occupation at Tokanui by patients from other mental hospitals. Sketch-plans to accommodate 250 were made and handed over for development to the architect detailed for the work, with whom all particulars were discussed. He, unfortunately, became ill, and as the serious turn his illness took was not at first anticipated, work was suspended in expectation of his return. When, however, the illness was prolonged another architect was detailed for the work; the requirements were discussed with him, and one of the plans was got through. For this tenders are about to be called. In the meantime, to afford immediate substantial relief for overcrowding, plans for an addition at Auckland have been completed, and specifications are being got out. This once out of hand, the plans and specifications of two other buildings at Tokanui will be got through, in order that they may be started before the first is completed. These preliminary buildings for the new institution are being placed on a piece of land jutting out from the main estate towards Te Puhi Railway-station. This land was purposely included to avoid delay of roading when the buildings come to be erected, there being a public road from the station to the site, about a mile and a half distant. The Court sits next month to fix the price of the Native part of the land.

The building at Auckland will be for 240 patients, and will have a home for nurses and one for attendants — a separate house. There will also be accommodation for an assistant medical officer. The building will be for the class of patient commonly designated as "refractory," and thus the main Mental Hospital will be left for the classification of well-behaved patients. The design of the additions follows the configuration of the site, but has been so arranged that all rooms will have ample sunlight and fresh air, and the observation of patients will be greatly facilitated. There is a central kitchen block, from which four dining-rooms radiate, one for each ward. Two of these wards are for fifty and two for seventy patients each. Every ward has a small associated dormitory, the rest of the sleeping-rooms being single, and cross-ventilated in the manner first adopted in the additions to Porirua, and there working successfully. The wards are complete in themselves, and therefore the kitchen and administration blocks and one male and one female ward will be built first, in order that they may pass into occupation when the two other wards are being completed.

At Seacliff the recommendations approved at my last visit have been put in hand. Hospitals

on the lines of the Wolfe Bequest should now be gone on with at Sunnyside and Porirua.

The work this year has been beset with difficulties, and I must express my appreciation of the support I have received from yourself and from the officials in the Department. The management of the institutions is being carried out faithfully, and the good work of the staffs deserves commendation.

Dr. Gribben's appointment will be of great assistance. He has been long enough in the office at this date for me to express this opinion. To Miss Maclean for her co-operation throughout the year I have to express my thanks.

I have, &c.,

FRANK HAY.

#### INSPECTION TO THE VARIOUS MENTAL ENTRIES OF VISITS OF HOSPITALS.

#### AUCKLAND MENTAL HOSPITAL.

23rd March, 1911.

I visited this Mental Hospital on the 12th, 14th, 15th, 22nd, and to-day, seeing all the patients and going over all parts of the institution. The medical journal for the week ended on the 18th shows that there are 311 patients (m., 508; f., 303). Of this number 34 (m., 13; f., 21) are under special-observation notices, as suicidal; 65 (m., 27; f., 38) are labouring under epilepsy; 13 (m., 12; f., 1) are general paralytics; 69 (m., 27; f., 42) are classed as dangerous—this figure, however, includes the majority of the epileptics. These, together with the sick and the feeble in body and mind, are the chief care of the nursing staff. Altogether, 351 patients (m., 185; f., 166) are unemployed. The remainder are usefully employed: over 200 men are working on the farm or in the garden; while the kitchen, laundry, and needlework are the principal outlets for the employment of women. Twenty-three patients are well enough to enjoy the privilege of parole, and only 12 are under special medical treatment for physical disorder, being testimony to the general good health of the inmates. The number attending divine service is 185 (m., 118; f., 67); and the number joining in recreations 245 (m., 80; f., 165). Yesterday I witnessed a large proportion of the patients playing bowls for the Mental Hospital team against the Mount Eden Club, and taking a keen interest in the game, and to-day all who are able are away at the annual picnic.

I have, as usual, accorded special interviews to patients having any grievance, but the only complaint made was of detention, and I was satisfied in each case that such detention was neces-

sary either for the patient's own good or in the public interest.

On the 14th, in consultation with Dr. Makgill, Dr. Beattie and I went over the drainage system and into the question of the disposal of the septic-tank effluent. There was some odour at the exit into the creek, but not to be compared as a nuisance with that in the Arch Hill gully, much nearer town, through which I have passed several times on my way to and from the Mental Hospital. The prolonged dry weather will have accontuated the condition in each case. The creek receiving our offluent is tidal, and is therefore flushed naturally, and there are but four habitations near it. It is nevertheless desirable to hasten the application of the city drainage

system to this district, and Dr. Beattie is going to see what can be done in this direction.

During the present visit I have remarked on the absence of noise. A proportion of patients in all such institutions are by the nature of their malady excited and noisy, and in this respect this Mental Hospital is unfortunate in the original selection of its site and in the planning which places such patients near public roads, where their exclamations are heard and are, no doubt, misinterpreted by passers by. This matter is more acutely brought forward now owing to the large number of new admissions, many of an unpromising kind, taxing the resources of the present buildings, while there is no outlet for extension on the present estate. The only solution is to build a separate institution for the disturbed cases on our reserve at the "Reef," about a mile away. Here they can be provided for in a specially designed institution, situate apart from private buildings, of which the natural extension of Auckland is placing a number near our main estate.

I found the wards clean and orderly, and was particularly pleased with the appearance of the Wolfe Bequest Hospital. I am convinced that it will prove a valuable addition to our classification, combining as it does a sentiment of freedom and comfort with the resources of hospital treatment. It is, as far as the patients are concerned, separate from the main institution, and is very popular with the inmates. Miss Gibbons, the Sister in charge, is a registered hospital nurse and midwife, as well as a registered mental nurse.

Dr. Beattie continues to take a keen personal interest in all details of the working of the institution and the treatment of the patients, a task which the large number of patients makes increas-The new institution on the Reef with a resident medical officer will relieve him ingly difficult.

considerably.

I visited this Mental Hospital on the 31st May, 1st, 3rd, 4th June, and to-day. I inspected the various parts and saw all the patients, who number 826 (m., 516; f., 310). The conditions ruling are not substantially different from those on my last visit, when the various divisions of patients were fully gone into and recorded. Dr. Ramsbottom, who has had experience at the Stirling District and Perth Royal Asylums, is now assisting Dr. Beattie, and before long there will be a second assistant medical offier.

I was very interested in the history of remission in a case of general paralysis following the administration by Dr. Milsom of the remedy popularly known as "606." The possibilities of this remedy on first publication having appealed to us, Dr. Donald, now in England, is studying its application, especially in such cases as the above, with the intention of its employment if favourably reported on. It is pleasant to be thus forestalled, for though there were previous indications of a remission in this case, and there is a danger therefore of falling into the post hoc fallacy, yet the subsequent course of the case has been so far stimulating that it modifies one's

The question of the disposal of the septic-tank effluent, into which I entered when last here, deciding that the best course was to do something to accelerate the application of the town drainage system to the district, was again considered by Dr. Beattie and myself. On this occasion there was no odour perceptible at the outlet. Dr. Beattie has made inquiries, as a result of which I understand that it will be rather more than two years hence before the Arch Hill sewer will be

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in use, and that in rather more than four years a sewer will pass near or through the Mental Hospital estate at a level which will take all our drainage. I had first thought of a connection with the Arch Hill sewer, but under the circumstances the most reasonable solution is to wait for the sewer designed to take the drainage of the district, and trust to the installation being hastened.

With Dr. Beattie, and Mr. Dodge, of the Public Works Department, I went carefully over the ground on which it is proposed to erect the new buildings suggested in my last report. A survey of the ground was made, which is being cleared and levelled. The site is an excellent one for the purpose, and will afford extensive views from the day-rooms, and large exercise-grounds under easy supervision.

Yesterday, a simple-minded unmarried woman, a recent admission, was delivered of a healthy-looking child, and a similar occurrence took place shortly after my last visit—the mother on that occasion being an unmarried Native. In these cases the mental symptoms became sufficiently pronounced for the women to be brought to the Mental Hospital, and they will thus be afforded protection in the future, but the law is at present powerless to protect many feeble-minded women, who readily succumb to temptation, and whose children become a burden on the State.

I inspected the patients' food and found it well cooked, of good quality, and abundant. The laundry machinery is working well. The institution was in good order. One of the parole patients, who had therein no purpose to serve, volunteered the statement that the patients were well looked after and kindly treated by the staff. The statutory books are up to date.

The patients in the Wolfe Bequest Hospital expressed themselves as contented.

#### CHRISTCHURCH MENTAL HOSPITAL.

21st June, 1911.

I inspected this Mental Hospital on the 18th, 19th, 20th, and to-day. A visit earlier in the year was cut short owing to my having to return to Wellington and proceed to Nelson after Mr. Chapman's death. That visit was not sufficiently complete to report upon separately, but I noted that everything was in smooth working-order. Since then this Hospital has sustained a great loss in the death of Mr. Newport. His memory, I am sure, will long be cherished by both patients and staff. I have every reason to believe that Mr. Harris, his deputy, promoted to be head attendant, will receive the loyal co-operation of the attendants in carrying on the high traditions of the office to which he has succeeded.

On the 19th, in company with Mr. Anderson, of Porirua, and Mr. Rose, Dr. Gow and I went into the engineering requirements of the institution. On these Mr. Anderson will report, keep-

ing in mind the possible electrification of the plant in the future.

On that day there were resident in the Hospital 667 patients (males, 354; females, 313), all of whom were seen and a large number of whom were conversed with during the course of the visit. No rational complaint was made. There are absent on probation 29 patients (m., 21; f., 8). Of the patients resident 7 only (m., 4; f., 3) are classed as suicidal, and 28 (m., 7; f., 21) are classed as dangerous. Though there are large exercise-grounds, the limitations in the way of open-air occupation for women, after making due allowance for other causes, no doubt contributes to the larger relative proportion classed as dangerous. The number of epileptics is 45 (m., 25; f., 20), and the number of general paralytics is 10 (m., 7; f., 3), a small total, but disproportionate with respect to the usual sex incidence in this malady. Two patients only require to be fed, but the number requiring to be assisted to wash and dress is 110 (m., 36; f., 74). Generally this class is equipment of unrecovered patients who have long the paralytic and have gradually such into description. been in residence and have gradually sunk into dementia, but there have been here and elsewhere numbers of admission of persons in senile dementia. In the case of such persons coming from private houses it may fairly be reasoned that the resources of relatives were at an end, otherwise they would not after long endurance have willingly been parted from a parent or grandparent when the exacerbation of symptoms preluded the end. But a considerable number of such patients have been sent from institutions in which the aged are cared for and where the persons admitted could have continued under care for a very little extra expense. In October last Dr. Gow reported four admissions in one evening from the same Home, and certified three as helpless old people in their dotage. Such people, of course, require special attention, and are no doubt sent to mental hospitals to get it at the cost of the State, and the local rates are saved not only the expense of the care of such persons, but that of extra buildings which would be necessary were they retained, to which buildings, also, others approaching dotage would be admitted. The same robbing of Peter to pay Paul has been experienced in England over the 4s. grant paid to guardians of poor-law unions in respect of the insane poor chargeable to the union maintained in an asylum. Originally started with the laudable desire of having the insane adequately provided for, it soon became evident that the troublesome aged were being transferred from workhouses because, with the assitance of 4s. a week, they could be kept in asylums with less expense to the union. This is perhaps more properly a question for the annual report, but having dis-

cussed the admission at one time of three such patients the matter called for some remark.

There are 5 men and 14 women confined to bed, 7 owing to their mental state, 4 who are senile and debilitated, I in advanced cardiac disease, I epileptic, I general paralytic, and the others as a matter of rest for minor complaints, except in the case of another general paralytic who during the visit slipped and fell, fracturing the bones of the left leg above the ankle. The fall was purely accidental, no one being to blame, and in any but a general paralytic would probably not have produced an injury. Dr. Gow and I placed the limb in plaster, and I noticed with approval that he made the event a subject of demonstration to the attendants employed

assisting, and that they, by their questions, were keenly interested.

Very few patients are idle—most do something according to their capacity, and many work well. Employed in the garden and on the farm are 165 men, and the result of their labours, though perhaps individually small, is collectively manifested in the good order in which everything is kept. Twenty-five patients have the parole of the grounds, and 14 are permitted to go

beyond bounds unattended. The case of these patients is considered from every aspect before parole is granted, and is always under review In 46 cases, equally divided between the sexes, there is deemed to be a good chance of recovery, and 30 are being treated with the same object, though hope of success is more remote. The recreation of the patients and staff is well considered, and the relations between them appear to be harmonious.

The food served during the visit was of good quality and sufficient quantity. Progress is being made in installing a cold-store, the necessity for which has at times been felt in the summer

months.

The most cordial relations exist between the chaplain (the Rev. Mr. Smail) and the patients. He continues to be a frequent visitor to the wards and to take an interest in the patients' amuse-

ments, and is rewarded by a large number attending Divine service.

I went over all parts of the farm, and was very pleased with the quality and condition of the stock. The success in sales of young bulls, the progeny of Carpet Prince, warrants paying a good price for another bull, provided it has the qualities we seek. The purchase of a small threshing-plant would soon repay itself. A cottage should be provided for Mr. Bloor, the farm-manager, now confirmed in his appointment. A site near the byres has been surveyed, and the plans are ready.

If the land now leased could be purchased at a reasonable price it should be bought. When negotiations were opened some time back an agreement could not be come to owing to large difference between the estimated value placed on the property by the buyers and sellers respectively.

The books and registers were examined, and found up to date and neatly and correctly kept.

13th July, 1911.

I spent this afternoon at the Mental Hospital, giving some special interviews and checking some items selected at random in the store, finding them exactly right in every case. The visit was too brief to record. Everything seen was, as at my last report, in good order. The number of patients resident was 658 (m., 344; f., 314).

### SEACLIFF MENTAL HOSPITAL.

28th January, 1911.

Finishing with a night round, I yesterday completed a series of visits to this Mental Hospital, including the Auxiliary Hospital at Waitati and the institution on the Otago Peninsula known as The Camp. I also took the opportunity of the dry season to satisfy myself on the potentialities

of the proposed new water-supply by visiting the source of the Waitiripaka Creek.

On the books there are described as resident 844 patients (m., 503; f., 341), and 42 (m., 40; f., 2) as on probation. All the resident patients were seen during the course of the visits, 787 at Seacliff and 57 at Waitati. Each had an opportunity to speak to me, and I conversed with many. No rational complaint was made against the management or treatment, and the patients who approached me with the object of facilitating their discharge had their cases reviewed, and I had no difficulty in deciding that their detention was necessary for their own good or in the public interest.

The number of patients under special-observation notices is 36 (m., 23; f., 13); the number of epileptics is 82 (m., 55; f., 27)—17 of the 55 are in the special building at Waitati for the best-conducted; 12 males labour under general paralysis; the number of those classified as suicidal is 32 (m., 17; f., 15), and as dangerous 81 (m., 10; f., 71). The 71 is disproportionately large, but is accounted for by transfers from this institution which have taken place in the past, leaving a larger proportional residuum of violently inclined patients who, because of their mental condition, were unfit for transfer. The above numbers include most of the patients whose care is a source of anxiety to the responsible officials.

The number of patients in whose case recovery is regarded as possible is set down at 39

(m., 24; f., 5), and these are naturally the subjects of special treatment.

The number of patients who require to be fed or are assisted to wash and dress is 106 (m., 39; f., 67). These added to the above include most of the patients that are the particular care of the nursing staff.

At Waitati all are fit for employment, to attend Divine service, and to join in recreations.

Of the patients resident at Seacliff, 787 (m., 446; f., 341), the number attending Divine service is 112 (m., 77; f., 35), and a very small fraction do not join in recreations, while the number usefully employed is 531 (m., 345; f., 186). The number of men on parole is 172.

I found all parts of the institution clean and in good order, and the general health of the patients good. The food served during the visit was abundant and of good quality. Owing to the dry weather there has been a shortage of water, but by careful conservation of the supply the

crisis is being tided over.

I conferred with Dr. King about some necessary works, and decided upon the following as the most urgent: At the Simla Annexe, the addition of two new dormitories and a day-room, twelve single rooms, and a sunk enclosing-fence, in order to better classify the refractory cases by removing to this building the less disturbed, and transferring them when more trustworthy to the open-door part of Simla. At the Byres Annexe, the addition of a sitting-room for the patients, and one for the staff, is a necessity, and can be carried out economically. In the main building, No. 2 ward, front dormitory, should be converted into a day-room, as was done on the women's side some time ago with great benefit. The extra accommodation at Simla will permit of this being carried out.

I found the patients at Waitati happy and comfortable under Dr. Donald's care, and was pleased with the arrangements for the welfare of the patients at the Camp under Mr. Boys. I

went into the question of selecting a visiting medical officer for this institution.

I have pleasure in indorsing Dr. King's opinion of the good work done by Dr. Tizard at Seacliff, and of recording the highly satisfactory state in which the work of this large institution is being carried out.

#### HOKITIKA MENTAL HOSPITAL.

11th July, 1911.

l visited this institution yesterday and to-day, going over all parts of it and seeing all the patients. Every patient had an opportunity to speak to me, and I conversed with many. Norational complaint was made. They looked well cared-for and were seasonably clad. The food served during the inspection was good and abundant, and the meals were orderly. There was complete absence of excitement and noise. All parts of the institution were clean and tidy.

The number of patients in residence is 176 (m., 126; f., 50), and 12 (m., 7; f., 5) are absent

on probation.

One woman is regarded as actively suicidal, and is under a special-observation notice; 5 men and 2 women are epileptics; 2 men and 1 woman are classed as dangerous, and 1 man labours under general paralysis. The above comprise those under special supervision. About 20 patients require to be assisted to wash, dress, or feed. The number under treatment as possibly curable is 27 (m., 16; f., 11). The patients actively employed number 92 (m., 74; f., 18). Of the men 54 work outside, either in the garden or on the farm. The unemployed are 80. These patients are mainly unfit through age or infirmity. A large measure of liberty is accorded to the trustworthy, and as many as 26 men and 5 women are on parole; 35 men and 11 women attend Divine service, and 80 men and 38 women join in recreation.

Mr. Downey contemplates the laying-out of a bowling-green, which I am sure will add

materially to the resources for the recreation both of the patients and staff.

I am pleased to find Dr. Macandrew looking well and back to work after his severe illness.

The bringing-in of the water-supply has been a great boon. The length of the 4 in. main from the town terminal up to and through the estate is about 25 chains, and this, together with the reticulations, has been carried out by our own labour in a most creditable manner. The pressure is 65 lb., and I tested its sufficiency for fire-extinguishing purposes.

I am satisfied that Mr. Downey and his staff are doing good work.

#### NELSON MENTAL HOSPITAL.

17th February, 1911.

l visited this Mental Hospital yesterday and to-day, inspecting all parts, including the Home and Valley farms. I also inspected the Home at Richmond, which in the future will be under the same medical supervision as this Hospital, and take this opportunity to express my satisfaction with the parental attitude of Mr. and Mrs. Buttle and the staff towards the children, whom I found in good health and happy.

At the Nelson Mental Hospital the gloom following upon the untimely death of Mr. Chapman had not lifted, and from members of the staff, and from most of the patients who were able to appreciate their environment and communicate their impressions, tributes were paid to the memory of the late Superintendent, recalling his devotion to his work, his geniality, and his goodness

The number of patients resident to-day is 176 (m., 82; f., 94), and there are 12 absent on probation (m., 9; f., 3). All resident were seen and spoken to, and no rational complaint was

No patient is acutely suicidal, but 10 (m., 6; f., 4) are classed as dangerous. Taking these, and those requiring to be dressed, as well as the sick, about one-fourth of the men and the same proportion of the women require the particular care of the nursing staff. Every patient at all fit joins in the recreations, and 56 (m., 29; f., 27) take part in Divine service. Forty-eight men work on the farm and in the gardens; altogether, 127 (m., 59; f., 68) are usefully employed.

The general health of the inmates is good. I was satisfied with the quality and quantity of

the food inspected. The wards were clean, and the condition of the institution and the patients reflected favourably on the staff, especially upon the matron and the head attendant.

Dr. Mackay, who for ten years has divided his services between the general and mental hospitals, and who recently resigned the former office, intending to live near and devote his whole time to the medical officership of the Mental Hospital, has been appointed Medical Superintendent. His interest in the institution has been above that of a medical officer visiting, and I feel sure that he will be seconded in his efforts by the loyal co-operation of the staff.

#### PORIRUA MENTAL HOSPITAL.

13th February, 1911.

I visited this Mental Hospital to-day, and with Miss Maclean and Dr. Hassell examined the candidates for registration. I went round the wards and saw the patients. The new wards are airy and are working well.

Since my last report I have paid short visits, and on each occasion found everything in the same perfect order in which it is to-day. Dr. Hassell must have passed through a trying time in adjusting conditions to the sudden influx of Mount View patients last year, plus the large number of admissions, and great credit is due to him and to the staff under him for the uninterrupted smooth working of this Hospital in all its parts.

I find the food good, and the general well-being of the patients reflected in their aspect.

The sick, who are comparatively few, are being well attended. The serious cases are 2 of hemiplegia, 1 of paralysis of the lower limbs due to a fracture of the spine before admission, 3 general paralytics, 5 cases of phthisis, 4 of heart-disease, and 1 of cancer.

The number of patients resident at this date is 883 (males, 509; females, 374), and there were absent on probation 35 (m., 15; f., 20). Under special observation there were 29 (m., 15; f., 14), 27 of whom are suicidal. There are 15 general paralytics, 3 of whom are women, and 72 patients (m., 44; f., 28) are epileptic. The distinctly lower proportion of women epileptics

will help to account for the lower proportion of women classed as dangerous—namely, 19, against 30 men. The number of patients requiring assistance to wash and dress is 138 (m., 39; f., 99).

A large proportion of the patients are usefully employed, and 175 men work on the farm or

in the garden.

As many as 70 men and 2 women can be trusted on parole within the grounds, and 18 men are allowed beyond the grounds. These cases are well considered when parole is granted and during it continuance, and manifestly this well considered liberty makes for their contentment.

The proportion of patients for whom there is a hope of recovery is large—130 (m., 61; f., 69) are being treated with expectancy of success, not including a large number in whom treatment

is being persevered in in the hope that recovery may ultimately take place.

9th June, 1911.

I went to this Hospital to-day with Mr. Goudie, the Chief Forester for the North Island, and with Dr. Hassell we walked over the watershed and arranged for its gradual planting. The catchment area for the north branch of the stream is bare, while that for the south branch is well wooded, and Dr. Hassell has noted of late years that the volume of the north stream has diminished —that, in fact, during the late dry season the flow of water in the south branch was about three times more than in the north, though originally this branch was the larger. When first the services of Mr. Goudie were requisitioned, Dr. Hassell and I had been over much the same ground as to-day, in the belief that the epidemic of enteric fever may have originated in the water-supply. There had been a heavy flood on the 25th February, and as the first case of enteric (soon followed by others from different wards) occurred early in March, it was naturally supposed that the events were related. The watershed is a considerable distance from the Hospital, and it was possible that among persons shooting over the hills, or other trespassers, there may have been some suffering from the disease, or a "carrier," and that the flood had washed contamination in to the water-supply directly or had stirred up slime in which bacilli may have been growing. This furnished an additional good reason for thickly planting the watershed as a practicable method of reducing trespassing. However, this cause of the outbreak had to be set aside upon the water being carefully analysed and after further investigation. The reservoir was nevertheless cleaned, and the planting is to be proceeded with. I take this opportunity of thanking Mr. Kensington for arranging Mr. Goudie's visit, and Mr. Goudie for his valuable advice. The epidemic, if not actually ended, shows signs of abating. It has been an anxious time for Dr. Hassell. He, Dr. Jeffreys, and, when the epidemic was at its height, Dr. Robertson, and the members of the nursing staff on special duty have been unremitting in their care of the sick. Our thanks are due to the Public Health Department for their investigations into the outbreak. Of late years the whole drainage system has been overhauled; nevertheless, it was reassuring to know that there was no defect of sanitation in or about the institution to which the trouble could be ascribed. The possibility of the milk-supply being infected has been negatived. Investigations as to the presence of a carrier are proceeding.

The rooms set apart for the sick make splendid isolation wards, being spacious, sunny, well ventilated, with two single rooms and sanitary block attached. The nursing-charts continue to be kept with great neatness and accuracy. At my last visit I remember thinking that they had been copied from rough originals, and was gratified to find I was mistaken. Until one analyses the condition of the patients attacked, there appears to have been a heavy mortality. There have been nine deaths—among the male patients seven, among the females two. Seven of the cases had serious complications. Four were epileptics, and one of these actually died in the status, and three were general paralytics, in one instance further complicated with double pneumonia. Two of the staff have been attacked, Attendant Walsh in the middle of April, and Attendant Cran.

one of the nurses in the isolation ward, on the 10th of last month.

I have to express my deep satisfaction that the test of strain has made no impression on the uninterruptedly smooth working of the institution.

## ASHBURN HALL LICENSED MENTAL HOSPITAL.

14th January, 1911.

I inspected this Hospital to-day in company with Dr. Ronaldson, of the Haddington District Asylum, Scotland, who, travelling through the Dominion, expressed a desire to visit the institution. He took occasion to express his gratification to find at the Antipodes an institution so home-like, comfortable, and complete.

The number of patients resident is 42 (m., 23; f., 19). There are also 7 voluntary boarders. One patient is absent on trial. All the inmates were conversed with, and no complaints were made. All looked well, and were neatly and suitably clad. The food inspected was of good quality, and, to patients at all able to appreciate niceties, was served as in a well-appointed private house.

The male staff is accommodated in a cottage near the main institution, and the Mitchell Wing

is now managed entirely by nurses.

Dr. William Brown, late of Dunedin, has been added to the proprietors. I have learned from him that it is not his intention to in any way interfere with the liberal policy under which the Hospital has been managed. To the devotion of Mrs. Milne as Matron, and to the skill and judgment of Dr. Alexander as Medical Superintendent, the continued and deserved success of the Hospital is a tribute.

The statutory books were up to date, and are neatly and correctly kept.

H.-7.

#### MEDICAL SUPERINTENDENTS' REPORTS.

#### AUCKLAND MENTAL HOSPITAL.

SIR.

I regret that the report for the year 1910, which I have now the honour to submit to you,

indicates in some essential points an unfavourable condition of affairs.

The number of admissions was 201—males 133, and females 68. Although one must deplore this large number, it must be borne in mind that it does not imply an increased insane incidence, but a natural increase due to the increased population in the area from which our patients are drawn. Four cases alone—alcohol, 22; senility, 26; ill health, 17; and heredity and congenital, 43—accounted for more than 50 per cent. of the admissions. The total increase for the year was 44, leaving a population on 31st December of 790.

I think it might reasonably be assumed that the average annual increase for the next ten or more years will be not less than 40. For this number, therefore, provision will require to be made, either in this or in some other Mental Hospital. Still, the great need here is for increased refractory accommodation on both sides, and hospital accommodation especially on the male side. On account of the overcrowding in these departments the administration during the year has been

rendered specially difficult.

The number of recoveries was 74—males under 30 per cent., and females about 51 per cent. This number is the smallest in my experience, and is due largely to the character of the cases admitted. When a large percentage of congenial, paralytic, epileptic, and senile cases is

admitted, both the recovery and the death rates must reflect the issue.

The number of deaths was 77—the largest number in my experience. Of these, 21 were due to senile decay, 10 to general paralysis, 8 directly to epilepsy, and 8 to tuberculosis; one death was due to typhoid fever, and 1 to eyanide poisoning. This patient was poisoned by a visitor, who at the same time committed suicide. The tubercular death rate is only about 10 per cent. of the deaths. In the Scottish asylums it is about four times as great as amongst the general population at the same age, whilst in some asylums in England tuberculosis accounts for over 25 per cent. of all the deaths. Our death-rate from this cause, therefore, need not be viewed with alarm; but I cannot get away from the fact that the cause is well known to us, that it is largely remediable, and that it ought to be remedied.

The Wolfe Home was completed towards the end of the year, but, on account of the difficulty in getting nurses, it has not yet been brought into thorough working-order. It will prove a great acquisition. Apart from any other consideration, it is the first step in a proper system of classifi-

cation, which common humanity alone demands.

The installation of new boilers and laundry machinery is a big advance towards a necessary

equipment.

The work of the whole staff during the year has been difficult and trying, and what success has attended the year's administration has been largely due to the loyalty and devotion of the greater number of the staff, especially of the seniors, and more especially of the matrons and senior nurses, who during a long period when we were compulsorily short-handed, worked strenuously and without a murmur—allowing their "leave" to be postponed indefinitely—for the welfare of the Hospital.

Dr. McKelvey resigned on his appointment to the Costley Home. During all the years that he was assistant medical officer he earned and retained the esteem and gratitude of the patients,

the staff, and myself

The work of the farm has been carried on vigorously and successfully.

Our thanks are due to the Official Visitors, whose work is always encouraging and helpful; to the proprietors of the *Herald*, for daily papers; to members of various brass bands and bowling clubs. These clubs have played several matches with our staff and patients on their own and on our greens, and I must say they have afforded a very great deal of interest and entertainment. I wish to draw special attention to the kindness of the Misses Fleming, of Onehunga, who provide us with a cab one day in each week for the use of the patients, and who regularly send them large quantities of luxuries.

I have, &c.,

The Inspector-General, Mental Hospitals, Wellington.

R. M. BEATTIE.

#### SUNNYSIDE MENTAL HOSPITAL

SIR.

I have the honour to forward you a report on this institution, with the annual statistics, for the year ending 31st December, 1910.

There was an average of 625.8 resident during the year, and the total number of patients under treatment was 796, of whom 169 were admissions. At the end of the year we had 679 patients, of whom 30 were absent on trial.

Of the 169 admissions, 116 were admitted for the first time, 28 were readmissions, and 25 were transfers. There were 67 recoveries, which gives a recovery-rate of 46.5 per cent. on the admissions, exclusive of the transfers from Mount View, who were chronic cases with no expectation of recovery.

During the year there were 41 deaths, giving a percentage of 6.5 on average number resident. Of these, 8 were of persons over seventy years of age and 7 were general paralytics.

A feature of the admissions has been the number of old people who have been received both from their own homes and from other institutions. This is a matter I commented on in my first report, and again I have to make use of the term "dumping-ground" as the only suitable description of what appears the function of the mental hospitals. These cases might be looked after in some less expensive fashion, and leave room with us for cases which have some chance of

The addition of twenty-one single rooms to the female wards has been a great assistance,

but we are still cramped for room there and on the male side as well.

Recreation enters largely into the scheme of treatment of the insane, and anything which tends to take the patients out of themselves is of service. Great interest is taken in the result of the competitions in the different games, and matches with outside teams gives a feeling of unity with the outside public which is helpful both to the patients and the staff. In cricket, billiards, and bowling we have managed to take good places. This season we have started a football club, which is showing fair promise, and the matches are enlivening the winter months. Concerts, dances, and visits to the theatres and other places of entertainment in town have helped to brighten the lives of the patients, and my thanks are due to all those who helped to make these things possible.

The farm has been well looked after by the new farm-manager, and the returns sent you previously prove that it is a valuable asset. The farm must be considered principally as an integral part of treatment, and it is very gratifying to find that this part of the treatment of the patients

is actually returning such a handsome profit.

An extra boiler is an absolute necessity. Owing to the increase in work, the boilers at present are worked to their full capacity, and do not get a fair chance of being cleaned out as often as they should. The new water-supply requires completion; the pump is labouring with the water from the old well.

It is with deep regret that I have to record the loss of our esreemed and respected head attendant, Mr. Newport. After twenty six years in the service, he died suddenly from heartdisease, actually in the uniform he so adorned. Both staff and patients alike mourn his loss, more as a friend than as a colleague and guardian. I am very pleased that the Hon. the Minister saw fit to promote Charge Attendant Harris to the position of head attendant, and feel confident that, after his long association with Mr. Newport, he will prove a worthy successor.

I lost the valuable services of Dr. Gribben as assistant for most part of the year. He had to go to England on private business, but his place was ably taken by Dr. Scannell, to whom and

the rest of the staff my thanks are due for their loyal and hearty support.

I have, &c.,
W. BAXTER GOW, M.D.,

The Inspector-General of Mental Hospitals, Wellington.

Medical Superitendent.

#### SEACLIFF MENTAL HOSPITAL.

SIR,-I have the honour to submit the following report on the Seacliff Mental Hospital for the vear 1910.

Having dealt somewhat exhaustively last year with what appeared to me to be some of the leading considerations bearing on problems affecting the insane under conditions which obtain

here, I shall practically confine myself this year to a routine record.

The total number of patients under treatment during the year was 1,021, the average number at one time being 855. At the beginning of the year there were 829, and at the close 880, being an increase of 51 in the twelve months. There were admitted during the year 192 patients. of whom 28 were chronic incurables transferred from other mental hospitals, leaving 164 ordinary admissions. The number of patients discharged, recovered, or relieved during the year was 82—in other words, exactly half the number admitted. It is interesting to note that of the patients admitted during the year only 5 were under twenty years of age, while there were 14 between sixty and seventy years of age, 11 between seventy and eighty, and 7 between eighty and ninety.

The deaths during the year were 53, just over 5 per cent. of the number under care. the deaths, 14 were between seventy and eighty years of age, and 2 were between eighty and ninety. The incidence of death from general paralysis was unusually large—viz., 12 in the year.

patients died from senile decay and 5 from epilepsy.

There is in the institution at the present time one male aged seventy-six who has lived for an unbroken period of forty-eight years in the Mental Hospitals of Dunedin and Seacliff—in other words, since the early gold days of Gabriel's Gully. There are still eleven Chinese inmates, but their numbers are gradually diminishing.

The general health of the population has been good throughout the year, and we have had no

casualties or serious accidents.

As usual, a very large proportion of patients have been kept employed on the farm or in the garden, and the returns from the estate have been satisfactory. In my last year's report I ventured to estimate that our catch of fish would come up to a quarter of a million pounds in the The actual net return has been 270,000 lb. Of this quantity, over 80,000 lb. has been sent gratis to other public institutions, and has therefore involved an apparent increased expenditure per head for our population instead of going in reduction of maintenance. I trust that in future an adjustment will be made whereby this very successful and profitable industry will appear, as it should, in the form of a substantial credit to this institution, instead of working out rather as a handicap in our financial returns.

The inclusion of the small institution at Waitati in the Seacliff returns makes the expenditure at the main institution appear some £2 per head heavier than is actually the case, the relative

cost in connection with a growing embryo hospital being necessarily high.

Regular religious service have been held by the various denominations throughout the year. The thanks of the authorities are due to the Otago Daily Times and Witness Company and to the Evening Star Company for newspapers and journals supplied free.

To. Dr. Tizard and to the other officers and members of the staff I wish to express thanks for hearty co-operation in carrying out the work at Seacliff. Similar thanks are due to Dr. Allen Dr. Johnston, and the staffs at Waitati and the Camp - 15

The Inspector-General, Mental Hospitals, Wellington.

I have, &c., F. Treby King.

#### PORTRUA MENTAL HOSPITAL.

I have the honour to submit the following report on this Mental Hospital for the year 1910.

In comparing the statistics with those of the previous year the most noticeable feature is the increase of the inmates, the chief cause of which was the transfer of upwards of 150 patients from Mount View when that institution was finally closed. In addition to these transfers, 216 patients were committed to this Mental Hospital in the ordinary way, which is an increase of 22 per cent. on the figures for 1909. The stoppage of admissions to Mount View sufficiently accounts for this increased rate at Porirua.

At the beginning of 1910 we had 695 patients on our register, and at the end 897 (513 males and 384 females), inclusive of 13 males and 15 females absent on trial. Notwithstanding the large additions to the buildings, which were erected for the prospective increase of patients, an excess of numbers became evident, especially towards the end of the year. To accommodate this excess one large room at the male auxiliary intended for use as a day-room was retained as a dormitory of thirty-six beds, and other expedients were devised as the necessity arose.

As regards recoveries, 101 were registered, which, in proportion to the number admitted, amounts to 45.5 per cent. In this computation I take into account only such transfers as were actually committed during the year under review. The mortality was 59 deaths, which is about 7.5 per cent. of the average number resident. Included in the causes of death were 10 from general paralysis and 11 from senile decay.

During the year the general physical health of the patients has been satisfactory. accidents have occurred; the only serious one was the suicide of a male patient, who had been an inmate for many years, and who never showed any active symptoms of mental alienation. No doubt he suffered from a mild form of mental enfeeblement, but he was a quiet well-behaved and fairly industrious man, who was allowed a considerable amount of liberty which he did not abuse. He had often asked for his discharge, but owing to the fact that he was technically a prisoner and that the crime he had committed was a serious one, there was little or no hope of his regaining his liberty. Possibly this prayed on his mind and prompted him to take his own life. His mental state gave no indication of his intention.

All departments of the institution have been working smoothly. No important changes in the staff have taken place. I have to express my appreciation of the officials and others on the staff who have assisted me in the administrative work, and in the care and treatment of the patients. My colleague, Dr. Jeffreys, has given me valuable aid.

Although it does not properly come within the year under review, I cannot refrain from mentioning the epidemic of typhoid fever which has occurred in the institution during this autumn and caused much anxiety. In all there have been thirty-three cases. The disease started in March, and cases kept cropping up from time to time for over three months, sometimes in one and sometimes in another ward of the main building, a fair proportion of both sexes being affected. Two cases occurred in the male auxiliary. Dr. Frengley and other officers of the Public Health Department rendered valuable assistance in investigating the cause of the epidemic, which obviously was not due to any specific sanitary defect; rather it seemed that the virus might be disseminated through the water or milk-supply, or even through some article of food. On thorough search the contamination of these seemed improbable. Dr. Frengley was strongly of opinion that the epidemic was due to one or more typhoid-carriers in the institution. To put this theory to the test certain bacteriological investigations are being carried out by the Public Health Pathologist in the cases of those attendents and patients who had typhoid in years gone by. As far as these investigations have gone there are indications that Dr. Frengley's opinion will ultimately be found correct, and that one or more typhoid-carriers of long standing have been the source of all the trouble.

One mild case of typhoid fever developed in the case of a female patient in the autumn of last year (1910), and it was difficult to account for its occurrence. Fortunately it was an isolated case, and curiously enough the fever had a curative effect on the patient's mental trouble, which had already lasted about twelve months and had shown symptoms of chronicity. When convalescence from the typhoid fever was established the patient was discharged recovered, her mind being perfectly restored. I have observed the coincidence of an attack of typhoid fever and of recovery from an almost hopeless condition of insanity in a few other cases.

> I have, &c., GRAY HASSELL.

The Inspector-General of Mental Hospitals, Wellington.

Medical Superitendent.

# APPENDIX.

Table I.—Showing the Admissions, Readmissions, Discharges, and Deaths in Mental Hospitals during the Year 1910.

n mental hospit Admitted for the Readmitted Fransfers			7, 1910  			• •	м. 409 65 165	F. 251 63 57	т. 660 128 222	2,088 639	F. 1,465 371	т. 3,548 1,010
Tota	al unde	r care du	ring the	year						2,722	1,836	4,558
ischarged and d	lied											
Recovered			·				182	145	327	1		
Relieved						!	30	29	59	Į		
Not improve	d					!	164	55	219	1		
Died						!	196	97	283	1		
										- 562	326	888
emaining in m	ental h	ospitals,	31st Dec	ember,	1910					2,160	1,510	3,670
crease over 31s	t Dece	mber, 19	09		• •					77	45	122
verage number	residen	t during	the year					• •		2,028	1,445	3,478

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 1910.

Mental Hos	nita la			ental tals o				Α	dmiss	ions i	n 1910				Tot	al Num of	ber
Mental Hos	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1st Ja				itted f rst Ti	or the me.	Res	dmitt	ed.		Tota	<b>a</b> 1.		Patient der Ca	
			М.	F.	т.	M.	F.	T.	М.	F.	т.	M.	P.	T.	M.	F.	T.
Auckland			458	288	746	114	49	163	19	19	38	133	68	201	591	356	947
Christchurch			337	290	627	63	53	116	37	16	53	100	69	169(1)	437	359	796
Dunedin (Seacliff)			500	329	<b>82</b> 9	84	56	140	40	12	52	124	68	$192^{(2)}$	624	397	1.021
Hokitika			140	55	195	17	9	26	1	2	3	18	11	29	158	66	224
Nelson			97	105	202	15	6	21	7	1	8	22	7	29(8)	119	112	231
Porirua			371	324	695	111	69	180	124	69	193	235	138	373(4)	606	462	1.068
Wellington			155	55	210	2	2	4	1	1	2	3	3	6(5)	158	58	216
Ashburn Hall (priv	ate n	iental	25	19	44	3	7	10	1		1	4	7	11`´	29	26	55
hospital)																	
Totals			2,083	,465	3,548	409	251	660	230	120	350	639	371	1,010	2,722	1.836	4.558

					P	atien	ts discl	arged	and d	ied.					ental	
Mental Hospita	ils.		charg covere			schar reco	rged vered.		Died.		Total an	dische d died	arged l.		Decem 1910,	
		M.	F.	т.	M.	F,	T.	М.	F.	T.	M.	F.	٠т.	M.	F.	т.
Auckland		39	35	74	4	2	6	56	21	<b>7</b> 7	99	58	157	492	298	790
Christchurch .		43	24	67	6	3	9	26	15	41	75	42	117	362	317	679
Dunedin (Seacliff) .		25	26	51	20	17	37	37	16	53	82	59	141	542	338	880
Hokitika		9	2	11		2	2	14	5	19	23	9	32	135	57	192
Nelson		9	2	11				17	13	30	26	15	41	93	97	190
Porirua		52	49	101	8	3	11	33	26	59	98	78	171	513	384	897
Wellington		4	1	5	152	56	208	2	1	3	158	58	216	ł		
	te mental	1	6	7	4	1	5	1		1	6	7	13	23	19	42
hospital)																
Totals .		182	145	327	194	84	278	186	97	283	562	326	888	2,160	1,510	3,670

Mental Hospitals.		1.681	rage Nu ident du the Yea	iring	of R	ercentag ecoverie dmission ng the Y	s on ns	Death Num	rcentag ns on A nber re ng the	verage sident	1	ercentag Deaths c Admiss	n
		М.	F.	т.	м.	F.	T.	M.	F.	Ť.	M.	F.	T.
Auckland		469	288	757	29.32	51.47	36.82	11.94	7.29	10.17	42.11	30.88	38.31
Christchurch		331	295	626	57.33	34.78	46.53	7.85	5.08	6.55	34.67	21.74	28.47
Dunedin (Seacliff)		487	330	817	26.04	38.24	31.10	7.60	4.85	6.49	38.54	23.53	32.32
Hokitika		132	54	186	50.00	18.18	37.93	10.61	9.26	10.22	77.78	45.45	65.52
Nelson		84	97	181	56.25	28.57	47.83	20.24	13.40	16.57	106.25	185.71	130.43
Porirua		439	350	789	40.31	59.76	47.87	7.52	7.43	7.48	25.58	31.71	27.96
Wellington*		61	14	75			_, _,		•	•			
	mental	25	17	42	25.00	85.71	63.64	4.00		2.38	25.00		9.09
bospital)		l											
Totals		2,028	1,445	3,473	38.40	46.18	41.50	9.17	6.71	8.15	39.24	30.89	35.91

Transfers.—(1) 25 males. (2) 28 males. (3) 6 males. (4) 106 males, 56 females. (5) I female.

\* Wellington Mental Hospital was closed in June, 1910. The average number of patients resident there from 1st January to 8th June is equal to 61 males and 14 females resident during the whole year.

TABLE III.—AGES OF ADMISSIONS.

Адек.	Auc	ckla	nd.		hris			ned acli		Но	kiti	ka.	Ne	oale	n.	Po	riru	<b>a.</b> .	Wei	lling	ton.	(P	hbu Hal riva I.H.	te	i	Tota	1.
	M.	F.	T.	M.	F.	T.	М.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	т.	М.	F.	T.	M.	F.	T.	м	. <b>P</b> .	T.
Under 5 years													0	1	1			1							0	1	1
From 5 to 10 years	1	0	1	0	1	1	1	0	1				4	1	5	0	2	2		٠.			٠.		6	4	10
"10 "15°"	0	1	1	1	0	1			- 1									l			į				1	1	2
<b>, 15 , 20</b> ,,	6	6	12	1	0	1	3	1	4						- 1	6	2	8							16	9	25
<b>" 20 " 30</b> "	31	12	43	16	15	31	22	14	36	4	3	7			ı	32	24	56	1	0	1	2	1	3	108	69	177
" 30 " 40 "	24	22	46	19	18	37	19	14	33	0	3	3	6	1	7	39	26	65	0	2	2	0	1	1	107	87	194
. 40 . 50	32	12	44	15	12	27	17	14	31	2	1	3	2	2	4	24	13	37	1	0	1	0	8	8	93	57	150
" 50 <u>"</u> 60 "	17	6	23	11	8	19	14	13	27	2	0	2	2	0	2	13	7	20	1	0	1	2	1	3	62	35	97
, 60 , 70 ,	7	2	9	6	5	11	8	6	14	3	4	7	0	2	2	7	8	10							31	22	<b>5</b> 3
, 70 ° 80 °	8	2	10	5	6	11	8	3	11	6	0	6	2	0	2	6	5	11				1			35	16	51
80 90	4	4	8	1	4	5	4	3	7	1	0	1			,	2	0	2		٠.		0	1	1	12	12	24
" 90 " 100 "	1	1	2														٠.			٠.					1	1	- 2
. 100 . 105 .	1	0	1	}		- 1		٠.						٠.											1	0	1
Unknown	1	0	1	ł		Ì		٠.						٠.											1	0	1
Transfers		••		25	0	25	28	0	28		• •		б	0	6	106	56	162	0	1	1		••		165	57	<b>22</b> 2
Totals	133	68	201	100	69	169	124	68	192	18	11	29	22	7	29	235	138	373	3	3	6	4	7	11	639	371	1010

TABLE IV .- DURATION OF DISORDER ON ADMISSION

	Au	ckla	ud.		brie urc			une eacl		Но	kiti	ka.	N	elsc	n.	Pe	oriru	a.		ellir ton.		( <b>P</b> :	bbu Hal rivs I.H.	l ite		Total	1.
First Class (first at- tack, and within 3 mos. on admission)		F. 27		м. 40	F. 28			F. 17		м. 10								т. 110	м. 2	F. 1					м. 227	P. 117	34
Second Class (first attack, above 3 mos. and within 12 mos. on admission)	26	13	39	5		10	5	4	9	4	1	5	1	0	1	14	11	25		••		0	1	1	55	85	9
Third Class (not first attack, and within 12 mos. on admis- sion)	15	16	31	21	19	40	14	16	30	2	4	6	2	1	3	26	22	48	1	1	2	1	1	2	82	80	16
Fourth Class (first at- tack or not, but of more than 12 mos. on admission)	18	9	27	9	17	26	41	31	72	2	1	3	8	3	11	12	16	28		••		1	2	3	91	79	17
Unknown Transfers	19		22	25		25	28	·.	28				6	ö	6	106	·: 56	162	0	·i	1		 · :		19 1 <b>6</b> 5	3 57	22 22
Totals	133	68	201	100	69	169	124	68	192	18	11	29	22	7	29	235	138	373	3	3	6	4	7	11	639	<b>371</b> 3	1010

Table V.—Ages of Patients discharged "Recovered" and "Not recovered" during the Year 1910.

			Aucl	tlan	d.			Cr	rist	chui	re):		I	Dun	edin	(Se	acli	Ť).		1	Hok	itik	в.	
Ages.	R	ecov	ered	rec	Not cove	red	Re	cov	ered	rec	Not	red	R	cov	erec	re	No	red	Rec	cove	red		No	t red
From 5 to 10 years  10 15 20 20 20 30 40 40 50 60 70 60 70 80 80 90 Unknown	4 9 7 11 4 1 2	3 7 11 5 5 2 0	7 16 18 16 9 3 4	M. 0 2 2 2	F 1 0 1	1 2 3	14 10 8 8 2	 7 6 5 2	21 16 13 10 3	M. 1 1 1 1 0 2	F 0 0 1 0 2 0	T.  1 1 2 1 2 1 2	1 0 5 10 2 2	0 2 6	1 2	M 0 4 3 4 3 3 2 1	 2 5 1 4 2 1 1	T. 1 6 8 5 7 5 3	1 0 3 3	 0 2 0 0 0 	1 2 3 3	0 0	  1 1 	1 1
Totals	 	35	74	4	2	6	43	_	67	6	3	9	 25	26	51	20	17	37	9	2	11	0	2	2

			N	leli	son	•				Por	iru	a.				We	lling	ton.		İ				Hal 1.H				То	tal.		
Ages.	c	R		d.		ot	re- red.	cc	Re	ed.	cc	lot	re- ed.	CC	Re		re	Not		ce	Re-			ot 1		Re	COVE	red.	re	Not	
		i. ]	7.	т.	M.	F	т.	M	. F	. Т.	м	. F	. T.	M	. F.	T.	М.	F.	т.	M.	F.	T.	м.	F.	T	M.	F.	T.		F.	Ŧ
From 5 to 10 years	l	٠	•	- [		• •		l	٠.			• •		l	• •		١,	٠.	0	ļ	• •			٠.		١.	٠.		0	1	1
. 10 . 15 .	ł	•	•	- 1		• •		١.	٠.			٠.		١,	٠.	4	0	2	2	i	• •		1	• •		1	0		1	3	4
. 15 . 20 .	اٰہ	٠.				• •		4	3	~7	1	0	1	1	0	1	, Z	1	3	١.	٠:	_	١.	• •		9	8	17		3	18
, 20 , 30 ,	3		0	3		• •		1.1	14		1	1	2	_	٠.	_	15	6	21	1	1	2	1	0	1	40	35	75		13	88
. 30 . 40 .	3		l	4		• •		117	15	~-	2	0	2	2	0	2	54	22	76		2	2	1	1	2	44	42	86		26	88
. 40 . 50	1		l	2		• •		13	9		2	2	4	1	0	1	43	13	56	0	3	3	l	٠.		47	29	76		20	69
<b>.</b> 50 <b>.</b> 60 .	1	. (	0	1		٠.		8	3	11							22	3	25	,	٠.		1	0	1	26	15	41	26	7	33
" 60 <b>" 7</b> 0 "				- 1		٠.		2	4	6	1	0	1	0	1	1	2	1	3		٠.	į				9	10	19	5	2	7
<b>,</b> 70 , 80 , .	1	(	0	1		٠.		1	1	2			ı				4	2	6							5	6	11	7	3	10
. 80 . 90 .				- 1		٠.		ĺ	٠.		1	0	1				0	1	1			- 1	1	0	1	1	0	1	2	1	3
Unknown		• •	•			٠.			٠.			• •			٠.		10	5	15		• •			• •			• •		10	5	15
Totals	9	9	2 1	1				52	19	101	8	3	11	4	1	. 5	152	56	<b>20</b> 8	1	6	7	4	1	5	182	145	327	194	84	278

TABLE VI.—AGES OF THE PATIENTS WHO DIED.

Ages.	Aucklar	ıd.	Christ- church.	Dunedin (Seacliff).	Hokitika.	Nelson.	Porirua.	Wellington.	Ashburn Hall (Private M. H.).	Total.
From 5 to 10 year 15 15 20 20 30 40 40 50 50 60 70 70 80 90 10	9 0 5 5 7 4 12 1 7 4 9 1 4 4 1 2 1 0	9 10 11 13	M F. T. 1 0 1 1 2 3 3 0 3 4 3 7 2 2 4 3 2 5 9 5 14 3 1 4	M. F. T.  1 1 2 5 5 10 6 1 7 10 1 11 4 3 7 11 3 14 0 2 2	M. F. T 0 1 1 1 2 0 2 2 2 0 2 1 0 1 3 4 6 6 6	1 0 1 1 1 2 3 1 4 3 4 7	M. F. T.  0 2 2 2 3 5 4 6 10 10 2 12 7 4 11 7 2 9 2 7 9 1 0 1	M. F. T.	М. F. т.	M. F. T. 1 0 1 2 0 2 1 3 4 16 8 24 22 20 42 30 11 11 34 10 44 29 18 47 39 17 56 9 8 17 1 2 3 1 0 1 1 0 1
Totals .	. 56 21	77	26 15 41	<b>37 16 53</b>	14 5 19	17 13 30 3	33 26 59	2 1 8	1 0 1	186 97 289

		<del></del>		-1 .		Ad	naisai	ions.	Di	echa:	rges.	Г	)eatl	18.
JUCKLAND-					1									
Single					!	м. 80	F. 29	T. 109	м. 24	F. 12	т. 36	М.	F.	T.
Married	• • •	• •	••	••		45	31	76	16	19	35	30	3	33
Widowed	••	••	• • • • • • • • • • • • • • • • • • • •			8	. 8	16	3	6	9	21 5	13 5	34
· Wittowou	••	••	••	••										10
•	Totals	• •	••	: ••		133	68	201	48	37	80	56	21	77
HRISTCHURCH-	- 1													
Single .	• •		• •	••	• • •	43	23	66	30	- 11	41	14	7	21
Married	••	• •	• •	• • •	•	26	25	51	18	12	30	10	3	13
Widowed	• •	••	• •	: ••	• • •	6	21	27	1	4	5	2	5	7
Transfers		• •	••	••	• •	25	0	25		••			• •	
	Totals					100	69	169	49	27	76	26	15	41
unedin (Seac	i#\				-		<del></del>			<u> </u>				
Single						60	27	87	99	18	50	18	7	25
Married			• • • • • • • • • • • • • • • • • • • •			27	32	59	11	21	32	15	6	20 21
Widowed	•••		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		9	9	18	2	4	6	4	8	7
Fransfers			••	•••		28	ŏ	28	-		. 0	•	• .	•
	Totals		• •		-	124	68	192	45	43	88	27		
11. 1	10000	••	••	• •	-							37	<b>1</b> 6	53
OKITIKA				•	- 1		-		_	_	10			
Single	• •	• • •	• •	••	••	15	5	20	9	1	10	12	3	15
Married	• •	*••	••	••		2	6	8	0	3	3	1	0	1
Widowed	••	• •	• •	••		1	0	1		• •		1	2	3
	Totals	••		••	••	18	11	29	9	4	13	14	5	19
KLSON					-									
Single	• •					15	3	18	5	1	6	15	7	22
Married	• •			••		1	4	5	2	1	3	2	6	8
Transfers	••	• •		••		6	0	6	2	0	2		••	~
	Totals	••				22	7	29	9	2	11	17	13	30
ORIRUA					-							<u> </u>		
Single			• •			77	39	116	36	17	53	14	11	25
Married	• • • • • • • • • • • • • • • • • • • •	• • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		45	34	79	22	29	51	16	8	20 24
Widowed	••	• • • • • • • • • • • • • • • • • • • •	•••	• • • • • • • • • • • • • • • • • • • •	::	7	9	16	2	6	8	3	7	10
Transfers	••	•••	••	• • •		106	56	162	4		J	3		10
					-						110			
	Totals	••	••	• •	-	235	138	373	60	52 	112	33	26 ——	59
VELLINGTON-					,	_	^		^^		100	_	_	
Single	••	• •	• •	••	• • •	2	0	2	98		120	1	0	1
Married Widowed	••	••	••	••		1	2	3	52	29	81	1	1	2
Widowed Transfers	••	••	• • •	••	::	0	i	1 l	6	6	12		• •	
TIGHNICIS		••	••	••	- :  -								··	
	Totals	••	••	* * *		3	3	6	156	57	213	2	1 	3
SHBURN HALL								_		٠				
Single Married	• •	••	••	••		2 2	3 3	5	4	5	9		٠.	_
Married Widowed	• •	• •	••	••	•••	0	3	5	. 0	. 2	2	1	0	1
TT IND WON	••	• •	• •	••					1	0	1	<u> </u>	••	
	Totals	••	••			4	7	11	5	7	12	1	0	1
OTALS-					]-									
Single						294	129	423	238	87	325;	104	22	142
Married	• • •		••	Σ.		149		286			237	67		104
Widowed	••						48	79	15	26		15		37
Unknown									Q	ŏ	2	10		0,
Transfers	••		••	••		165	57	222	. 2	ő	Õ	l	••	
			4.1	· · · ·	- [-		<u> </u>				<del></del>	<b> </b>		
	Totals	• •	• • •		]	639	971	1,010	976	990	605	186	07	283

TABLE VIII.—NATIVE COUNTRIES.

Countries.	Au	ıcklaı	nd.	Chri	istch	urch		uned:		Но	kitil	ka.	N	Telso	n.	Р	oriru	8.	Wellingt	on.	( <b>P</b>	abu Iall riva	te		Total	
	м.	F.	T.	м.	F.	т.	м.	F.	т.	м.	F.	т.	М.	F.	T.	м.	F.	т.	M. F.	7,	М.	F.	т.	м.	F.	1.
England and Wales				104		207			172	29				18		168	89	257			6	2	8	555	358	913
Scotland	40	17	57	34	18		106	67	173	11	6	17		7	13		27	66	• • • • • • • • • • • • • • • • • • • •	:	7	4	11	243	146	
Ireland	58		116		58	113	90	62	152	38	12	50	17	23	40			133			2	ō	2	330	276	
	170			126	116	242	176	121	297	41	21	62	44	43	87	177	183	360			8	12	20	742	619	
Australian States	20	9	29	12	9	21	18	22	40	2	2	4	3	3	6		7	26		İ	ō	1	1	74	53	127
France	2	ŏ	2	0	1	1			- 1	_					-	1	Ó	1			_		-	3	1	4
Germany	4	2	6	3	1	4.	- 8	1	9	2	0	2	3	0	3	8	7	15					ł	28	11	39
Austria	10	$\bar{0}$	10	ĺi	Õ	1			41	_			1	ő	ĭ	ő	i	1	•••	:			- 1	12	1	13
Norway	0	1	1	2	0	2	6	1	7				ō	2	2	1	ō	1		,			- !	9	4	13
Sweden	7	i	8	2	Õ	2	4	0	4	3	0	3	ī	Õ	1	4	2	6	• • •	+			i	21	3	24
Denmark	3	Ŏ	3	3	.,	5	1	2	3	-		- 1	ī	Õ	ī	4	ō	4		- 1				12	4	16
Italy	3	ŏ	3	4	ō	4	ī	ō	1	2	Ö	2	Ô	i	ī	4	ő	4		,			Ţ	14	1	15
China	1	ŏ	1	1	ŏ	2	11	ō	11	4	ŏ	4	Ĭ		-	2	ő	2	• •				1	20	0	20
Maoris	21	10	31	ī	2	3			!	_		-				6	2	8					ł	28	14	42
Other countries	34	5	39	9	$\bar{2}$	11	7	4	11	2	Ö	2	2	0	2	1Ŏ	3	13					- 1	64	14	78
Unknown				4	5	. 9	·	• .		1	0	1			-					,			ı	5	5	10
Totals	492	298	790	362	317	679	5 <b>4</b> 2	338	880	135	<b>57</b> 1	192	93	97	190	513	384	897			23	19	42	2160	1510	3670

TABLE IX.—AGES OF PATIENTS ON 31ST DECEMBER, 1910.

Ages.		Au	cklaı	ad.		Chris bure			uned eaclif		Ho	kiti	ka.	N	lelse	on.	Р	oriru	18.	Wel	llingte		I Pr	bu Ial iva .H.	l te		lotal.	
From—		M.	F.	T.	М.	F.	т.	M.	F.	т.	M	. F.	ጥ.	М.	F.	Τ.	M.	F.	т.	М.	F.	т.	М.	F.	т.	М.	F.	T.
1 to 5 years							1				ł			0	1	1	1					ì		٠.		0	1	1
5 , 10 ,		3	1	4	O	3	3	1	0	1				3	1	4	1	3	4							8	8	16
10 . 15		. 1	0	1	2	0	2				1	0	1	5	0	5	0	3	3			i				9	3	12
15 20		- 5	6	11	9	6	15	3	4	7	1	0	1	5	0	5	12	11	23			i	1	0	1	36	27	63
20 30		48	27	75	41	36	77	63	39	102	10	9	19	6	3	9	68	57	125			- 1	$^{2}$	1	3	238	172	410
30 40		120	72	192	70	60	130	104	75	179	19	10	29	10	20	30	124	70	194				0	3	3	447	310	757
40 , 50 ,		123	71	194	79	74	153	119	73	192	23	6	29	16	17	33	113	97	210				4	4	8	477	342	819
50 , 60 ,		102	62	164	68	59	127		58	160	22	8	30	15	17	32	99	84	183			ì	6	6	12	414	294	708
60 , 70 ,		50	33	83	51	48	99		48	127	_	13	44	14	14	28	67				• •	i	4	3	7	296	196	492
70 , 80		29	20	49	35	27	62		32	91	15	7	22		-6	12		19	44			H	6	1	7	175	112	287
80 90	• •	. 6	-3	9	6	4	10	12	9	21	2	á	-2	3	2	-5	4	2	6			- 1	ŏ	ĩ	1	33	21	54
90 , 100 ,	• •	iŏ	ĭ	1	1	ō	1				_	•	_	. ~			٥	1	1				•	-	-	1	2	9
Unknown		5	2	7	•		-				11	4	15	10	16	26			-		• •			• •		26	22	48
Totals		492	298	790	362	317	679	542	338	880	135	57	192	93	97	190	513	384	897				23	19	42	2160	1510	3670

TABLE X.—LENGTH OF RESIDENCE OF PATIENTS WHO DIED DURING 1910.

Length of Residence.	Auc	kla	nd.		iris urc			ned		Но	kiti	ka.	N	elso	n.	Po	riru	L.	Wel	ling	ton.	(P)	hbu Hall iva .H.)	te	1	'Ota	1.
	M.		T,	M.	F.	T.	M.	F.	T.	M.			M.	F.	T.	М.	F.	T.	M,	F.	т.	M.	F.	т.	M.	F.	7
Jnder 1 month	10	4	14	2	1	3	1	1	2	3	0	3				1	2	3	ļ						17	8	2
From 1 to 3 months	5	1	6	1	1	2	5	4	9	i			3	0	3	4	1	5	İ						18	7	2
. 3 . 6	5	2	7	3	3	6	5	1	6	1	0	1		٠.		4	1	5				1	0	1	19	7	2
. 6 . 9	6	0	6	4	1	5	3	0	3				0	1	1	5	2	7	:		- 1				18	4	2
9 , 12 ,	2	1	3	1	0	1	4	0	4	1	0	1	1			1	<b>2</b>	3							9	3	1:
. 1 , 2 years	5	1	6	. 3	<b>2</b>	5	2	3	5	1	0	1	1	3	4	3	2	5	2	0	2				17	11	2
. 2 . 3	4	<b>2</b>	6	2	0	<b>2</b>	2	0	2	3	<b>2</b>	5	2	0	2	1	3	4	[						14	7	2
. 3 . 5	6	3	9	1	1	2	5	1	6	i				٠.		2	2	4	ĺ		i				14	7	2
. 5 . 7	3	1	4	ļ			0	1	1				2	4	6	1	2	3							6	8	1
" <b>7</b> " 10	3	Ú	.3	0	2	2	1	1	2	1	1	2	0	1	1	2	1	. 3			į				7	6	13
" 10 " 12 "	0	3	3				ĺ	٠.		i			0	2	2	3	2	5	1						3	7	10
. 12 . 15	2	0	<b>2</b>	0	3	3	0	1	1				2	0	2	1	0	1							5	4	,
over 15 years	4	2	6	7	1	8	6	3	9	4	2	6	7	<b>2</b>	9	5	4	9	0	1	1				33	15	4
Died while absent on trial	1	1	2	2	0	2	3	0	3		٠.		ĺ	٠.		0	2	2		٠.			٠.		6	3	1
Totals	56	21	77	26	15	41	37	16	53	14	5	19	17	13	30	33	26	59	2	1	3	1	0	1	186	97	28

TABLE XI.—LENGTH OF RESIDENCE OF PATIENTS DISCHARGED "RECOVERED" DURING 1910.

Length of Residence		Auck	land.		hrie			necii		Но	kiti	ika.	N	elso	n.	Pe	orir	us.	Well	ing	ton.	( <b>P</b>	hbu Hal riva M.H	ate	,	Total	i.
	1	м. :	F. T.	м	. F	т.	м	. F.	T.	м.	F.	т.	M.	F.	T.	M.	F.	т.	M.	F.	т.	M.	F.	т.	M.	F.	T
Jnder 1 month	• • •			3	1	4	1			1	0	1	1			5	1	6	2	0	<b>2</b>	0	1	1	11	3	14
From 1 to 3 months		8	3 11	8	2	10	9	10	19	1			4	0	4	14	3	17	1	1	2	1	1	2	45	20	68
8 . 6 .		19 1	6 35	13	8	21	7	10	17	2	0	2	2	0	2	9	11	20		• .		0	1	1	52	46	98
. 6 . 9 .		4	8 12	5	5	10	3	3	6	3	1	4	1	1	<b>2</b>	2	6	8				0	3	3	18	27	45
. 9 , 12 .		6	3 9	3	3	6	3	<b>2</b>	5	0	1	1	1	1	2	7	8	15		0	1	1			21	18	39
" 1 " 2 years		0	3 3	9	3	12	2	1	3	1	0	1	1			8	14	22				:			20	21	41
" <b>2</b> " 3 "		1	1 2.	1	0	1	1	0	1	1	0	1	1	0	1	0	3	3				į			5	4	ç
" <b>8</b> "5 "		1	0 1	1	1	2				Ì	٠.					4	1	5	-			l			6	2	- 8
, 5 , 7 ,																1	0	1				į			1	0	1
" <b>7 "1</b> 0 "				0	1	1							1			1	1	2				1			1	2	8
"10 "12 "		0	1 1				1			i				٠.		1	1	2	ļ	٠.					1	2	9
12 . 15				!			ĺ			1	0	1	i			i			1	٠.					1	0	1
Over 15 years	• •	•	•		• •			• •			• •			• •		ŀ	٠.		į	٠.			• •		ĺ	• •	٠.
Totals		39 9	5 74	43	24	67	25	26	51	9	2	11	9	2	11	52	49	101	4	1	5	1	6	7	182	145	327

TABLE XII.—CAUSES OF DEATH.

Causes		Auckland.	Christ- church.	Dunedin (Seacliff).	Hokitika.	Nelson.	Porirua.	Welling- ton.	Ashburn Hall (Private M.H.).	Total.
	_			1	Ī		1	لسانده مشدده		<del></del>
GROUP 1.—GENERAL		M. F.	M. F.	M. F.	M. F.	М. Г.	M. F.	M. F.	м. г.	M. F. 1
Anæmia, pernicious	••	1		• • •	: : .	• •	· ·		• • •	10.
Carcinoma	••	•			1 0	• • •	2 1			3 1
Diabetes	••				0 1		0 1		••	0 2
Enteric fever		l l		0 1		1 0				2 2 . 4
nfluenza	••		••	••		4 7		••		471
Pneumonia, broncho		I.	,	1	2 1	•		•••	•••	2 1
lobar				3 1	••	1 0	3 1	• •		72
Septicæmia		•		1 1 1	• • •	••				1 1 :
Tuberculosis			i			: 1				
General	• • • • • • • • • • • • • • • • • • • •				i		1 :			2 0
Of lungs		60	2 1	3 1	••	••	3 4	1 0		15 6 2
GROUP II.—DISEASES C SYSTEM.		Ţ		1	:					
Brain, Congestion of				1 2 2					••	2 0
" Organic disease			0 2	1 2			4 0	• •	· • •	11 8 19
" Softening of		.   12	1 :		• •					1 2
Tumour of	2	.	1 0	1 :	••					1 0
Epilepsy	.,		0 2	2 3	1 0	3 3	0 1			11 12 2
General paralysis of th			7 0	12 0	1 0	••	8 2	• •		37 3 4
Mania, exhaustion from	n.	1 1		• •						1 1
Melancholia, exhaustic	n from	1 1	0 3	0 1		• •	0 1			16
	17	1	!		: .					
GROUP III. — DISEASES		-a l	1		1		1	*.		er ji sijaa i
Dilatation	••	ļ	i 0	0 1		1 0	• • •			1 0
Fatty degeneration	••	1 0 1	1 0 2 1			••	1 :		•••	1 1
Syncope		1 4 . ^		1 : .	2 2	••	1 3	••	••	5 7 19
Valvular disease	•••	. 1 0	2 1	1 0	1 0	••	2 0	••		. 7 1 1
GROUP IV.—DISEASES VESSELS.	or Blood	-								
Apoplexy	••	•   ••	• • •	0 2	1	1 1	10		• • •	23
Cerebral hæmorrhage	••	1 ^ 4	4	1 0		••	!	••		1 0
Embolism	••	. 0 1	0 1	• • •	••	• •				0 2
Senile gangrene		•   • • •		· • •	•••	••	1 0		!	1 0
GROUP V.—DISEASES O						· ·			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	er en en en en en en en en en en en en en
Bronchitis					3 0	1 0			!	4 0
Congestion of lungs					1 0	,				1 0
Gangrene of lung			}	1 0	1		1		1	1 0

TABLE XII.—Causes of Death—continued.

Causes.	Auckland.	Christ- church.	Dunedin (Seacliff).	Hokitika.	Nelson.	Porirua.	Welling- ton.	Ashburn Hall (Private M.H.).	Total.
GROUP VI.—DISEASES OF DIGESTIVE SYSTEM.	м. ғ.	м. г.	м. ғ.	M. F.	м. ғ.	м. г.	м. ғ.	м. ғ.	м ғ. т.
Cirrhosis of liver	i o	1 0	1 0 		i 0	0 1  2 1	••	••	0 1 1 3 0 3 1 0 1 2 1 3
GROUP VII.—DISEASES OF LYMPHATIC SYSTEM AND DUCTLESS GLANDS.			i :						
Addison's disease Hodgkin's disease	1 0		i o	::		'	• •	••	1 0 1
GROUP VIII.—DISEASES OF URINARY SYSTEM. Chronic Bright's disease	1 0		1 0	. 0 1		i 1	•	٠. پ	
GROUP IX.—CONDITIONS NOT SPECIFIED. Pelvic abscess	1 0 16 5	 8 4	6 3	2 0	3 2	4 7	1 1	•	1 0 1 40 22 62
GROUP X.—ACCIDENT OR VIOLENCE Suicide (hanging)	0 1	 	• •		i 0	1 0		1 0 	2 0 2 0 1 1 1 0 1
Died while absent on probation		2 0	8 0		••	0 2			5 2 7
Totals	56 21	26 15	37 16	14 5	17 13	33 26	2 1	1 0	186 97 283

TABLE XIII.—PRINCIPAL ASSIGNED CAUSES OF INSANITY.

Causes.	Auckland.	Christ- church.	Dunedin (Seacliff).	Hokitika.	Nelson.	Porirua.	Wellington.	Ashburn Hall (Private M. H.).	Total.
Heredity	м. <b>F.</b> 16 9	м. <b>г.</b> 3 3	м. ғ. 8 10	м. <b>г.</b> 0 2	м. ғ.	м. г. 13 12	M. F.	м. <b>г.</b> 1 3	м. г. т. 41 39 80
Congenital mental deficiency	9 9	5 9	8 5	0 1	6 2	5 9	l 1		33 35 68
Previous attack	4 2	13 15	6 5		1 0	10 7	1 0		35 29 64
Puberty and adolescence	7 6	9 3				8 2	1 0		25 11 36
Climacteric	0 3	2 7	0 3			1 3			3 16 19
Senility	18 8	10 15	10 6	7 1	3 1	15 9		0 1	63 41 104
Pregnancy			0 1	\ ' <sup>*</sup>		0 1			0 2 2
Puerperal state	0 7	0 4	0 3	::		0 3	0 1		0 18 18
Lactation			0 2	::		0 3		• • •	0 5 5
Sudden mental stress	1		ĭīī		0 2		1 1	0 1	1 4 5
Prolonged mental stress	9 9	1 0	2 6		1 1	6 17	0 1	ĭō	20 34 54
Privation	1			1 0			"	• • •	1 0 1
Masturbation	2 0	1 0	5 0	1 0	• • •	6 0			15 0 15
Sexual excess	1 0	1	0 i	l	• • • • • • • • • • • • • • • • • • • •	·	1 :: 1	· ·	1 1 2
Toxic:-			1 -	''	•••	• • •	''		
Alcohol	22 0	17 3	17 6	4 1	1 1	17 2	1 0		79 13 92
Tuberculosis			1	7		iõ		• •	1 0 1
T		! ::	3 2	l :: l		3 1		• •	6 3 9
Syphilis	9 0		6 2	::	• •	10 0	] :: [		25 2 27
Other toxins					1 0	1 0	[ ]		2 0 2
Injuries			4 0	::		4 1			8 1 9
Sunstroke			2 0	::	• • • • • • • • • • • • • • • • • • • •	īō	::	• •	3 0 3
Lesions of the brain			1	::	• • •		1 1		1 0 1
Disease of the ear	0 1		1	:: :		! ·•	1 :: 1	• • •	0 1 1
Epilepsy .	7 3	1 3	5 1		1 0	6 4	::		20 11 31
Other defined neuroses	. Ó 1		2 4				::		2 5 7
Graves' disease		0 1				2 0	1 :: 1	0 1	2 2 4
Cardia-vascular degeneration	• • •		4 3		• • •	3 0	::	1 0	8 3 11
General ill health	12 7	1 0	1 4	;		1 0	::	1 1	16 12 28
No factor ascertained, his- tory defective		12 6	10 1	5 6	1 0	16 7		,	60 23 83
Religious excitement		1	2 2	l i	1 0	0 1	l l		3 3 6
Transfers		25 0	28 0		6 0	106 56	0 1		165 57 222
Totals	133 68	100 69	124 68	18 11	22 7	285 138	3 3	4 7	639 371 1010

TABLE	XIV	-Former	OCCUPATION	OF	PATIENTS.

			T.Y.	BLE	Α	IV.	—- I	ORM	ER C	CCUPATION OF PAT	CIEN	TS.							
Occupations.	Auckland.	Christchurch.	Dunedin (Seacliff).	Hokitika.	Nelson.	Porirua	Wellington.	Ashburn Hall (Private Mental Hospital).	Total.	Occupations.	Auckland.	Christehurch.	Dunedin (Seacliff).	Hokitika.	Nelson.	Porirua.	Wellington.	Ashburn Hall (Private Mental Hospital).	Total
									Mai	CES.									
Accountants Bakers Barman Blacksmiths Boilermakers Book keeper Booksellers Bootmakers Builders Bushman Butchers Canvasser Carpenters Carters Cartiers Cattle-dealer Chemists Clerks Coach builder Coal-miner Commercial travellers Lers Cooks County foreman Dentist Drapers Drover Engineers Ex police sergeant Factory hand Farmers Farm hands Flax-outter Firemen French polisher Gardeners Gold-miners Grocers Groom Gum-diggers Hawkers Journalists	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1	2	2 1 1		1	22 14 21 22 7 31 4 10 4 21 22 7 31 14 11 32 22 11 18 22 11 18 22 11 18 22 11 18 22 18 18 18 18 18 18 18 18 18 18 18 18 18	Medical practitioner Merchants Messenger Miners Miniers Minister of religion Money-lender News agents Newspaper-runner No occupation Painters Paper-ruler Platelayer Plumbers Piano-tuner Picture framer Porters Professor of classics Printer Quarryman Rabbiters Railway hands Saddler Sallors School-boys School-teachers Settlers Shearer Shepherd Shipwright Shoemaker Solicitor Steward Stoker Storemen Students Tailors Telegraphists Tram-conductor Traveller Warehouseman Watchmaker Wheelwright Transfers	111111111111111111111111111111111111111	11	1 1 1 2 2 2 2 1 1 1 1	7		1 1 1 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Labourers Laundrymen	41		26				••		2	Totals	-55	-55	!!				3	4	1 00.
Charwoman Cook Dentist's assistant Domestic duties Dressmakers Factory hand Governess Laundress Milliner Music teachers Nurses	57			 11		1	· · · · · · · · · · · · · · · · · · ·	6	Fram: 1 1 1 274 4 1 1 1 1 4 2	School-teachers Sempstress Shop-assistant Storekeeper Student Tailoress Typiste Transfers	5 2 1 1  1	1  1	1	11	2    	3  1 1  56	··· ·· ·· i	7	13 3 1 1 1 2 1 57

т. 736 670

F. 254 1,510

м. 482 160

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1876 1911

mental hospitals, 1st January, 1 mental hospitals, 1st January, 1

n n

THE Percentage of Deaths on Average Numbers resident. Ġ 5.44 6.71 5.50 5.50 6.71 ()ENT. PKK RECOVERIES Percentage of Recoveries on Admissions. 551.90 564.93 56.93 45.53 46 OF. Average Numbers resident. PROPORTION 125 172 241 2, 3141, 313 2, 3151, 347 2, 4801, 411 2, 4801, 418 2, 5571, 487 2, 6721, 534 2, 7731, 622 2, 9591, 741 3, 0381, 780 3, 1021, 796 3, 2401, 823 3, 2401, 823 3, 4141, 894 GNE 2,1681 Remaining 31st December in each Year. AND DEATHS, WITH THE MEAN ANNUAL MORTALITY ADMISSIONS FOR EACH YEAR SINCE 18T JANUARY, 1876 , 4721, ,5121, ,5121, ,56111, ,65411, 1,771111, 1,80111, 1,99011, 1,99711, 1,99711, 1,99711, 1,99711, 1,99711, 1,99711, 1,99711, 1,99711, 1,99711, 21.0 51.0 154 229 308 339 339 440 1,415 4,613 Died 3,198 1.751Not Improved. 25 67 67 67 67 772 2 2 6 8 84 12 31 47 979 1,557 Relieved Discharged 676--- SHOWING THE ADMISSIONS, DISCHARGES, 881 7.307 Recovered 3,170 4,137 18, 163 Admitted 10,8737,290 :: :: :::: : ::: TABLE XV Year. 

 ${\it Table~XVI.} - {\it Showing~the~Admissions,~Readmissions,~Discharges,~and~Deaths~from~the~1st~January,~1876,~to~the~31st~December,~1910.$ 

Persons admitted December, 191 Readmissions		period 	from 1	lst January. 	, 1876, t	o 31st	M 8,741 2,132	5,550 1,740	т. 14,291 3,872	М.	F.	Τ.
		admitted	i							10,873	7,290	18,163
Discharged cases— Recovered	••						4,137	3,170	7,307			
Relieved Not improved	• •	• •		• •			881 979	676 772	1,557 1,751			
Died	••	• •	• •	• •	• •		3,198	1,415	4,613			
Total	cases o	discharg	ed and	died since	January	, 1876		•		9,195	6,033	15,228
Remaining, 1st Jan	nuary,	1876				••.				482	254	736
Remaining, 1st Jar	iuary,	1910			• •					2,160	1,510	3,670

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

			Males.	Females.	Both Sexes.
Recovered	.,		 38.05	43.49	40.23
Relieved	• •		 8.10	9.27	8.57
Not improved			 9.01	10.59	9.64
Died		• •	 29.41	19· <b>4</b> 1	25.40
Remaining			 15.43	17-24	16.16
			 100.00	100.00	100.00
			 		<u> </u>

Table XVIII.—Expenditure, out of Public Works Fund, on Mental Hospital Buildings. etc., during the Financial Year ended 31st March, 1911, and Liabilities at that Date.

		Me	e <b>nta</b> l H	lospitals.				Net Expenditure ended 31st Marc		Liabilities on 31st March, 1911.
ıckland								£ s. 462 17		£ s. d.
	-house	at Auckia	nď			•		2,531 6	-	1 9 9
kanui			• •				• •	165 16	_	_::
rirua	··	• •	• •	• •	• •	• •	• •	8,121 7	•	74 15 11
ristchu	reh	• •	• •	••	• •	• •	•••	1,062 14 4 4	7	••
cliff	• •	• •	• •	• •	• •	• •	•••	352 16	7	••
lson kitika		••	• •	• • • • • • • • • • • • • • • • • • • •	• • •	• • • • • • • • • • • • • • • • • • • •	•	5 14		••
		Totals			••			12,706 17	7	76 5 8

TABLE XIX.—Total Expenditure, out of Public Works Fund, for Buildings and Equipment at each Mental Hospital from 1st July, 1877, to 31st March, 1911.

Mental	Hospital	8.		1877	-1903	i <b>.</b>	1903	-4.		1904~	-5.	i	1905	6.		1906	3-7.	
				£	8.	d.	£	8.	đ.	£	s.	d.	£	s.	d.	£	s.	d.
Auckland			!	95,60	7 15	5	1,284	4	1	2,413	12	5	5,600	7	3	527	17	3
Reception-house	at Auck	land													1	4	10	0
Wellington				28,10	1 15	2	532	1	10	235	5	9			1	482	0	9
Wellington (Por	irua)			105,25	3 6	1	6,377	15	0	5,387	11	3	2,602	14	6	1,175	12	2
Christchurch				103,68	5 4	3	4,238	4	11	3,266	1	7	1,944	4	6	1,962	6	5
Seacliff				137.08	3 0	10	1,360	17	0	3,229	0	10	1,494	3	6	1,997	4	5
Waitati				•			1			΄.		i	· .		- 1	320	10	2
Dunedin (The C										:			3,014	3	6	899	7	11
Napier	···			14	7 0	0						1	-,		- }			
Hokitika				1,52			874	11	8	. 890	16	2	156	11	5	19	7	0
Richmond				-,		·			•			_	989	4	8	107		7
Nelson				14,35	7 16	2	1,144	5	8	526	19	10	493		3	552		11
	Totals			485,75	9 11	8	15,812	0	2	15,949	7	10	16,235	6	7	8,048	19	7
Menta	l Hospita	ls.		19	07–8.		1908	<b>-9</b> .		1909-10	).		1910-11.		İ	Tota et Expen 1st July 31st Mar	ditu	7.
Auckland				£		d.	£ 1.318	s. 8	d. 9	£ s. 1.523 10	d. 2		£ s. 462 17	d. 2		£ 108,992		d. 4
Reception-house	at Anab	land	•••		2 10			16		1,788 8		١,	,531 6	5		4,848		
Tekanui	Au ALUOM		•••			v	0.	10	v	1,100	U	"	165 16	8	!	165		8
Wellington		• •	•••	19	 8 2	1	106	· 100	0			i	100 10	G	i	29,655		7
Wellington (Por	ima)	• •	• • •	2.36			2,246			10.347 13	10	ء ا	,121 7	0		143,882		i
Christchurch	irua)	• •		$\frac{2,00}{2,01}$			4.143			1,133 4			.062 14			123,453		5
Seacliff		• •		1,31			5,598			2,796 17		"	4 4	7		154.817		1
	• •	••	• •			10			10	2,190 11	ij	}	4 4	- 1		659		
Waitati		• •		25	2 4 8 18			16		• • • • • • • • • • • • • • • • • • • •		1	• •					
Dunedin (The C	• /	• •	•••	91	0 10		1 96	10	9	•••			• •			4,891		10
Napier	••	• •			• •			•		256 7	^	İ	5 14		:	147	0	0
Hokitika Diakana	• •	• •	•••		• •		•	•		256 7	0	1	ə 14	4		3,727	1	4
Richmond	• •	• •	•••	- 20		_	1 000		^	1 000 6		I	050.10	_		1,096		3
Nelson	• • •	••	• • •	20	0 0	0	1,675	0	0	1,992 6	1	1_	352 16	7		21,295	10	6
	Totals			7.98	6 18	4	15,296	3	4	19,838 7	3	12	,706 17	7		597.633	12	4

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ı		Items.	;	!			Auckland.	Christehureh.	Danedin (Seacliff).	Hokitika.	Velson.	ion.	Porirus.	Wellington.	gton.t	Total.	ı
		:		•	1	-	£ 9	£ 8.03.	£ 8	3	<b>.</b>	7	ت ع	9	70		70
Inspector-General*	:	:	:	:			:	:	:				:			974 6	
Assistant Inspector*	:	:	:	:			:	:	:	•	•		:				
Clerks	•	:	:	:		:	:	:	:	:	•		:	•		603 18	٠.
Medical fees	:	:	:	:			:	:	:	:	•		:				
Contingencies.	:	:	:	:			. 16									81 /JC	
Superintendents	:	:	:	:			- د	۰ ح	+ =	01 6	200		+ <		5	21 08 21 076 c	
Assistant Medical Officers	:	:	:	:			9 5 666	981 50	000				381	36	 	1,619,10	
Visiting Medical Officers	: :	: :	: :	: :		' : :		· .		175 0	0 175	0			· .	4	9
Clerks	:	:	:	;		~¶ :	219 12 7	~	355 0 0	:	•		15		0	1,285 17	2 2
Matrons	:	:	:	:		- :	14	Ö	0	82 0	0 · 108	15 0	9		9	762 10	_
Attendants and servants	:	:	:	:		86	6,859 16 9	6,335 12 4	11,170 13 3	1,937 8	<b>-</b> î.	21	12	1,276		38,673	
Rations	:	:	:	:		7,6	61	۲,	2	1	<del>-</del>		2		8	_	
Fuel, light, water, and cleaning	leaning	:	:	:		4,	•	5	ლ -	38 15		· œ			က	9,040	
Bedding and clothing	:	:	:	:		ξ. 	9 :	G (	- 3		327	 	<u>.</u>	~		•	
Surgery and dispensary	:	:	:	:				" 2	11 0 00%	4 6			- 1	·-	2		-
Wines, spirits, ale, and porter	orter	:	:	:		 :	0 2		944		# 201 	) o				81 00 18	٦
Ruildings and remains	:	:	:	:		r er 	9 -	3 ::	1 12	50 IS		0 =	> -		- c	0,429 12	
Necessaries, incidental, and miscellaneous	nd misce	laneons	: :	: :				2,636 19 9	339 11		6 533	15 10	2,666 19 0	285		_	
Totals	otals	;	÷	:		20,050	50 16 3	21.832 1 7	32,746 13 10	4,791 14	5,314	6 91	26,188 4 7	-	7 2	118,268 14	2
Repayments, sale of pro-	duce, &c.		:	:		5,0		2	<b>2</b>		8 1,058	6 6 6	9	1,448	03	32,133 12	
AC.	Actual cost	:	:	:		14,972	72 5 0	14,260 6 1	22,651 15 6	4,149 15	6 4,255	17 0	19,948 18 2	2,403	;;  -	86,135 2	2 2
						Not ine	nded in	Table XXI +	Closed 8th June, 1910	1910.			į			!	, .
			•						į								
					TABLE	TABLE XXI	.—Ауеклбе	Cosr of	EACH PATIENT	PER ANNUM	I						
		ļ		-							: : :					:	
Mental Hospital. Prov	Provisions.	Salaries.	Hedding and Clothing.	Fuel, Light, Water, and Cleaning.		Surgery and Dispensery.	Wines, Spirits, Ale, and Porter.	Buildings Farm and Repairs.	ings Necessaries, d ancidental, and Mis- cellaneous.	Fotal Cost per Patient.	Repayments for Main- tenance.	Fotal Cost Repayments for Main- tenance.	ress Fotal Cost ess per Head, less tracker Receipts of all kinds.		Total Cost per Head, less Receipts of all kinds pre- vious Year.	<b>D</b> естенне по in 1910. п	Іп <b>ства</b> ке in 1910.
33 E	8. d.	£ s. d.	8. d.	33 -	جة د م	9. cl.	£ 8. d.	<i>*</i> i ≘	d. £ 8. d.	3. 8. 0. 0.	70 0	.s 3.	•		8. d. £	ક તે.	8. d
rch :: 8	4.0	1	9	4 5 6			037	3 = = = = = = = = = = = = = = = = = = =	4	34 17 71 48	10	25 12	33	3			
eliff) 6	6	15	13	3		7.5		=	73 (	40 5	9 /	30 14	27	6 29		& 4∙	::
	4 10 <u>4</u>	13 O 6	17	0 - 4 5		1 104	000		⊃ <u>o</u>	20 10	9 9	27 T8	3 8			œ.	
• œ	<b>5</b> 25	3 =	2 8 2	- 61	9 12	+ cc - c <del>c</del> =	==	8.4 1.7 1.0	4 w	33 3		26 15	2 12 2 13 2 13 2 13		15 194	) ) : :	3 104
Wellington*	:	:	:	:		. :	:	: - :	:	:	:	:	:		:	:	•
Averages 8	0 43	13 8 4	2 7 43	2 12	0 48	3 84	tt 0 0	1 17 531 4	3 3 14 54	33 9 04	7 9 14	25 19 11	24 1	83 24	2 104 0	1 14	:
								TABLE XXI	<b>A</b> .								;. T
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Approximate Cost of Paper. -Preparation, not given : printing (1,625 copies), £23.