

1882.
NEW ZEALAND.

EDUCATION: INDUSTRIAL SCHOOLS AND ORPHANAGES

(PAPERS RELATING TO).

[In Continuation of E.-6A, 1881.]

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

No. 1.

EXTRACT FROM FIFTH ANNUAL REPORT OF THE MINISTER OF EDUCATION.

THE Burnham and Caversham Industrial Schools are wholly maintained by Government. The cost for each child at Burnham for the year (including salaries of officers and teachers) was £13 9s. 4½d., or deducting sums received from relatives of the children £11 14s. 0½d. To this should be added £1 5s. 3d. for each child, for the value, £235 19s. 8d., of produce raised on the farm and consumed. During the year £1,325 was spent on buildings, and £224 was spent on the farm in excess of the returns from sale of produce and the value of produce raised and consumed; and these two items represent about £8 5s. for each child. It would not be quite fair to charge this to annual maintenance, seeing that it has been expended on permanent extensions and improvements, and on stock. The cost at Caversham was £12 11s. 6d., or, deducting sums received from relatives, £11 9s. 2d., to either of which the expense that may be added for buildings is £2 5s. 10d.

The Kohimarama Naval Training School established under "The Naval Training Schools Act, 1874," has also been maintained by the Colonial Government. The cost for the year was about £35 5s. for each boy, about £1 of this amount being for expenses not properly chargeable to annual maintenance. Contributions from parents to the extent of £2 0s. 6d. reduce the cost to £33 4s. 6d. At the end of March in the present year the school was broken up, it being considered that in the present circumstances of the colony no adequate return was obtained for the comparatively large outlay on an institution of this character. Most of the boys were sent to suitable places of service or to their relatives, and the remainder—twelve in number—were committed by the Resident Magistrate to the industrial school which now occupies the Kohimarama premises.

The Auckland Industrial Home was until March of this year maintained by a benevolent society, and Government gave £1 for every pound voluntarily contributed to the society, and paid £10 a year for every child committed under "The Neglected and Criminal Children Act, 1867," or admitted at the instance of the Relieving Officer, besides which the Auckland Board of Education received a capitation allowance of £3 16s. 6d. under "The Education Act, 1877," for every inmate attending the day-school of the home. This arrangement ceased on the 31st March, and the school is now maintained in the same way as those at Caversham and Burnham. The boys—except a few very young ones—have been removed to the premises formerly occupied by the Naval Training School, and the girls remain at the Home in Howe Street. It is proposed to sell the Howe Street property, and to provide new accommodation for both boys and girls on a reserve made for the purpose of a site for a lunatic asylum near Mount Eden.

The St. Stephen's Orphanage at Auckland is maintained by a Church of England charity, and the St. Mary's Industrial School and Orphanage (also at Auckland) by the authorities of the Roman Catholic Church. The payments made by Government to both these schools are £1 for every pound of voluntary contributions, and £10 for each child sent in by the Relieving Officer, and, in the case of St. Mary's, for each committed child.

The Thames Orphanage is practically maintained by the Borough and County Councils; and the Lyttelton Orphanage by the Charitable Aid Board: the accounts in both cases being paid in the first instance by the Colonial Secretary's Department, and then charged against the subsidy payable to the local bodies. The amount so paid by Government for each child at the Thames Orphanage was £21 4s. 3d., and the Education Board received £3 16s. 6d. for each child in average attendance at the day-school. The payments paid by Government on account of the Lyttelton Orphanage amount to £16 15s. for each child, the remainder of the cost, £2 5s. 7d., being met by contributions of relatives.

For each child sent to St. Joseph's, Wellington, by order of the City Council, the cost is 1s. a day, which is borne in equal proportions by the Government and the City Council. The payment for children maintained by the Government at St. Mary's, Nelson, is 1s. a day; and at Motueka Orphanage (which is a school carried on by a private person) the charge is 7s. a week in some cases and 8s. a week in others.

The schools at Burnham and Caversham have been for the last two years under the direct management of the Education Department, and the Auckland Industrial School at Howe Street and Kohimarama has been placed on the same footing during the current quarter. The other industrial schools

and orphanages, though they have all been inspected by, and made returns to, the Education Department, receive their income from the State out of the Charitable Aid vote administered by the Colonial Secretary, or out of subsidies to local bodies.

The site and buildings at Caversham, as appears from a report supplied by Dr. Hector,* are not well adapted to their purpose. The adoption of a new site for the Auckland School will involve expenses that may not be covered by the proceeds of the sale of the Howe Street property; and extensions are needed at Burnham. The boarding-out system, if adopted as proposed in the Industrial Schools Bill now under consideration in the House of Representatives, will probably have the effect of greatly diminishing the number of inmates in large institutions, but this process is not likely to be very rapid in its operation for the first few years, and provision must be made for the immediate future.

The number of the children received into and dismissed from these institutions during the year, and the number of children maintained in them at the beginning and at the end of the year respectively, are shown in Tables S and T, of which the first relates to children committed under "The Neglected and Criminal Children Act, 1867," and "The Naval Training Schools Act, 1874," and the second to children admitted as destitute.

TABLE S.—NUMBER OF COMMITTED CHILDREN AT INDUSTRIAL SCHOOLS, ETC.

INSTITUTIONS.	Number in School on 31st December, 1880.			Admitted during 1881.	Total Number at all in 1881.	Placed out under License.	Discharged or Absconded.	Died.	Number in School on 31st December, 1881.			Total Number at all in 1881.
	Boys.	Girls.	Total.						Boys.	Girls.	Total.	
Industrial Home, Auckland ...	58	28	86	53	139	26	26	...	50	37	87	139
St. Mary's, Auckland ...	...	32	32	4	36	...	4	...	...	32	32	36
Thames Orphanage ...	6	2	8	2	10	1	...	...	5	4	9	10
Kohimarama Naval Training School ...	55	...	55	24	79	7	19	...	53	...	53	79
St. Mary's, Nelson ...	6	8	14	24	38	...	...	...	12	26	38	38
Burnham ...	114	56	170	82	252	7	27	1	145	72	217	252
Caversham ...	154	108	262	105	367	21	93	4	139	110	249	367
Totals ...	393	234	627	294	921	62	169	5	404	281	685	921

The number of committals for the year (294) exceeds the number for 1880 by 21, and the licenses, discharges, and deaths were 22 more than in 1880, so that the increase for the year (58) is less by one than the increase (59) in 1880. The deaths in 1881 were 5, as against 8 in the preceding year. The proportion of dismissals to admissions is about as 4 to 5. The only considerable additions to the number of inmates are at Burnham and at St. Mary's, Nelson; at some schools the number diminished during the year. Many of the children have been restored to their families under license, this practice having been adopted as affording a means of probation in cases in which there is reason to hope that the parents will prove able and willing to perform their proper duty.

There is a slight diminution in the number of children maintained at the cost of the Government without being committed by Magistrates. Table T shows that 46 such children were admitted in the year, and 55 restored to their friends, or otherwise discharged, or sent to service. In this table no account is taken of children maintained by charities that only receive £1 for £1 out of the Charitable Aid vote.

TABLE T.—CHILDREN (NOT COMMITTED) IN ORPHANAGES, ETC., PAID FOR BY GOVERNMENT.

INSTITUTIONS.	Number in School on 31st December, 1880.			Admitted during 1881.	Total Number at all in 1881.	Placed out to Service.	Restored to Friends or Discharged.	Died.	Number in School on 31st December, 1881.			Total Number at all in 1881.
	Boys.	Girls.	Total.						Boys.	Girls.	Total.	
Industrial Home, Auckland ...	9	2	11	5	16	1	4	...	7	4	11	16
St. Mary's, Auckland ...	...	2	2	1	3	...	...	...	...	3	3	3
St. Stephen's, Parnell ...	9	8	17	4	21	...	3	...	13	5	18	21
Thames Orphanage ...	5	4	9	5*	14	1	3*	...	5	5	10	14
St. Joseph's, Wellington ...	...	21	21	...	21	...	1	...	...	20	20	21
St. Mary's, Nelson ...	7	26	33	10	43	...	9	...	6	28	34	43
Motueka Orphanage ...	12	16	28	4	32	5	6	...	8	13	21	32
Lyttelton Orphanage ...	53	45	98	18	116	10	13	...	52	41	93	116
Totals ...	95	124	219	47	266	17	39	...	91	119	210	266

* This table has been corrected since the Annual Report was made, an amended report having been received from the Thames Orphanage, showing that one child had been admitted and one discharged beyond the numbers at first reported.

The ages of the children in all the institutions on the 31st December were as follows: Under one year, 7; between one and two, 6; between two and three, 9; between three and four, 33; between four and five, 33; between five and seven, 119; between seven and ten, 247; between ten and thirteen, 295; between thirteen and fifteen, 135; more than fifteen years old, 11; total, 895. It thus appears that nearly 10 per cent. were under five years of age, rather more than 40 per cent. between five and ten years, and not quite 50 per cent. above ten years old. Nearly 800 were receiving regular day-school instruction, the numbers being as follows: Auckland Industrial Home, 69; St. Mary's, Auckland, 30; St. Stephen's, Parnell, 16; Kohimarama, 53; Thames, 18; St. Joseph's, Wellington, 17; St. Mary's, Nelson, 50; Motueka, 21; Lyttelton, 77; Burnham, 215; Caversham, 217; total,

783. Those at the Auckland Industrial Home and at the Thames are included in the returns of "public school" attendance; the rest (684) are children taught at the public expense in addition to the pupils of the public schools.

Beside the actual inmates of industrial and training schools and orphanages, there were, at the end of the year, 314 young persons (210 boys and 104 girls) out in service or with their friends, but still subject to the authority of the institutions. The numbers in connection with the several institutions respectively were as follows: Auckland Industrial Home, 26 boys and 13 girls; Kohimarama, 25 boys; Thames, 2 boys; Motueka, 4 boys and 7 girls; Lyttelton, 17 and 3; Burnham, 20 and 15; Caversham, 116 and 66.

No. 2.

MEMORANDUM BY MR. HABENS.

THE brief statements made by the police authorities, when children are committed to the industrial schools, show that in by far the greater number of cases the parents are to blame. Of the 294 admissions entered in Table S, 12 are cases of readmission from service. Of the 282 cases of commitment, there are 55 not due to the parents' faults, and 51 others in which the returns do not indicate any cause of blame. But in 63 cases both parents are of unsatisfactory character, in 90 one or other of them, and in 23 either one or both. In the following table these 282 children are grouped so as to show the circumstances or character of the parents as reported to the department.

COMMITTED CHILDREN CLASSIFIED ACCORDING TO PARENTS' CIRCUMSTANCES AND CHARACTER.

Children of	Mothers described as						Total.
	Dead.	Sick, Lunatic, Disabled, &c.	Of Good Character.	Not Known or Not Stated.	Of Bad Character.	Deserters.	
Fathers described as—							
Dead	12	11	1	1	10	15	50
Sick, lunatic, disabled, &c.	1	...	2	...	...	4	7
Of good character (or poor)	12	4	12	17	8	...	53
Not known (or not described)	10	2	4	17	7	2	42
Of bad character	17	6	4	14	22	1	64
Deserters	6	5	15	...	34	6	66
Totals	58	28	38	49	81	28	282

The accounts given of the parents of the children not committed by Magistrates are more satisfactory. One of the 47 children was readmitted from service. The remaining 46 cases may be described as follows: In 30 cases the destitution appears to be due to misfortune; there are 3 in which both parents are certainly to blame, and 7 in which only one of them is at fault; in 3 cases one of the parents is unfortunate, and the character of the other is not stated; and as to the remaining 3 there is no sufficient information. The 46 cases are classified in the following table.

PARENTAGE OF NON-COMMITTED CHILDREN.

Children of	Mothers described as						Total.
	Dead.	Sick, Lunatic, Disabled, &c.	Of Good Character.	Not Known or Not Stated.	Of Bad Character.	Deserters.	
Fathers described as—							
Dead	11	7	11	2	...	...	31
Of good character (or poor) ... ..	...	1	...	...	...	...	1
Not known (or not described) ... ..	...	1	...	3	1	2	7
Deserters ... ..	...	4	...	...	...	3	7
Totals	11	13	11	5	1	5	46

The ages of the children in the several institutions at the end of the year are shown in the following table. The large proportion of very young children at Caversham is remarkable.

AGES OF THE CHILDREN MAINTAINED BY GOVERNMENT IN INDUSTRIAL SCHOOLS, ETC.

Institution.	Under 1 Year.	1 and under 2.	2 and under 3.	3 and under 4.	4 and under 5.	5 and under 7.	7 and under 10.	10 and under 13.	13 and under 15.	Above 15 Years.	Total.
	Howe Street, Auckland	1	3	5	9	16	36	22	5		1	98
St. Mary's, Auckland ... ..	...	...	...	3	2	6	8	14	2	...	35
St. Stephen's, Parnell ... ..	...	...	1	...	1	4	7	5	...	...	18
Thames Orphanage	1	...	...	...	...	2	6	7	3	...	19
Kohimarama ... ..	...	...	...	...	...	...	...	35	18	...	53
St. Joseph's, Wellington ... ..	...	...	...	1	2	...	8	8	1	...	20
St. Mary's, Nelson ... ..	...	...	1	4	1	12	13	27	11	3	72
Motueka Orphanage ... ..	...	...	...	...	...	4	10	4	3	...	21
Lyttelton Orphanage ... ..	...	...	...	2	3	10	29	28	19	2	93
Burnham	1	1	...	4	10	30	51	77	39	4	217
Caversham	5	4	4	14	5	35	79	68	34	1	249
Totals	7	6	9	33	33	119	247	295	135	11	895

The amount of payments made by parents on account of the maintenance of their children is considerably larger for 1881 than for 1880. The detailed statement made by the Treasury is as follows:—

	£	s.	d.
Industrial Home, Auckland	12	10	0
St. Mary's, Ponsonby	Nil.		
St. Stephen's, Parnell	Nil.		
Kohimarama Naval Training School	111	1	6
Thames Orphanage	Nil.		
St. Joseph's Providence, Wellington	Nil.		
St. Mary's Industrial School, Nelson	Nil.		
Motueka Orphanage	Nil.		
Lyttelton Orphanage	204	1	10
Burnham Industrial School	317	3	6
Caversham Industrial School	302	15	11
	<u>£947</u>	<u>12</u>	<u>9</u>

The following is a statement of the amounts of the sums held as savings from the wages of young people under the care of the institutions. These sums will be paid in due course to those who have earned them, unless they forfeit their claim by serious misconduct:—

	£	s.	d.
Industrial Home, Auckland... ..	222	5	3
Kohimarama	4	5	7
Lyttelton Orphanage	84	19	0
Burnham	326	0	7
Caversham	1,032	4	7
	<u>£1,669</u>	<u>15</u>	<u>0</u>

HOWE STREET INDUSTRIAL HOME, AUCKLAND.

The Committee of the Benevolent Society by which the Home was established, having expressed a desire to be relieved of further responsibility on its account, Government has taken the school into its own charge, and the new arrangement took effect on the 31st March, 1882. The boys have been removed to Kohimarama, where they are under the care of the master of the school; and a matron and assistant-matron have been appointed to look after the girls at Howe Street, the master being still the legal manager of both branches. At Howe Street the girls are now taught by the matron, and at Kohimarama a schoolmistress has been appointed; so that the capitation allowance paid to the Board of Education while Howe Street was recognized as a "public school" ceased on the 30th June. The Hon. Colonel Haultain, Captain Daldy, and Shirley W. Hill, Esq., have accepted appointments as official visitors of the two branches of the school. The expenditure from the Treasury for the year 1881 was £1,278 15s. 10d., in addition to the payment of £257 4s. 7½d. to the Education Board.

ST. MARY'S, AUCKLAND.

(Government contribution, £10 for each child, and £1 for £1.)

The following statement of income and expenditure has been supplied by the authorities of the school at St. Mary's, Ponsonby:—

INCOME and EXPENDITURE for the Year 1881.

Income.			Expenditure.		
	£	s. d.		£	s. d.
To Government	523	10 4	By Management, salaries, and wages	25	13 6
Subscriptions and donations	104	12 11½	Maintenance	521	17 10
Other sources	32	3 0	Education—Salaries	14	3 10
Police Court... ..	19	2 0	„ Sundries	13	18 6
Ladies' Society	89	5 0	Fittings and furniture	60	5 0
			Insurance, &c.	10	3 0
			Buildings	197	0 0
	<u>£768</u>	<u>13 3½</u>		<u>£843</u>	<u>1 8</u>

ST. STEPHEN'S, AUCKLAND.

(Government contribution, £10 for each child, and £1 for £1.)

The annual report of the Orphan Home at Parnell is appended as an enclosure to this memorandum. A return furnished at the end of the year shows that the average cost of each child, including all expenditure, was £14 12s. 1½d. per annum.

THAMES INDUSTRIAL SCHOOL AND ORPHANAGE.

(Payments made by Government are charged against subsidy.)

The average number of children at the Thames Orphanage in 1881 was 19. The receipts and expenditure are reported as follows:—

INCOME and EXPENDITURE for the Year 1881.

Income.			Expenditure		
	£	s. d.		£	s. d.
To Government	403	2 9	By Management, salaries, and wages	146	15 0
Subscriptions and donations	19	17 8	Maintenance	263	10 5
Relatives of children	22	10 0	Education—Salaries	23	8 4
Board of Education	78	0 0	„ Sundries	12	7 0
			Buildings	33	14 1
	<u>£523</u>	<u>10 5</u>		<u>£484</u>	<u>14 10</u>

The cost for each child appears to be £25 10s. 3d.

KOHIMARAMA NAVAL TRAINING SCHOOL.

The annual report of the Naval Training School showed that at the end of December 53 boys were in the school. Before the school was closed 25 were discharged and sent to their parents, 2 were released on the expiry of the terms for which they were committed, 5 absconded, 2 went to sea as apprentices, and 7 were placed in service. On the closing of the school there remained 12 who were not yet fit for service and had no suitable home to go to; these were committed to the Industrial School.

ST. MARY'S NELSON.

(Government contribution, 1s. a day for each child.)

The authorities of St. Mary's Orphanage and Industrial School, in acknowledging the receipt of £766 from Government for the girls' school, say, "The children being under the domestic as well as the scholastic charge of the sisters, it is not possible to correctly estimate the cost under these heads [management and education]. The bare cost of food and clothing per head was £12 8s. 3½d. for year 1881. A considerable sum has also been expended in repairs and up-keep of buildings." So with respect to £265 16s. received for the boys' school, it is stated that the cost for each child can only be approximately ascertained, and that for food and clothing it ranged from £12 to £14.

It is understood that preparations are being made to carry on this school on a more extensive scale, relying on the operation of the Amendment Act of 1881, which gives Judges, Magistrates, and Justices power to remove a child from one industrial school to another, in which they can be educated in the principles of their own religious denomination.

MOTUEKA ORPHANAGE.

(Government contribution, 7s. or 8s. a week for each child.)

A recent report from Lowther Broad, Esq., R.M., shows that Mr. Wallis's private school at Motueka is well conducted. Mr. Broad says, "The children are, I am satisfied, almost strangers to corporal punishment; they seem to be managed with kindly tact, and gave me the idea of being members of a happy family. They were scrupulously clean, neatly dressed, and appeared to be in robust health. None of them had any complaints to make. . . . The general tone of the establishment is excellent."

WM. JAS. HABENS,
(for the Secretary for Education.)

Enclosure to No. 2.

Annual Report of the Managers of the St. Stephen's Orphan Home, Parnell, for the Year ending 31st March, 1882.

THE institution continues to progress satisfactorily. There are now 58 inmates in the Home, viz., 34 boys and 24 girls. This is the same number as at the commencement of the sessional year. Of these, 3 are four years of age or under, 4 are between four and five years of age, 13 are between five and seven years, 19 are between seven and ten years, 14 are between ten and thirteen years, 3 are between thirteen and fourteen years, and 2 are above fifteen years of age. These two last are employed in the Home. Seven children have been removed from the Home by their relatives during the year, and there have been 7 new admissions. Of these, 3 have been admitted on the nomination of Government, making 13 boys and 4 girls at present in the Home, towards whose maintenance Government contribute. It is gratifying to report that, amidst so much sickness as has prevailed in the district, the health of the children in the Home has been generally good, the one or two cases of scarlatina which occurred having been promptly attended to and isolated, and the disease stayed from spreading through the institution. The income of the year has amounted to £1,063 5s. 8d., and the expenditure to £939 3s. 6d. It will be seen from the Treasurer's statement that a sum of £241 15s. 5d. has been received from the Colonial Treasury, being a grant of £1 for every £1 of general subscriptions received during the half-year ending the 31st December last. Prior to receiving this grant the Board, from various causes, had been obliged to encroach upon the fund reserved for repairs and improvements to the Home buildings. The Board would remind the subscribers that the amount of the grant depends upon their liberality, and they trust it will be a stimulus to increased generosity. There is abundant scope for extending the usefulness of the institution, and it is in contemplation to alter and enlarge the present buildings, with a view to making the institution available for a larger number of children, under an improved system of classification. This will necessarily involve a considerable outlay. The Board have again heartily to thank the lady canvassers for their self-denying services during the past year, and trust that the prospect of each pound they collect being supplemented by one from Government will prompt them to still greater zeal in their work. The Board also desire to thank the many kind friends who, during the past year, have given entertainments and useful or amusing articles for the gratification of the children. They would especially mention the Union Steamship Company and Captain Carey, of the s.s. "Te Anau," for the annual treat and trip to Motutapu; Captain Underwood, of the s.s. "Rotomahana," for several subscriptions promoted by him, in aid of the Home, among the passengers; promoters of the band contest at the North Shore for amount realized by the sale of booths; the North Shore Ferry Company for a free pass for the children of the Home by the company's steamers; the children's old friend and benefactress, Mrs. Reader Wood, for her annual treat and Christmas-tree; and Mr. and Mrs. Raynes for the entertainment and Christmas-tree procured by them. The work of laying down the Home paddock in grass having been completed, a second cow has been procured, so that the children have now a constant and plentiful supply of good pure milk. The Board regret that the directors of the Gas Company have not yet seen fit to comply with their request to have the Home supplied with gas. The Board hope the directors will soon be imbued with a more enlightened spirit in the matter. It was always gratifying to the Board, as they feel sure it will

be to the subscribers and friends of the Home, to learn that their efforts for the welfare of the children committed to their charge are, under the Divine blessing, bearing good fruit. Instances are frequently brought under their notice of such cases. One of these was recently referred to by a gentleman residing in the North, who had both a boy and girl from the Home some years ago, and who, when applying for another boy to go to him, stated that the girl had respectably married, and the boy had a farm of about 80 acres, with stock thereon worth £60. A late inmate of the Home writes to the Secretary as follows: "I am very thankful to you and all the Committee for the care and teaching they gave to us. Mrs. Cameron and Mrs. Scarlett were certainly very kind to us, and they did all they could for us. I can never forget them as long as I live. That Home gave me such a good start in the world that now I can work for myself. When my father wants to write he has always to get me to spell for him. We have no church or Sunday-school here like we had there, but of a Sunday I do not forget to read my Prayer-book and Bible every Sunday. I have very few books to read. All my prizes I have got yet, and take good care of them. I have read them all through. My best compliments to yourself, Mr. and Mrs. Walker, and all the friends of the Home." It is the knowledge of such cases as these, and the consciousness that their efforts and anxieties for the good of these orphan children are not all in vain, that sustain the Board in their labours, and impel a continuance of them. Let the like feeling animate and support their fellow-labourers in the good work, relying on the assurance of the Apostle Paul, "Let us not be weary in well-doing, for in due season we shall reap if we faint not."

STATEMENT of ACCOUNTS for the Year ending 31st March, 1882.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
To Balance 1st April, 1881	281	4 5	By Salaries, wages, &c.	320	13 0
Subscriptions and donations	364	1 5	Food, lighting, and washing	341	5 9
Contributions towards maintenance—			Clothing, &c.	89	9 6
From Government	180	0 0	Coal and firewood	34	17 4
From relatives of children	131	7 6	House furnishing, &c.	42	15 7
St. Stephen's Native School Trustees	66	7 8	Medicine, hair-cutting, &c.	10	16 8
Trustees of the late W. Morrin, Esq.	73	19 10	Books, stationery, printing, &c.	22	5 0
Interest on deposit		5 13 10	Fire insurance		8 11 3
Government subsidy of £1 per £1 of sub- scriptions for half-year ending 31st De- cember, 1881	241	15 5	Postages and sundries	4	1 11
			Repairs, improvements, &c.	21	0 6
			Paddock ploughing, &c.	31	17 0
			Cow	11	10 0
			Balance—		
			Bank	151	1 1
			Fixed deposits	250	0 0
			In hands of Matron	1	8 6
			In hands of Treasurer		2 17 0
	<u>£1,344</u>	<u>10 1</u>		<u>£1,344</u>	<u>10 1</u>

Audited and found correct.—JOHN BATGER and JAMES M. BRIGHAM, Auditors.
Auckland, 26th April, 1882.

No. 3.

REPORT ON CAVERSHAM INDUSTRIAL SCHOOL, by DR. HECTOR.

SIR,—

Colonial Museum of New Zealand, Wellington, 5th May, 1882.

I have the honor to report that, in compliance with your instructions, on the 12th ultimo I visited the Industrial School at Caversham for the purpose of inspecting the sanitary condition of the establishment, especially in relation to the cause of the recent epidemic of typhoid fever among the children. I was accompanied by Dr. Burns, the Medical Officer, who, as well as the Superintendent, Mr. Titchener, afforded me every facility in making the inspection you desired.

The primary cause of the fever is attributed, and it seems correctly so, to a woman named Crawford having, in the month of October last, visited her child while she was in the convalescent stage of typhoid. This child, a female, sickened in due course, and by the 12th December twelve cases were reported, and all in the young girls' side of the establishment. The disease then steadily spread through the buildings, and by the end of January there had been nearly fifty cases out of the 240 pupils in the school, and including both boys and girls, but chiefly the latter.

From the description of the symptoms, the form the disease assumed appears to have been that of true typhoid, and not the usual remittent fever, which is its commoner form among children. This circumstance, and the gradual manner in which the disease spread among the children, indicates that it was propagated by the direct action of germs, and did not arise either from a general condition of the atmosphere, due to noxious exhalations, or from infection by personal contact.

A scrutiny of the drainage-system of the establishment suggested an explanation of how this might have arisen. There are several detached buildings erected on a steep slope facing the south-east. The soil is clay that powerfully absorbs and retains damp; and the site is as unsuitable as well can be for the purpose of keeping young children in health. Most of the buildings are in a very dilapidated state, having been portions of the old Dunedin Hospital (originally only a temporary structure), that had done the full share of work before they were transferred to their present position. They have also been badly placed, the foundation having been excavated in the clay soil of the hill-side. Much has no doubt been done of late to remedy this by cutting open drains round the back of the buildings and laying bare the rotten wall-plates; and in this, as in every other respect, the officer in charge deserves the greatest credit for his exertions in trying to make the most of the small capabilities that exist for improvement. Only one building is in a sound condition, that occupied by the infants. It is built of brick, and is well arranged, with the exception of one singular peculiarity in its ventilation. This is effected by circular traps in the floors, through which the mouldy air from the excavated

foundation enters, first into the basement-floor room, and then—by similar apparatus—into the room above. In this manner, air, drawn from a very bad source in the first instance, has to do double duty. The Superintendent, however, informed me that he had ceased to use the lower rooms as dormitories. The dormitories in the other buildings, though much overcrowded, are probably sufficiently ventilated through the imperfections in the walls, which exhibit signs of extreme frailty, and are supported by clumsy props.

One main drain, formed of pipes without cemented joints, takes off the surface-water from the various yards and gutters round the buildings. Its outlet is open to the south-east, and, as it is not provided with any traps or ventilators, the air is free to blow through it to its upper termination, where it opens into the middle of the floor of the scullery or back kitchen, where the food is prepared, and which also is used as a larder for the uncooked meat. Only the rain-water and the water from the baths is supposed to pass through this system of drains; but it is evident that kitchen scraps must also enter it, and with so many young children playing about in the yards it is very unlikely that these drains can be kept quite free from other casual matters.

Moreover, in the very ward where the fever commenced and spread from, there are two fixed tubs with covers, which are used as baths, but which, in an emergency, might be temporarily used for soiled linen, and these tubs enter directly, without any taps, into the main drain. Now, if by any chance infected faecal matter once found its way, even in minute quantity, into the main drain, the conditions most favourable for the propagation of typhoid would be fulfilled; for it is not necessary that there should be the foul sewage gas produced that would give warning by its offensive smell, but merely that the germs should have access to articles of food, many of which, and especially milk and raw meat, are rapid absorbents of such germs, and by this means they would pass into the system of the healthy children.

There is another point worthy of attention. The water in use for cooking and drinking is taken from the mains of the Dunedin water-supply, and is of excellent quality; but in the centre of the courtyard, and below the level of the uncemented drains, there is a large tank in which a reserve-supply is kept. This water is pumped up, and is intentionally used for bathing and washing. Iron tanks were originally sunk in the ground, but they were burst through some accident, and now the water is only contained in the excavated pit, and there is, therefore, no protection against surface-contamination. However strict the discipline may be, in an establishment of this kind, where most of the domestic work is done by the senior children, there is always a probability that the tank-water might be used for drinking or other purposes, so that it constitutes another weak point in the arrangement.

The above unfavourable circumstances are beyond the control of the management, unless, by a complete rearrangement of the institution, involving a much larger expenditure than I consider would be warranted for restoring the buildings on the present site. The closet-drainage and the systems adopted for the disposal of the nightsoil are thoroughly satisfactory; and the best evidence of the skilful management of the institution is afforded by the general healthiness of the children, except in the case of sickness arising from epidemics, and these will probably increase in frequency and virulence unless some radical change is made.

The proper remedy is to remove the institution to properly constructed buildings erected on a better situation, if possible on a dry or gravelly soil, on more level ground, and where the full benefit of the sunshine will be received during the winter months.

As a temporary measure, it would be well to relay the drains in cement, and to cut them off from direct communication with the dormitories, bath-houses, and kitchens; and to abolish the water-tank that is sunk in the yard. This should be done at once,* or, at any rate, before the return of summer, when the warm weather might perhaps revive latent germs, and cause a renewal of the epidemic.

I have, &c.,

JAMES HECTOR.

The Hon. the Colonial Secretary.

* The work was done without delay.—W. J. H. (for the Secretary).

