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COUNTY BOROUGH OF BRIGHTON.



Annual Report

OF THE

MEDICAL OFFICER OF HEALTH

AND

SCHOOL MEDICAL OFFICER

FOR THE YEAR 1911.

DUNCAN FORBES, M.D., B.Sc., D.P.H.

BRIGHTON :

THE SOUTHERN PUBLISHING CO., LTD. 139, NORTH STREET.

Sanitary Committee :

Chairmen		{	MR. COUNCILLOR BURBERRY (until Nov., 1911).	
		{	MR. COUNCILLOR YATES.	
MR. ALDERMAN C. THOMAS-STANFORD (THE MAYOR).			MR. COUNCILLOR PARRY.	
MR. ALDERMAN TITCOMB.			" " G. PENFOLD.	
MR. COUNCILLOR BLACK (from Nov., 1911)			" " SKINNER.	
" " BURBERRY.			" " SONE.	
" " HARDY.			" " TEASDALE.	
" " HEUN.			" " WELLMAN.	
" " LINTOTT.			" " YATES.	

Town Clerk: HUGO TALBOT, Esq.

Medical Inspection Branch Sub-Committee :

Chairmen		{	MR. COUNCILLOR CAMPBELL (until Nov., 1911).	
		{	MR. COUNCILLOR HARDY.	
MR. COUNCILLOR CAMPBELL.			MR. COUNCILLOR YATES.	
" " HARDY			MISS HEATHCOTE.	
" " SOUTHALL			MRS GERVIS.	
" " (from Nov., 1911)			MR. JOHN CARDEN.	
" " STEVENS.			" LETHBRIDGE.	

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 JAMES A. CUCKNEY " " " " "
 (Superintendent of Abattoir).
 ERNEST E. MILLS (Certif. San. Institute) " " "
 (Inspector under the Factory and Workshops Act and Shop Hours Act).
 FREDERICK BRAYBON (Certif. San. Institute), Assistant Inspector of Nuisances.
 JOSEPH WEBB " " " " "
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 HUBERT W. HEASMAN, Senior Clerk.
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 REGINALD GRUTCHFIELD, Junior Clerk.

Matron of Sanatorium: Miss RATCLIFF.

House Physician and Deputy to Medical Officer of Health:

R. M. COURTAULD, M.A., M.B., B.C., D.P.H. (to July, 1911).
 HENRY P. NEWSHOLME, M.B., B.Ch., M.R.C.P., D.P.H.

Chief Inspector of Nuisances:

JAMES F. SKINNER (Certif. San. Institute).

School Medical Staff and Health Visitor :

NURSE HENSON.	|	NURSE RICHNELL.	|	NURSE BOWEN.
		Miss CAMPBELL, Clerk.		Miss LAWRENCE, Clerk.

School Doctor: J. LAMBERT, M.D., M.A., D.P.H.

Medical Officer of Health and School Medical Officer :

DUNCAN FORBES, M.D., B.Sc., D.P.H.

PREFACE.

TOWN HALL, BRIGHTON.

April 26th, 1912.

To the Brighton Town Council.

GENTLEMEN,—

I beg to present herewith my Report on the work of the past year.

At the end of this, my fourth year of office, I wish to acknowledge the constant and assiduous help which I have received from the members of the Sanitary Staff, of the School Medical Staff, and from the Matron and Staff at the Sanatorium. I have also to thank the members of the Sanitary Committee and the Elementary Schools Sub-Committee for the time and attention which they have devoted to the important work of my Department.

I am, Gentlemen,

Yours obediently,

DUNCAN FORBES,

*Medical Officer of Health and
School Medical Officer.*

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VITAL STATISTICS.

POPULATION.

The estimated population of the County Borough of Brighton at the middle of 1911 was 131,444.

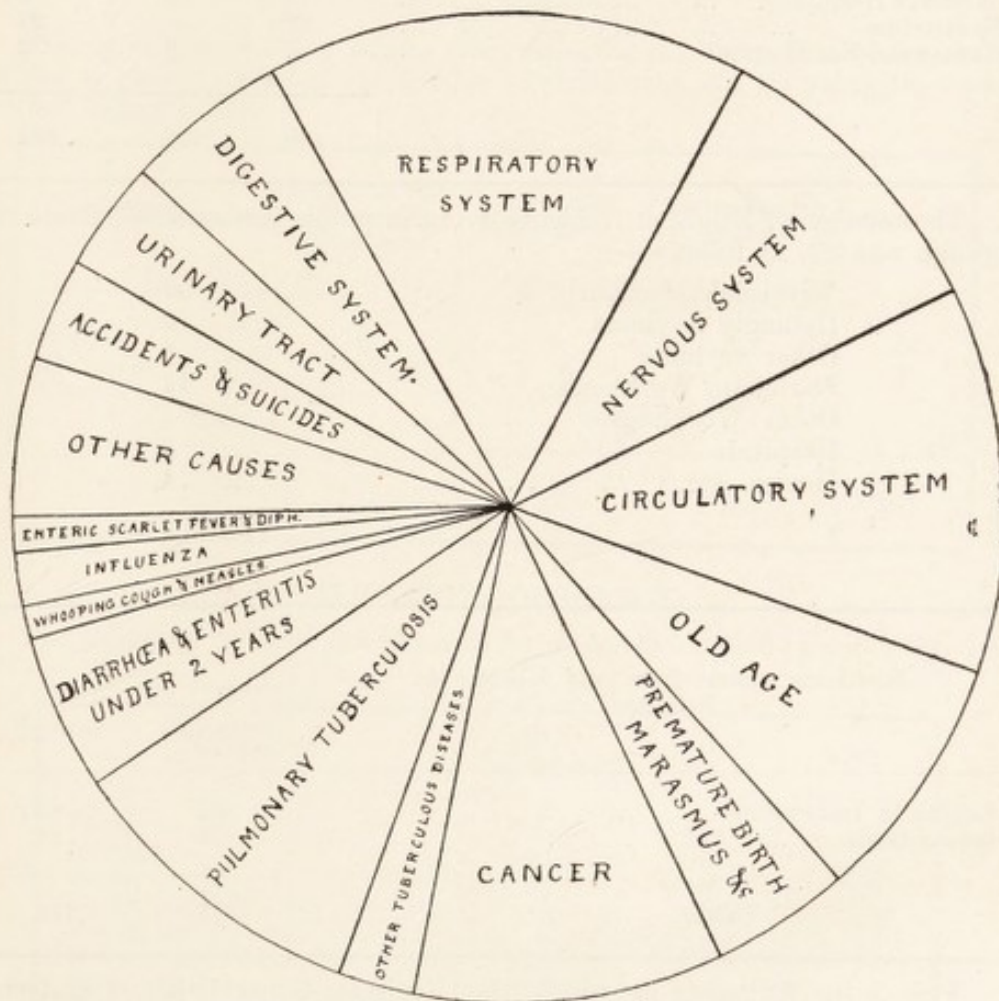
BIRTHS.

The total number of births belonging to Brighton* registered in the 52 weeks ending the 30th December, 1911, was 2,603, 1,315 of boys and 1,288 of girls. This is equivalent to a birth rate of 19.8 per 1,000 inhabitants.

Of the births, 192 were illegitimate children, forming 7.3 per cent. of the total births. Of 30 births occurring in the Workhouse, 27 were of illegitimate children.

DEATHS.

Last year, 1,835 deaths from all causes were registered as belonging to Brighton; all of these were certified. The proportion of deaths from the



* The number of births registered in the Borough was 2,584, 1,309 of boys and 1,275 of girls. The inward transfers numbered 26, of whom 16 were illegitimates; the outward transfers were 7, all of whom were legitimate children. This is the first year that births have been made transferable. The change has added to our illegitimate birth-rate.

principal causes is shewn diagrammatically on page 5. Exact information can be had by consulting Table IV., page 59. On comparing the number of deaths from various causes during 1910 and 1911, it is found that in the latter year there has been an increase in the number of deaths from diarrhoea and pulmonary tuberculosis, but a marked decrease of deaths from measles. The death rate was 13.96.

Table I., page 56, shews the birth and death rates of Brighton from 1900—1910. Table II. gives the more important causes of death for each Ward.

DEATHS IN PUBLIC INSTITUTIONS.

The following table shews the return for 1911:—

	Residents.	Non-residents.	Total.
Workhouse	278	3	281
Royal Sussex County Hospital...	127	77	204
Royal Alexandra Hospital	43	17	60
Women's Hospital	5	3	8
Sanatorium	27	—	27
Throat and Ear Hospital	—	2	2
	480	102	582

The number of Brighton residents dying in public institutions outside the Borough was 89, as follows:—

Brighton County Borough Asylum	59
Hellingly Asylums	2
Other Asylums	3
Shoreham Workhouse	14
Other Workhouses	2
Hospitals	5
Homes, etc.	4
	—
	89
	—

Residents absent from and Visitors to Brighton.	Transfers.	
	Outwards.	Inwards.
Deaths in Institutions	102	89
Other deaths	71	24
Totals	173	113

This is the first year in which the Registrar-General has transferred deaths of all visitors to the districts in which they usually reside.

INFANTILE MORTALITY.

Once more the infantile mortality has fallen under 100 per 1,000.

The following table gives the figures over a series of years:—

1890 ...	164	...	1900 ...	166
1891 ...	137	...	1901 ...	162
1892 ...	151	...	1902 ...	125
1893 ...	169	...	1903 ...	114
1894 ...	137	...	1904 ...	133
1895 ...	164	...	1905 ...	102
1896 ...	124	...	1906 ...	111
1897 ...	144	...	1907 ...	111
1898 ...	179	...	1908 ...	104
1899 ...	173	...	1909 ...	95
			1910 ...	111
			1911 ...	98

Of the total deaths under one year, 28 were of illegitimate babies. Stated in terms of births, this implies that the infantile mortality among illegitimate babies is 146 as compared with 94 per 1,000 among babies born in wedlock. The chief causes of infant mortality are given in Table III., page 58.

STILL BIRTHS.

Owing to the courtesy of the Secretaries of the three Cemeteries, I am enabled to give a record of the number of still-births and by whom they were certified before burial.

Certified by	Brighton and Preston Cemetery.	Parochial Cemetery.	Extra Mural Cemetery.	TOTAL.
Doctors	21	8	39	68
Midwives	17	9	—	26
Coroner	1	5	3	9
	39	22	42	103

NOTIFICATIONS OF BIRTHS.

The following table shews the number of births notified since July 1st, 1909:—

Notified by	1909. July—Dec.	1910.	1911.
Doctor	226	389	416
Midwife	842	1749	1670
Parent	89	137	168
Doctor and Midwife	10	7	10
Doctor and Parent	9	4	11
Midwife and Parent	20	5	—
Other relative	2	1	9
Taken from death returns	1	3	—
Total { Births	1149	2216	2223
{ Still-births	50	79	61

Of the number of notifications received during 1911, 69 were sent only after the issue of a circular letter pointing out that notification was required by the Act. Up to the present no one has refused to notify after they were told of their obligation to do so.

Over 80 per cent. of births are notified apart from direction from this office.

THE FEEDING OF INFANTS.

Of 465 children visited when six months old, it was found that

77 per cent. were still being breast fed;

10 per cent. had both breast and bottle;

13 per cent. were entirely weaned.

That 77 per cent. of infants of the poorest families in Brighton are breast fed at six months of age is very satisfactory, as in such families the mother is at times the wage earner, and for that reason has to wean early.

REASONS FOR WEANING BEFORE THE AGE OF SIX MONTHS.

74 were weaned because the milk "went";

20 because the mother was delicate;

14 because the mother had to go to work; and

5 because the baby was not getting on well.

—
113
—

115 babies were partially breast fed;

44 because the baby was said not to be satisfied;

26 because the mother had not sufficient milk;

11 because the mother or child was delicate.

THE ADVANTAGE OF BREAST FEEDING.

Of 260 children weighed when six months old, the average weight
of 192 entirely suckled was 16.6 lbs.;
of 29 breast and bottle fed, 14.8 lbs.;
of 39 entirely weaned, 13.6 lbs.

THE LONG TUBE BOTTLE.

Of bottle-fed children,

21 had long-tube bottles;

130 had bottles with teats; and

17 were fed with a spoon.

THE EMPLOYMENT OF MOTHERS.

The employment of 1,128 mothers visited:—

968 worked at home; of these 950 did their own housework;

4 took in dressmaking;

12 minded the shop, and

2 did laundry work at home.

160 went out to work; of these 80 worked in laundries;

53 were charwomen;

9 were in service;

13 were hawkers, and

5 were in shops.

THE MOTHERS' WELCOME.

In November, 1910, at the instance of the Committee of the Crèche, a Mothers' Welcome was started at the Pelham Institute. Fourteen mothers are at present attending regularly. All the babies are weighed, and afterwards the mothers have tea. Dr. Lilian Clifton Harris kindly attends and advises the mothers as to their own and their infants' health. Several ladies during last year have kindly given short addresses to the mothers. Mrs. Hazelfoot, the Treasurer of the Crèche, has given a quantity of children's clothes, which have been sold to the mothers for a nominal sum. The Matron of the Crèche, and the Health Visitor, will welcome any ladies who are interested in this work at the Meetings, which take place on alternate Thursday afternoons, at 3.30 p.m.

THE FEEDING OF MOTHERS.

The feeding of nursing mothers was continued for four months during 1911, 789 dinners being given at the cost of 4d. each, which amounted to a total cost of £13 3s.

THE CRÈCHE.

The Crèche is a charitable institution, which provides a day nursery for the children of working mothers. During 1911 the average daily attendance was twenty-seven. A few of the regulations taken from page 12 of the Annual Report are given below.

HOURS AND DAYS OF ATTENDANCE.—From 8 a.m. till 8 p.m. every day, except Saturdays, when the Nursery closes at 2, and Sundays, when it is not opened at all.

RULES FOR ADMISSION.—Forms are given at the Nursery on application, to be filled in by a Medical Man, certifying that the child is free from any infectious or contagious disease.

PAYMENTS.—The Mothers pay 4d. a day for one child, 3d. a day each for two of the same family, and 8d. for three.

AGES.—The children are received from three weeks to seven years old.

REQUIREMENTS.—That the Mother shall be *obliged* to go out to work in order to provide for her family; that the children shall come decently clean; that they shall be fetched not later than 8 o'clock; and that they shall be brought regularly if the Mothers are in continuous employment.

FOOD.—The food consists of Oatmeal, Milk, Sago, Rice, Bread and Butter (or Dripping), Treacle, Light Puddings, Broth with Vegetables, Minced Meat, and various Foods for Infants.

MATERNITY BASKETS.—Maternity Baskets are kept for lending. These are supplied with everything requisite for a mother and infant for the first month. Early application must be made for these, and they may be sent for a few days before required.

A new Crèche will be opened shortly in the Lewes Road.

LECTURES ON MOTHERCRAFT.

These Lectures are held at the Municipal Technical College, and all church workers and others interested would do well to attend them. The particulars are given below:—

1.—Lecturers' names	Miss Martindale, M.D., B.S. (Lond.). Miss A. Palmer, M.R.San.Inst.
2.—Duration of Course	Sixteen weeks, for $1\frac{1}{4}$ hours per week, commencing usually in the last week in September.
3.—Fee	2s. 6d.

Further information can be had from Dr. W. B. Burnie, the Principal of the Technical College.

INFANT LIFE PROTECTION.

In the parishes of Brighton and Preston there are some 191 children under the age of seven years who are being boarded for reward. This part of the Children Act is administered by the Guardians, and their officers, Mr. G. Clifford and Mr. Bramwell, report that all these children are well cared for.

THE MIDWIVES' ACT, 1902.

According to the register there were 25 midwives in private practice; all of these have been visited at their homes. The particulars regarding the conduct of practice of these are given below. In obtaining this and other information 120 visits were paid.

Year.	1909.		1910.		1911.	
	Yes.	No.	Yes.	No.	Yes.	No.
Illiterate	6	19	8	18	8	17
Registers properly kept	19	6	21	5	21	4
Bags with washable linings	19	6	25	1	25	—
Washable dresses	25	—	26	—	25	—
Douche cans	4	—	5	—	3	—
Higginson's syringes	21	—	25	—	22	—
Same syringe* for vaginal douching and the giving of enemata	14	—	1	—	—	—
Pulse and temperature taken regularly	9	—	13	—	16	—
Pulse and temperature if think necessary	7	—	8	—	—	—
Temperature only taken	5	—	1	—	4	—
Pulse only taken	1	—	—	—	—	—
Neither pulse nor temperature taken	3	—	4	—	5	—

* Different nozzles are always used.

As many as 1,164 deliveries of living children were attended in or from the Women's Hospital, West Street, or its branches, during 1911. Of this number 979 belonged to Brighton. The staff consists of the Matron, Miss Blott, and six midwives; five of the latter are allocated to districts in Brighton.

This hospital is one of the institutions approved as training schools under Section C of the Rules of the Central Midwives Board. During 1911, 57 midwives were trained at the Institution, and 54 of these obtained the certificate of the Central Midwives Board.

Number of cases occurring in 1911, in which the Midwife advised that a Registered Medical Practitioner should be sent for (Rule E. 18).

Medical aid called in on account of the following causes, as stated by the Midwife.	Private Cases.	Outside Cases in connection with Women's Hospital, West Street	
<i>Pregnancy—</i>			
Abortion	—	1	
Ante-Partum Hæmorrhage	—	7	
<i>Labour—</i>			
Presentation {	Prolapse of Cord	—	1
	Face... ..	—	2
	Transverse	1	1
	Impacted and Breech	—	2
	Obstructed Labour	3	8
Delay in Labour	2	30	
Retention of {	Placenta	2	—
	Membranes... ..	1	6
Rupture of Perineum	3	31	
Post Partum Hæmorrhage	—	7	
<i>Lying-in Period—</i>			
Rise of Temperature	2	8	
Other reasons connected with mother	4	6	
<i>Condition of Infant—</i>			
Weakly Infant	1	12	
Still Births	5	12	
Premature Births	5	5	
Conjunctivitis	1	1	
Totals... ..	30	140	
Totals, 1910	24	151	

PUERPERAL FEVER.

During the year 9 cases of Puerperal Fever were notified. The table given below records the more important points regarding these cases.

No. in Register.	Age.	Midwife.	Doctor.	No. of Previous Labours.	Removed to Public Institution.	Remarks.
1	35	X.S.	—	4	No.	Doctor's note, Retained Secundines.
2	22	—	C.	1	No.	Husband had Erysipelas. The Erysipelas and the Puerperal Fever developed on the same day.
3	31	X.	—	2	Infirmary.	Died.
4	24	—	C.	0	No.	Illegitimate.
5	39	N.	—	5	No.	Died.
6	23	D.	—	0	Infirmary.	
7	27	N.	—	1	Infirmary.	
8	25	—	T.	0	No.	Died.
9	35	—	G.	2	Yes.	Died.

NOTIFICATION OF INFECTIOUS DISEASES.

The number of cases of infectious diseases, excluding pulmonary tuberculosis, notified during 1911 was:—Diphtheria, 155; scarlet fever, 383; enteric fever, 26; erysipelas, 92; puerperal fever, 9.

Three cases of puerperal septicæmia, 1 of diphtheria, and 3 of erysipelas were notified severally by two doctors.

The cases notified are classified according to age and ward in Table V., page 66.

The total number of notifications (including 20 notified by the Medical Officer of Health) was 672, as compared with 432 in 1910. Of the total, 150 occurred in public medical practice, while 502 occurred in private medical practice.

SCARLET FEVER.

The incidence of scarlet fever since notification came into operation is shewn in the following table:—

	Number of cases.	Number of deaths.	Per 100,000 of population.		Number of deaths per 100 cases notified.
			Number of cases.	Number of deaths.	
1892-01 (average)	378	7.6	315	6.3	2.0
1902	146	3	117	2.4	2.1
1903	195	—	156	—	—
1904	172	2	137	1.6	1.1
1905	206	1	163	0.8	0.5
1906	225	2	176	1.6	0.9
1907	230	—	179	—	—
1908	287	2	222	1.5	0.9
1909	330	8	254	6.1	2.4
1910	163	5	125	3.8	3.1
1911	383	9	291	6.8	2.3

Of the 383 notified cases, 340, or 88.8 per cent., were treated in the Sanatorium, as compared with 85.9 per cent. in 1910.

Schools:—

27 School Departments had 0 cases.

14	„	„	„	1	„
7	„	„	„	2	„
11	„	„	„	3	„
8	„	„	„	4	„
4	„	„	„	5	„
5	„	„	„	6	„
2	„	„	„	7	„
1	„	„	„	9	„
1	„	„	„	12	„
1	„	„	„	19	„
1	„	„	„	20	„

School children suffering from scarlet fever were absent from school on 8,349 school days.

In addition, contacts were absent from school 1,966 school days.

DIPHTHERIA.

The incidence of diphtheria in Brighton has continued low during 1911.

	Number of cases.	Number of deaths.	Number of cases per 100,000 of population.	Number of deaths per 100,000 of population.	Case-mortality. Number of deaths per 100 cases notified.
1892-01 (average)	340	35.5	283	29.5	10.5
1902	437	36	351	29.0	8.3
1903	410	32	328	25.6	7.8
1904	269	16	214	12.7	6.0
1905	223	5	176	3.9	2.2
1906	231	13	181	10.2	5.6
1907	266	14	207	11.0	5.3
1908	212	9	164	7.0	4.3
1909	240	19	185	14.6	7.9
1910	151	2	116	2.0	1.3
1911	155	11	118	8.4	7.1

Schools:—

39	School Departments	had	0	cases.
25	"	"	1	"
11	"	"	2	"
2	"	"	3	"
1	"	"	4	"
2	"	"	5	"
1	"	"	6	"
1	"	"	13	"

School children suffering from diphtheria were absent from school on 3,295 school days. In addition, contacts were absent from school 2,155 school days.

During 1911, and the first quarter of 1912, careful examinations for the discovery of cases of fibrinous rhinitis have been made in five instances in classes or departments in schools in which diphtheria has occurred.

Infant Schools.	Number of cases of faucial diphtheria.	Approximate number of children examined.	Cases of fibrinous rhinitis discovered.	Cases of sore nose with positive swabs.	All apparently healthy.
Pelham Street (Class IV.) ...	4	60	1	—	—
Pelham Street (Class V.) ...	1	50	3	—	—
Hollingdean Road ...	2	250	—	2	—
Crown Street ...	2	50	3	—	—
Lewes Road (January, 1912) ...	1	150	1	—	1 case of ear discharge diphtheroid bacilli.
St. John the Baptist ..	1	90	1	—	—

Some writers hold that fibrinous rhinitis rarely gives rise to cases of faucial diphtheria, and it is only by the accumulation of a great mass of evidence that such a theory can be proved or disproved. Personally, I regard fibrinous rhinitis as the principal individual cause of the spread of diphtheria in schools.

The virulence of the diphtheria bacilli was tested in three of the cases mentioned above, and in each instance they proved lethal to guinea pigs.

In one instance during the year a brother and sister were admitted to the Infectious Disease Hospital suffering from faucial diphtheria. The brother was admitted on the sixth day of the disease and having been a mild case received no antitoxin. Later he developed a profuse nasal discharge along with typical fibrinous rhinitis. This case goes far to prove that faucial diphtheria and fibrinous rhinitis are one and the same disease, as at the time of development of the fibrinous rhinitis there was no similar case in the same wards.

Fibrinous rhinitis is easily recognised, and cases are unlikely to be missed, even in a hurried examination, if the children are examined in a good light. Usually a white membrane is seen on the septum. The membrane is not easily detached, seeming to be incorporated with the mucous membrane. Whitish crusts can usually be separated easily as a whole, without giving rise to bleeding, but when the white membrane of fibrinous rhinitis is rubbed only tiny shreds are removed, and a bleeding raw surface is left. In short, the crust can be removed from the mucous membrane, leaving the latter, it may be, reddened but intact; whilst in trying to remove the membrane of fibrinous rhinitis we remove the altered mucous membrane of which the membrane of fibrinous rhinitis partly consists, and consequently have a raw surface left. The white membrane, the readiness with which it bleeds, the commonly associated irritating nasal discharge, all enable one to at once diagnose this condition. A class of sixty can easily be examined in ten minutes, so that if I am correct in my assertion that fibrinous rhinitis is the principal individual cause of the spread of diphtheria in schools, no medical officer should neglect to examine scholars in any class in which a case of diphtheria has occurred.

Having isolated the case of fibrinous rhinitis in hospital, great difficulty will usually be met with in effecting a cure. An autogenous vaccine in three of our cases quickly led to the disappearance of the membrane, but for some time thereafter the nasal discharge remained positive. Recently the preparation pyocyanase has been used; although not so immediately effective as the vaccine, under its influence the membrane disappeared in two cases.

ENTERIC FEVER.

The incidence of enteric fever, since notification came into operation, is shewn in the following table:—

	Number of cases.	Number of deaths.	Number of notified cases per 100,000 of population.	Number of deaths per 100,000 of population.	Case-mortality Number of deaths per 100 cases notified.
1892—1901 (average)	98.5	14.4	82	12	14.6
1902 ...	65	14	52	11.3	21.5
1903 ...	39	4	31	3.2	10.3
1904 ...	34	7	27	5.6	20.6
1905 ...	34	2	27	1.6	5.9
1906 ...	22	3	17	2.4	13.6
1907 ...	24	3	19	2.3	12.5
1908 ...	28	5	22	3.9	17.2
1909 ...	29	6	22	4.6	27.3
1910 ...	38	10	29	7.7	26.3
1911 ...	26	2	20	1.5	7.7

Of 26 cases, six proved not to be typhoid.

The probable causes of the remaining twenty are noted below :—

Direct contact with known or overlooked cases	3
Direct contact with an ascertained carrier ...	1
Oysters	3
Mussels	2
Imported	3
Not traced	8

A CARRIER CASE OF ENTERIC FEVER, AGED 69.

The household consisted of an old lady, the carrier case, a female companion, and a servant.

The first case of typhoid occurred in a servant aged 31; the date of onset was October 21st, 1909. So far as it can be ascertained, no further case occurred until this year. A grand-daughter paid a visit to this town and stayed with the carrier case from the 9th to the 20th of February. She then left for London where she sickened with enteric fever on the 3rd of March. Towards the end of June, a servant girl, aged 16, was taken ill. She did not consult a doctor before leaving for her home in the country on the 1st of July. She died from typhoid fever on the 3rd of August.

On inquiry it was found that the only person who had been in contact with all these cases of typhoid fever was the lady of the house.

To make sure that she was a carrier it was necessary to obtain a specimen of the faeces. This delicate task was accomplished by the private medical attendant. Only a small amount of faeces and urine were required, and these were obtained in diphtheria outfits. The faeces were found to contain large numbers of bacillus typhosus. Unfortunately it was impossible to obtain a specimen of blood.

The carrier case is apparently in good health. Her doctor, who has been in attendance for some ten years, reports that she suffers at times from diarrhoea, but that she has had no illness resembling typhoid fever. Her son writes that during the last thirty-five years neither his mother, father, nor any of their five children have had enteric fever; all the family remain healthy except the father, who died thirteen years ago from pneumonia.

DIARRHŒA.

In the following Table the deaths in children under 1 year of age from diarrhoea are given in terms of the births.

	From Diarrhoea.		From Diarrhoea.	From Diarrhoea and Enteritis.
	Deaths per 1,000 Births.		Deaths per 1,000 Births.	Deaths per 1,000 Births.
1897	25	1903	14	21
1898	33	1904	14	22
1899	49	1905	11	18
1900	24	1906	17	23
1901	23	1907	12	21
1902	12	1908	8	13
		1909	6	10
		1910	10	16
		1911	25	30

The diarrhoeal death-rate in Brighton is very low when compared with that of other towns. Comparisons of the death-rate per 1,000 for the third quarter are given below.

1.—*Brighton compared with the 77 Great Towns.*

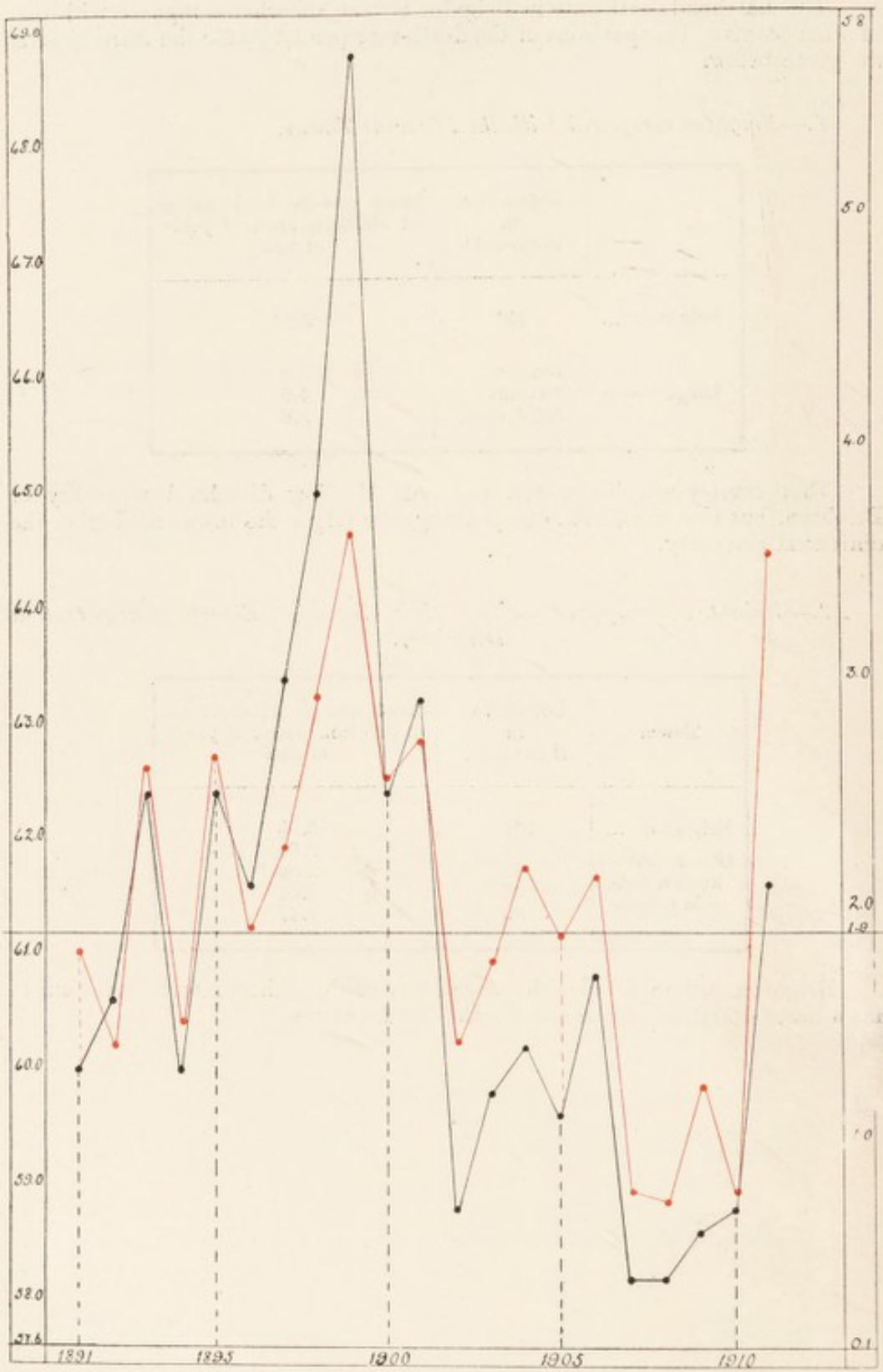
	Population in thousands.	Death-rate for third quarter of children under 2 years of age.
Brighton ...	131	2.35
Large towns	100-150	3.9
	150-300	4.9
	300 & over.	5.0

This comparison illustrates, not only the low diarrhoeal mortality of Brighton, but also that, broadly speaking, the larger the town, the higher the diarrhoeal mortality.

2.—*Brighton compared with other Seaside Resorts (Registration Districts).*

Town.	Population in thousands.	Death-rate for third quarter of children under 2 years of age.
Brighton ...	131	2.35
Other well-known seaside resorts	52	2.54
	40	2.59
	63	3.04
	32	3.47

Brighton, although twice the size of any of the other resorts mentioned, has a lower diarrhoeal death-rate for the third quarter.



The red line = Mean Temperatures
 The black line = Mortality from Diarrhoea } in the third quarters of each year.

MEAN TEMPERATURE FOR THIRD QUARTERS.

The following table, and also the diagram on page 18, shew the close relationship between the average temperatures for the third quarter, and the death-rate from diarrhœa.

Third Quarter of the years.	Mean Temperature.	Earth Temperature at four feet.	Diarrhœa and Simple Cholera mortality. Annual rate (third quarter) per 1,000 living.
1891	61.0	—	1.3
1892	60.2	—	1.6
1893	62.6	61.0	2.5
1894	60.4	59.6	1.3
1895	62.7	60.2	2.5
1896	61.2	60.3	2.1
1897	61.9	60.5	3.0
1898	63.2	60.6	3.8
1899	64.6	64.0	5.8
1900	62.5	62.1	2.5
1901	62.8	62.1	2.9
1902	60.2	60.2	0.7
1903	60.9	61.5	1.2
1904	61.7	62.0	1.4
1905	61.1	62.0	1.1
1906	61.6	61.7	1.7
1907	58.9	59.7	0.4
1908	58.8	60.8	0.4
1909	59.8	60.1	0.6
1910	58.9	60.2	0.7
Mean	61.2	61.0	1.9
1911	64.4	64.6	2.35

The diarrhœal death-rate for the third quarter of 1911 is very low, if one takes into consideration the hot and dry summer. The Chart on page 18 shews graphically that the diarrhœal death-rate varies with the mean temperature. The mean temperature for the third quarter of 1911 was 64.4, and the death-rate 2.1; the mean temperature for the third quarter of 1899 was 64.6, and the death-rate 5.8. This shews a very marked improvement. On our present population, a death-rate for one quarter of 5.8 represents 191 deaths, whilst a death-rate of 2.1 represents 69 deaths. According to this calculation there has been a saving of 122 lives in the third quarter. This reduction of mortality is due to:—

- 1.—Improved treatment of the disease;
- 2.—Improved sanitation, both personal and municipal;
- 3.—Increased knowledge† as to how to avoid infection.

1.—Improved Treatment.—The following is an extract from a letter from Dr. Powell, a general practitioner in Brighton:—

“I am sure that during the last ten years a great advance in the treatment of Infantile Diarrhœa has taken place, which must have had a marked influence upon the mortality as compared with previous periods, and may date from the time when milk, with its toxin-forming residue, ceased to be recommended as a food in these cases, and elimination, starvation, and warmth with infusions became the rationale of treatment.”

†An addressed circular letter on the prevention of diarrhœa was sent early in August to each house in which a birth had occurred during the previous twelve months.

The sanitary officials, the health visitors, the church workers, by their teaching and their assistance, have done much to prevent attacks of diarrhoea and to render the population more resistant to attack, but the fall in the diarrhoeal death-rate amongst infants must also be in part attributed to the improved treatment of this disease by the medical practitioner. The particularly low death-rate in Brighton, compared with other towns, may in a measure be due to the easy access the Brighton poor have to hospitals and dispensaries. On inquiry I find that, of patients under two years of age, 364 were treated at the out-patients' departments of the Alexandra and Sussex County Hospitals, and large numbers were treated from the various Dispensaries

INSTITUTIONAL TREATMENT OF CHILDREN UNDER TWO YEARS OF AGE.

- 65 were admitted to the Sick Children's Hospital from Brighton, each patient remaining on an average for 15 days; 10 of these died.
- 5 were admitted to the Royal Sussex County Hospital from Brighton, each patient remaining on an average for 15 days; 3 of these died.
- 11 emaciated children were admitted to the Sanatorium, each patient remaining on an average some 8 weeks; one of these, an infant 3 months old, and weighing $6\frac{1}{4}$ lbs. on admission, died.

WHY EMACIATED INFANTS WERE ADMITTED TO THE SANATORIUM.

It is well-known that the mortality is very great amongst artificially fed *delicate* children during the diarrhoeal season; admission to the Sanatorium was therefore offered to all emaciated infants. It is impossible for a mother of the working class, however well informed and however careful, to give these children the attention required. There is much talk of the ignorance of mothers, and everyone is agreed that ignorant mothers should be taught, but there is now, for Charity or for the State, another obvious duty which is to help the overburdened mother in the actual work of rearing her infants.

The infants admitted to the Sanatorium, were admitted not chiefly because of diarrhoea, but because of their emaciated condition. They were all kept until the end of the diarrhoea season and until they began to shew marked improvement. It was observed that after any change from one milk food to another milk food the infants lost weight for a time, whatever the ultimate effect of the change. This seems to prove that it is dangerous to repeatedly change the food of an infant whilst it is in poor condition. It is often advisable to change the food of a child which is not thriving, but the new food should be persevered with although for the first week the child's weight continues to fall; later the child may do quite well on the new food.

RISE IN TEMPERATURE AND DIARRHOEAL INCIDENCE.

From the following table it would appear that the increase in diarrhoea follows immediately on the increase of mean temperature in the shade.

	WEEKS ENDING.															
	June	July	August				September					October				Nov. 4
			5	12	19	26	2	9	16	23	30	7	14	21	28	
Total of out-patients and in-patients under 2 treated at the Sussex County and Children's Hospitals for diarrhoea	7	18	15	33	68	69	65	53	27	30	18	12	8	5	2	3
Mean temperature obtained from maximum and minimum temperatures in the shade	59	65	65	*71	69	65	64	66	63	56	58	50	54	58	51	49

* The means for each day of this week were 63, 68, 67, 72, 76, 74, 78. The last half of the week was the warmer.

The reasons one would suggest for the increases not being simultaneous are:—

- 1.—That foodstuffs take time to decompose;
- 2.—That diarrhoea takes time to develop;
- 3.—That in this particular instance, the very warm weather began in the middle of the week, ending on the 12th.

After the epidemic has started, it is probable that the prime factor causing the spread of the disease is direct personal infection. Enteric fever has been proved to be spread to a considerable extent by carrier cases, and there are interesting records in which cooks have been proved to be the carriers. The infection in diarrhoea is likely to be carried in the same way as the infection in enteric fever. The food of infants is particularly liable to contamination by the cook—in this instance the mother. For instance many mothers test the temperature of the milk with their fingers. Apart from infection by food, however, foolish persons persist in putting their fingers into infants' mouths. Under such favourable conditions for the spread of infection one cannot be surprised that, during the season when many adults suffer from diarrhoea, many infants are infected. In every case of death from diarrhoea the house was visited, and in many instances it was found that other members of the family suffered from diarrhoea immediately before or after the infant; this points to the readiness with which the disease may be carried by direct personal contact.

FEEDING AND DIARRHOEA.

	I.	II.	III.	IV.	V.	VI.
	Number visited.	Method of feeding. Per-centage of total.	Children attacked with diarrhoea shortly before the 21st Aug.	Diarrhoea attack rate (see col. III.)	Deaths from Diarrhoea.	Figures shewing comparative risk of death from diarrhoea.
Breast Fed ...	473	76	24	5	6	1
Breast and Cows' or Condensed ...	32	5	10	31	3	10
Cows' ...	76	12	23	30	25	33
Condensed ...	43	7	19	44	19	44
Total ...	624	100	76	—	53	—

This table refers to infants under 9 months of age who belong to the poorest families in Brighton.

Columns 1 and 2 shew how 624 children were fed during August. It is satisfactory to find that 76 per cent. of the poorest children were being entirely breast fed, and another 5 per cent. were being partially breast fed, at the time of the inspector's visit.

Columns 3 and 4 shew the number of attacks of diarrhoea occurring amongst these children. The 624 children were visited during the 3rd week in August, and a note was made of recent attacks of diarrhoea. As many as 5 per cent. of the entirely breast-fed children had been attacked.

Column 5 shews the number of deaths from diarrhoea during 1911 .

Column 6 shews the comparative risk of death from diarrhoea of infants fed in the various ways mentioned. Judging from these figures, it would appear that an infant fed on cows' milk is 33 times more likely to die from diarrhoea than a breast-fed infant. This is probably an over-statement of the danger of cows' milk, as many delicate children who do not thrive on breast milk are weaned and are given cows' or condensed milk; naturally this makes the comparison unfavourable to cows' and condensed milk, as there can be no balancing transfer from cows' and condensed milk to breast feeding. Although the figures in Column 6 are fallacious, there is no doubt that breast feeding lessens the number of attacks of diarrhoea, and also enables an infant attacked to more readily overcome the disease.

MEASLES.

During 1911 measles was the cause of 8 deaths. The epidemic of 1910 finished early in the year. The table given below shews the complete statistical history for 1910 and 1911. The table was commented upon in the report for 1910.

Statistics regarding 2,476 cases of Measles which occurred during 1910-11.

	Months.						Years.						10 and over.	
	0-3	3-6	6-9	9-12	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9		9-10
Children who were attacked.														
(a) Primary cases in homes ...	2	1	5	4	22	20	79	214	392	349	161	52	16	19
(b) Secondary cases ...	2	17	35	41	167	189	178	148	112	82	63	51	20	35
Children who were not attacked.														
(a) With a history of Measles ...	—	—	—	2	10	29	29	35	53	96	132	102	154	848
(b) With no such history ...	54	35	31	10	36	30	26	14	9	6	15	14	12	37
Percentage of susceptible* children exposed who were attacked ...	4	33	53	80	82	86	88	91	93	93	81	78	62	49
Group A. School notifications and other cases occurring in the same houses ...	4	17	39	45	187	207	532	355	501	430	224	102	36	83
Deaths occurring in Group A ...	—	1	—	2	19	12	9	—	7	2	—	—	—	—
Death-rate per 100 in Group A ...				3	10	6	4		0.7					
Deaths for 9 years, 1903-11 ...	1	4	40	—	87	48	27	15					26	
				45										

* 2 equals case mortality at all ages in Group A.

* Children with no history of an attack.

WHOOPIING COUGH.

The number of deaths from whooping cough was 16; 55 cases were notified, chiefly from Schools. Of these 5 occurred under 1 year of age, 5 aged 1—2, 2 aged 2—3, 6 aged 3—4, 3 aged 4—5, 17 aged 5—6, 9 aged 6—7, 5 aged 7—8, and 3 aged 7—9.

Annual death-rates from Measles and Whooping Cough:—

Year.	MEASLES.		WHOOPIING COUGH.	
	Number of deaths.	Number of deaths per 100,000 of population.	Number of deaths.	Number of deaths per 100,000 of population.
1892-1901 (average)	—	34	—	24
1902	30	24	28	23
1903	5	4	15	12
1904	94	75	36	28
1905	2	2	11	9
1906	28	22	22	17
1907	13	10	31	24
1908	22	17	18	14
1909	1	1	22	17
1910	80	61	19	14
1911	8	6	16	12

TUBERCULOUS DISEASES.

In the following table the registered death-rate from pulmonary tuberculosis or phthisis and from other tuberculous diseases for a series of years is shewn:—

Mean Annual Death-rate in Brighton from Phthisis (Consumption) and other Tuberculous Diseases per 100,000 persons, in Groups of Years.

	Phthisis.	Other Tuberculous Diseases.
1861-70	—	98
1871-80	—	78
1881-90	—	74
1891-1900	—	66
1901	133	59
1902	140	43
1903	145	53
1904	138	67
1905	136	54
1906	145	59
1907	142	57
1908	129	46
1909	139	43
1910	109	52
1911	136	36

During the last thirteen years the number of persons dying from phthisis has been 1,313 males and 942 females.

The comparatively low death-rate in females as compared with males is chiefly due to the extremely satisfactory housing conditions present in Brighton.

The gradual lowering of the death-rate from pulmonary tubercle is due in large measure to better feeding and improved housing. Education of consumptives in their homes and at the Sanatorium as to the prevention of the spread of infection, must also exercise a beneficial effect. In the past, Sanatorium treatment has been disappointing because so few cures have been effected in cases shewing tubercle bacilli in the sputum. Great hopes are entertained that in the future early diagnosis will be assisted by the application of tuberculin tests, and that by treatment with tuberculin many early cases will be cured.

A great deal of interesting information is contained in the following table, which gives the particulars of notification from 1899 onwards.

The course of notification is indicated by the following table:—

Year.	PHTHISIS.					Annual No. of Deaths from Tuberculosis in Brighton.
	No. of New Cases Notified.	No. of Cases Re-notified.	New Cases Notified per 100,000 of Population.	Total No. of Cases Treated in the Borough Sanatorium.	No. of Cases Re-admitted to the Sanatorium.	
1899	111	—	92	—	—	215
1900	105	—	85	—	—	232
1901	153	9	124	—	—	237
1902	224	52	180	31	—	227
1903	316	82	252	98	—	248
1904	363	85	288	130	—	259
1905	308	102	243	135	6	241
1906	373	119	292	213	32	260
1907	299	104	233	197	36	255
1908	270	64	209	191	31	226
1909	267	152	206	175	32	236
1910	251	105	192	165	28	211
1911	258	184	196	115	21	226

During the year, 442 Notifications of Pulmonary Tubercle were received; of these, 177 were under the System of Voluntary Notification, 146 under the Public Health (Tuberculosis) Regulations, 1908; and 119 under the Public Health (Tuberculosis in Hospital) Regulations, 1911, as shewn by the following table:—

	Primary No- tification.	Re-Notifica- tion.
<i>Voluntary Notifications—</i>		
In private practice	101	25
In public practice	21	17
By M.O.H. of adjoining district ...	1	—
By M.O.H. and School Doctor ...	11	—
By M.O. Barracks	1	—
	135	42
<i>Public Health (Tuberculosis) Regulations, 1908—</i>		
By Parochial Medical Officers ...	16	9
By Workhouse Medical Officers ...	42	49
By Workhouse Masters	3	20
By Relieving Officers	—	7
	61	85
<i>Public Health Tuberculosis in Hospital Regulations, 1911—</i>		
By M.Os. of—		
Royal Sussex County Hospital ...	23	18
Brighton and Hove Dispensary ...	27	27
Other Brighton Dispensaries ...	10	5
Hospitals and Dispensaries outside Brighton	2	7
	62	57
Total	258	184

RE-NOTIFICATIONS.

The 184 Re-Notifications were in respect of 129 patients; 89 cases being re-notified once, 28 twice, 10 three times, 1 four times, and 1 five times.

Of the 258 New Cases notified in 1911, 46 were subsequently re-notified on one or more occasions. Many of the cases were re-notified owing to change of address, this information enabling prompt disinfection to be done.

NOTIFIED CASES.

Of the 258 notified cases, 35 were already ill when they came to Brighton.

Proportion of Cases Notified.—Of 179 deaths, 63 (of whom 8 died in the Asylum), were those of unnotified cases. Out of the 63, 9 were visitors. This would indicate that under the present system of notification a very large majority of cases is notified.

Disinfection after admission to Sanatorium.—The amount of disinfection that is carried out at the patient's home, in addition to thorough domestic cleansing, varies according to circumstances. Special attention is paid to the patient's bedroom, which is usually sprayed with disinfectant; the bedding is disinfected by steam. In dirty homes, notices to cleanse are served, and this results in the stripping of wall-paper and whitewashing of ceilings. In very clean houses, frequently nothing is required, except domestic cleansing, which can be conveniently undertaken by the tenant. Damp dusting of articles of furniture and dough cleansing of wall-paper are advised.

After deaths from phthisis and other tuberculous diseases, disinfection was carried out as follows: in 93 cases rooms were sprayed, and in 3 cases rooms were fumigated with sulphur by the tenant. In 52 instances rooms were stripped, cleansed and whitewashed. In 6 cases the bedding or clothing was burnt, in 10 the bed-ticking was taken off and washed, and in 103 the bedding and clothing were disinfected by steam.

The number of cases of consumption treated in the Sanatorium during 1911 was 115; of these, new cases numbered 94. Of this latter number 81 had been notified during 1911. The total cases notified during the year was 258, which means that 31 per cent. of the new cases notified during the year had the advantage of Sanatorium treatment and training. The average stay each patient was 76 days in 1911, as compared with 79 in 1910. Of the 81 new cases treated in the Sanatorium, 1 was subsequently admitted to the Infirmary, and of the 177 new cases notified during the year who did not receive Sanatorium treatment, 46 were admitted during the year to the Infirmary.

Under the new regulations regarding transference of deaths, not only deaths occurring in public institutions are transferred, but the deaths of all persons who, having a fixed or usual residence in England and Wales, die in a district other than that in which they resided.

Apart from public institution transfers, there were 7 outward and 6 inward transfers of visitors.

On inquiry it is found that 17 persons already suffering from phthisis came to Brighton during 1910 and 1911, and died during 1911. These deaths were all credited to Brighton, although some of these persons had only been resident in Brighton for a few weeks.

Brighton residents who suffer from consumption rarely leave the town, whilst many persons come to Brighton because they suffer from that disease; the result is that the phthisis death rate for Brighton is increased.

Deaths occurring in Public Institutions.—57 cases died in the following institutions: 33 in the Brighton Workhouse, 3 in Shoreham Workhouse, 7 in the Brighton Borough Asylum, Haywards Heath, 8 in the Sanatorium, 6 in the Royal Sussex County Hospital.

The following table gives some idea as to the stage of the disease when the patients are first admitted, and as to the length of their stay and progress in the Sanatorium.

Stage of Disease. Turban-Gerhardt Classification.	Number of Cases.	Average Stay in Hospital in Days.	Bacteriological Results.			Average Gain in Weight in lbs.	Deaths.
			Positive.	Negative.	No Sputum.		
I. { Male ...	11	68	6	3	2	10	—
{ Female ...	15	89	1	4	10	10	—
II. { Male ...	9	115	7	2	—	10	—
{ Female ...	2	47	1	1	—	$\frac{1}{2}$	—
III. { Male ...	19	66*	19	—	—	4*	3
{ Female ...	9	75*	8	1	—	$-\frac{1}{2}$ *	1
Children under 15 { Male ...	6	93	1	—	5	7	—
{ Female ...	6	110	—	1	5	6	—

*Average excluding deaths (3 Males and 1 Female).

TREATMENT BY TUBERCULIN

Two preparations of tuberculin, T.R. and B.E., have been used. At first T.R. was tried, the first dose was commonly $\frac{1}{1000}$ or $\frac{1}{500}$ mgm. The weekly dose was doubled until 1 mgm. doses were reached. This preparation was well borne, even by children. During the last half of the year, the preparation B.E. was tried. The first dose was $\frac{1}{10000}$ mgr., and this was doubled at weekly or bi-weekly intervals. Unfortunately, sterile dilutions in doses containing $\frac{1}{20}$ and $\frac{1}{10}$ mgm. gave rise to abscess formation. A study of the subject leaves little doubt that the cause of abscess formation was the non-absorption of the solid matter in the preparation. This was proved by the presence of tubercle bacilli in the pus of the abscesses, and also by the presence of hard nodules persisting over long periods at the site of injection. The abscesses occurred about one period, and it may be that the bacilli were not ground sufficiently. After the worry and trouble caused by these abscesses, I have entirely discarded the preparation B.E., and would advise all persons who administer large doses of tuberculin to do likewise.

T.R., even in large doses, seems to be well absorbed, and in future I intend relying on this preparation or simultaneous injections of this preparation and old tuberculin.

The results of treatment are recorded in a paper, by Forbes and News-holme, in Public Health, March, 1912. It is still too early for us to judge whether or not tuberculin treatment is to fulfil the expectations of certain of its advocates. Apart from the abscess formation following the use of B.E. no untoward results have occurred. In Brighton, as a precautionary measure, the first doses of tuberculin are always given whilst the patients are in hospital, but later, the patients are treated at the Town Hall on Friday evenings. Friday is the most suitable day, as, should a severe re-action occur, the patient loses a minimum amount of work.

TUBERCULAR JOINT DISEASE.

Since the Joint Ward was opened in April, 1910, 14 cases have been treated over prolonged periods. Of these, four were cases of spinal disease, and nine were cases of hip disease, and one suffered from disease of the knee joint. Three cases of spinal disease have been discharged cured, and with no increase of deformity, after stays of 303, 534, and 611 days. Five cases of hip disease have been discharged cured, three with perfect movement, one with fair movement, and one with ankylosed hip. The joint in the last case was extensively diseased before admission. The average stay in hospital was 497 days.

One case of hip disease developed an abscess after 2 months' stay in hospital, and one case of knee joint disease was discharged for operation after 440 days, having shewn no sign of improvement. Our object was to obtain complete cure of hip and knee cases, and a minimum of deformity in spinal cases. The general hospitals used to keep those cases for as long a time as possible, but seeing rest for a year was required, and that there were always many patients wanting beds, these cases were sent home to rest. Even careful mothers found difficulty in giving these children the attention required, especially in large families. Consequently the joints were moved, and abscess or increased deformity resulted; also in the poor hygienic conditions of many of the homes, the patients had no chance of fighting the disease successfully, and succumbed from the spread of the disease. At the Sanatorium the little patients lead practically an open-air life, and are kept at perfect rest. Being satisfied with the results obtained, the Corporation have decided to continue the treatment of tuberculous joint disease.

TUBERCULOUS MILK.

Forty-six samples of milk were collected and submitted to the Lister Institute for examination (see page 46).

Phthisis; Sanatorium and Hospital Accommodation.

Classes for which accommodation is provided	By whom provided.	Where situated.	Total number of Beds.	How are patients selected?	Are patients under the care of a resident Medical Officer?	What charge, if any, is made for the use of Beds.	Do the Sanitary Authority use— (1) their Isolation Hospital, or (2) their Small-pox Hospital, for cases of Phthisis?	Do the Sanitary Authority reserve Beds in any Phthisis Sanatorium; If so, how many, and in what Sanatorium?	Do the Sanitary Authority provide portable open-air Shelters or Tents?
(a) Early cases.	Brighton Corporation.	Brighton Infectious Disease Hospital, Bear Road, Brighton.	B. Corporation 48	<i>Brighton Corporation</i> — Two years continuous residence in Brighton immediately before admission. No persons previously treated at the Infirmary for phthisis are admitted.	Yes.	None.	Their Isolation Hospital; it would be too expensive to use the Small-pox Hospital owing to difficulties of administration and food supply.	No.	No.
(b) Intermediate cases.	Brighton Corporation.								
(c) Advanced cases.	Brighton Corporation. Brighton Guardians.									The Infirmary Elm Grove, Brighton.	43	Yes.	None.

Patients notified from Dispensaries and Hospitals after discharge from the Sanatorium, if suitable cases, are treated with tuberculin at the Town Hall.

Patients notified by private practitioners are also treated with the consent of the practitioner.

No patients, except suspicious contacts who are not having attention, are examined by the M.O.H.

BOROUGH ISOLATION HOSPITAL.

The following table shews the number of cases admitted to, treated at, and discharged from the Sanatorium.

	Number of Patients suffering from the following Diseases :—											Fulking Grange.
	Scarlet Fever.	Enteric Fever.	Measles.	German Measles.	Diphtheria.	Phthisis.	Tuberculous Joints.	Chicken Pox.	Emaciated Infants.	Other Diseases.	Total in Sanatorium.		Small Pox.
Remaining in the Sanatorium Dec. 31st, 1910 ...	21	4	4	—	12	26	9	3	—	—	79	—
Admitted to Sanatorium during 1911 ...	354	17	—	—	154	115	5	2	15	9	671	1
Total number treated in 1911	375	21	4	—	166	141	14	5	15	9	750	1
Number discharged during 1911 ...	281	17	3	—	152	116	8	5	14	7	603	—
Died in Sanatorium in 1911 ...	9	—	1	—	6	8	—	—	1	2	27	—
Remaining in Sanatorium Dec. 31st, 1911 ...	85	4	—	—	8	17	6	—	—	—	120	—

Of the above cases, 2 of scarlet fever, and 7 of other diseases, belonged to the Sanatorium staff; one case of scarlet fever and two of diphtheria were admitted from Newhaven Rural District, two cases of scarlet fever were admitted from a School outside the Borough, and 23 cases of diphtheria were admitted from the Warren Farm. No charge is made for Brighton residents treated in the General Wards. Private patients and non-residents last year were charged £132 2s. 8d. for maintenance and treatment; £303 1s. 6d. was paid for Poor Law patients; £22 6s. 3d. was paid for special disinfection done in the town, etc. The Newhaven Rural District Council has paid £57 17s. In addition to the above amounts, £763 4s. 6d. was received for the maintenance of Hedgcock patients who received treatment during 1911.

The table on page 35, prepared by the Borough Accountant, shews the expenditure for the year on the two hospitals. The total number of weeks spent by all the patients in the Sanatorium was 5,394, as compared with 3,985 in 1910. Of the total in 1911, scarlet fever patients spent 2,133 weeks, diphtheria patients 803 weeks, and phthisis patients 1,639 weeks, and patients suffering from tuberculous joints, 3,561 weeks.

RETURN CASES OF SCARLET FEVER.

After the return of 17 scarlet fever cases from hospital, 24 cases of scarlet fever occurred in their homes. The children from two homes attended a school where there was a sudden large outbreak of scarlet fever, 20 children being affected, and during this outbreak contracted the disease. This fact, taken along with the intervals of 50 and 150 days between the return home of the primary cases and the sickening of the subsequent cases, allows these cases to be excluded from our tables of return cases; this leaves 15 cases which are presumed to have given rise to infection after their return from hospital. See table inserted opposite page 32.

In 4 of the 15 cases, the intervals between the discharge of the primary case and the onset in the return cases was 59, 84, 139 and 142 days. In most returns these would not have been classed as return cases, although there is every reason to believe that return cases do occur after even longer intervals. Taking the three years 1909, 1910, 1911, the percentage of hospital cases is 4.7; excluding cases in which the interval between discharge of primary case and onset in return case was six weeks or over, the percentage 4.7 is reduced to 3.8.

During the same 3 years, 139 cases of scarlet fever have been nursed at home, and 6, or 4.3 per cent., gave rise to return cases after they had been certified as free from infection.

The following table gives information regarding the intervals of time elapsing between the discharge from hospital of the primary case, and the onset in the return case, etc.

1911.	Days.																
<i>Intervals between</i>																	
(1) discharge from Hospital and onset return case ...	2	6	6	7	8	9	9	10	12	15	17	59	84	139	142		
(2) onsets in primary and return cases ...	36	52	53	105	44	61	55	69	95	57	58	114	130	207	197		
The day of disease on which primary case discharged from Hospital ...	34	47	48	89	37	53	47	60	84	43	42	56	47	69	56		

That great length of stay in hospital does not prevent return cases is shewn by the following table, which gives the week of illness during which the patients were discharged; it was thought better to give the dates of discharge according to length of illness, and not length of stay in the Sanatorium, as some cases are admitted later in the illness than others.

Before end of	3rd week.	4th week.	5th week.	6th week.	7th week.	8th week.	9th week.	10th week.	10th and over.
For 1909, 1910 & 1911.	From onset of illness.								
Number discharged ...	8	25	106	230	157	69	33	42	69
Primary cases giving rise to return cases were discharged ...	—	—	3	9	10	6	1	3	3

The table on page 32 shews that 173 out of 738 cases had no desquamation on hands or feet during their stay in hospital.

Twelve per cent. of the septic cases (including nasal discharge, sore nose, otorrhœa, and vaginal discharge) gave rise to return cases, whilst only 3.5 per cent. of the remaining cases did so. It is remarkable that no return cases have arisen from the 15 cases of otorrhœa discharged.

Condition on Discharge of Scarlet Fever Cases during 1909, 1910 and 1911.

	Desquamation.			Throat.			Enlarged Tonsils.	Nasal Discharge.			Nose.			Otorrhea.		Cough.	Adenitis.	Cracks and Sores.	Vaginal Dischg.		
	Present.	Absent.	None on hands or feet during stay in Hospital.	Normal.	Red.	Pale.		Thick.	Thin.	Undefined.	Sore.	Crusts.	Picked.	Moist.	Acute.					Chronic.	
(1) Of 738 cases ...	333	233	173	513	31	195	256	27	59	7	11	19	10	71	7	8	7	10	18	18	2
(2) Of 35 cases giving rise to return cases ...	17	12	6	24	—	11	11	3	5	2	2	—	1	—	—	—	2	3	3	1	1

The following table shews the complications from which the patients suffered during their stay in hospital during 1908, 1909, 1910, and 1911. During 1909, 1910 and 1911, the scarlet fever patients were kept in bed for at last four weeks. Previously they were allowed up at the end of ten to fourteen days. I am of opinion that cases should not be allowed to mix with each other until after the end of the fourth week of their illness; if they do so they are more apt to suffer from complications, and to remain in an infectious condition for a longer period.

	1908 275 patients.	1909 284 patients.	1910 149 patients.	1911 330 patients.	Patients suffering from various Complications developing after admission.			
					1908	1909	1910	1911
Otorrhœa	30	22	8	35	10.9	7.7	5.4	10.6
Nephritis	5	5	1	10	1.8	1.7	.7	3.0
Endocarditis . . .	2	4	1	1	.7	1.4	.7	.3
Pericarditis . . .	1	—	—	1	.4	—	—	.3
Harbouring D.B. on admission	9	2	6	9	3.3	.7	4.1	2.2
Harbouring D.B. dur- ing stay	5	1	—	2	1.8	.3	—	.6

In addition the following complications were noted:—

On admission 54 suffered from nasal discharge, 11 from ringworm of the head, 4 from septic sores, 2 from chronic ear discharge, 3 from endocarditis, 2 from whooping cough, one from each of the following: albuminuria, chicken pox, vaginal discharge, chronic eczema.

Whilst in hospital the following additional complications were first observed: six abscesses of neck, two mastoid abscesses, three cases of mumps, six from labial discharge, and one from each of the following: chorea, jaundice, rectal discharge, chicken pox, pleurisy, bronchitis, bronchial pneumonia. In addition to the above nasal discharge commenced in 53 cases on the following weeks of disease:—

1st week, 12; 2nd, 8; 3rd, 7; 4th, 9; 5th, 4; 6th, 11; 7th, 2.

DIPHThERIA.

During the year 163 persons, notified as suffering from diphtheria, or harbouring diphtheria bacilli, were admitted to the Sanatorium. Of these 42 did not give D.B. either on admission or during their stay in hospital.

Condition on discharge.	Throat.	Nose.
143	—	—
11	+	—
3	—	+
6 died		
Total, 163		

Two cases notified as diphtheria required tracheotomy ; the particulars are as follows :—

No.	Sex.	Age.	Date of onset.	Days of Disease.		Termination.
				Doctor called in.	Removed to Sanatorium.	
116	Female	4	Oct. 8th	Oct. 10th	Oct. 20th	Death Oct. 22nd.
138	Female	1½	Nov. 17th	Nov. 22nd	Nov. 22nd	Death same night.

Deaths from diphtheria.

Sex.	Age.	Doctor called in.	Day of disease.		Remarks.
			On Admission.	At Death.	
7. F.	5	4th	4th	8th	Throat and nose affected.
21. F.	4	4th	4th	9th	" " "
55. F.	9	3rd	3rd	13th	" " "
82. F.	5	1st	3rd	3rd	Died ¼ hr. after admission.
119. F.	4	3rd	13th	15th	Laryngeal Diphtheria. Tracheotomy. Two weeks after operation for adenoids.
138. F.	1½	6th	6th	6th	Laryngeal Diphtheria. Tracheotomy. Death same night.

FIGURES FOR 1911, COMPARED WITH 1910.

COUNTY BOROUGH OF BRIGHTON HOSPITALS.

Expenditure—Sanatorium, Bear Road.

	1910.	1911.
Salaries and Wages—	£ s. d.	£ s. d.
Medical Officer	100 0 0	100 0 0
Matron	90 5 5	90 0 1
Nurses and Servants	1144 14 7	1157 1 8
Labour (gardens)	124 10 0	125 9 6
Repairs	299 15 8	150 14 11
Fuel	722 10 1	739 10 11
Electricity	198 18 0	204 6 7
Gas	45 4 9	54 15 0
Water	64 2 11	64 5 0
Sundry household goods, furniture and repairs	315 11 10	405 19 1
Provisions	2050 16 4	2210 15 11
Drugs and medical sundries	178 8 8	180 10 9
Surgeons' Fees (special cases) and hire of extra nurses	22 7 6	62 17 3
Dresses for Matron, uniforms for nurses and servants, hospital garments, linen, flannel and drapery goods	179 7 5	181 19 6
Printing, advertising, stationery and stamps	29 6 4	27 18 4
Rates, taxes and insurance	462 18 4	445 13 4
Travelling expenses, cab hire, carriage, telegrams and sundries... ..	17 2 7	24 3 6
Garden seeds, manure, &c.	5 10 2	8 19 0
Telephone rent	6 13 3	6 13 3
<i>The Grange, Fulking.</i>		
Wages	73 0 0	72 16 0
Repairs	19 2 8	1 13 6
Fuel	8 9 0	10 6 6
Sundry household goods	5 4 0	6 19 0
Travelling and miscellaneous expenses	2 0 6	1 19 8
Rates, taxes and insurance	11 1 4	11 8 2
Telephone rental... ..	35 0 0	35 0 0
	£6212 1 4	£6381 16 5

LABORATORY REPORT, 1911.

	Positive.	Negative.	Doubtful.	No Growth.	Total.
Swabs from Borough...	117	932	7	53	1109
<i>Sanatorium Swabs—</i>					
Admissions Diphtheria ...	113	222	—	27	362
Convalescent Diphtheria ...	255	954	—	95	1304
Admissions Scarlet Fever ...	24	610	3	21	658
Convalescent Scarlet Fever...	8	79	2	5	94
Other Patients ...	—	8	—	—	8
				Total...	2426
Sputa from Borough...	92	312	—	—	404
Sputa from Sanatorium ...	105	57	—	—	162
<i>Blood Specimens, Widal's Reaction—</i>					
From Borough ...	(1)*	(2)*	(3)*	(4)*	
From Sanatorium ...	14	—	4	27	45
From Sanatorium ...	5	—	2	10	17
<i>Hairs examined for Tinea—</i>					
From the Borough...	168	112	—	—	280
From Sanatorium ...	14	25	—	—	39

* In blood specimens—

1 = complete reaction.

2 = almost complete reaction.

3 = incomplete reaction.

4 = no clumping.

Miscellaneous Specimens.

	Positive.	Negative.
Faeces examined for B. Typhosus ...	2	7
Urine " " " " ...	—	1
Urine " " B. Tuberculosis ...	—	2
Cerebro-spinal fluid examined for B. Tuberculosis ...	1	—

Number of Water Examinations.

	Chemical.	Bacteriological.
Patcham ...	11	12
Falmer ...	11	12
Goldstone ...	10	13
Shoreham ...	10	21
Mile Oak ...	10	12
	—	—
	52	70

SANITARY WORK OF THE YEAR.

SANITARY INSPECTION.

In the following Tables, prepared by Mr. Skinner, the Chief Sanitary Inspector, the work of the Sanitary Department is stated, so far as it can be given in tabular form:—

Inspections during 1911.

	Totals for 1911.
Number of Streets Inspected	260
„ Houses and other Premises Inspected	14604
„ Complaints attended to	868
„ Visits to Slaughter Houses	3227
„ „ Cowsheds	57
„ „ Bakehouses	295
„ „ Dairies and Milk Shops	585
„ „ Provision Shops	3429
„ Day Visits to Common Lodging Houses	113
„ Night Visits to ditto	96
„ Visits in respect of Sickness... ..	6178
„ Visits to Disinfect Rooms	745
„ Visits for Removal of Bedding	281
„ Drains Tested by Volatile Test	36
„ Drains Opened for Examination	341
„ Visits for Sundry Purposes	9536
„ Visits to look up Notices served	4475
„ Attendances at Police Court... ..	15
„ Samples Collected for Analysis	550
Samples for Bacteriological Examination—	
Milk for Tubercule Bacilli... ..	48
Number of Inspections of Stables	1186
„ Wastes of Water Reported	115
„ Letters sent to Schools and Public Library	1463
Meteorological Observations taken	1282
„ Reports issued	2663
Visits to Schools	226
Number of Visits under Factory and Workshops and Shop Hours Acts	3745
Drains Flushed	13
Markets Committee, One Inspector	10 days
Visits to Houses Let in Lodgings (Day)... ..	134
„ Offensive Trades	47
Smoke Observations	120
Contagious Diseases (Animals) Act	106
Visits to Ice Cream Vendors	120
Housing, Town Planning, &c., Act—	
Visits by Medical Officer of Health... ..	111
„ Chief Inspector	1212
Customs and Inland Revenue Act—	
Visits by Medical Officer of Health... ..	8
„ Chief Inspector	8

It will be seen by the above table that 3,429 visits have been made to provision shops during the year.

The primary object of these is to prevent the sale of unsound food, but frequent visits are also necessary to ensure the removal of refuse, more particularly during the summer months. Fish shops especially require constant supervision.

No complaint of a nuisance from any provision shop has been received during the year; this is very satisfactory considering the excessively hot summer.

All stables have been regularly inspected and the frequent removal of manure insisted on. Complaints of offensive smells from stables are now very rare.

Premises in which offensive trades are carried on have been regularly visited, and the frequent removal of matters likely to cause a nuisance insisted on.

By an arrangement between the Chief Inspector and the proprietors, all bones and fat were removed daily from the marine stores during the summer months. In consequence of this no complaint was received respecting them during the whole year.

120 visits were made during the hot weather to premises where ice cream is manufactured, to see that proper precautions were taken to prevent its contamination.

The visits for sundry purposes include the testing of house drains after repairs and alterations, but not the testing of new drains. The latter is done by the Borough Surveyor's department. Visits to premises with builders and owners, to arrange details for carrying out the work ordered, inspections of common passages at the rear of houses, waste land, areas of unoccupied houses, and visits to dirty houses are also included under this head. Houses occupied by dirty tenants are kept under observation until an improvement in their condition is made.

Many of the complaints received were due to the keeping of fowls, rabbits, pigeons, &c., in the back yards of houses. This practice is most objectionable and sometimes causes serious nuisance.

The sanitary inspections enumerated in the preceding table have been followed by the serving of the notices given in the next table. A large proportion of the work is done on the strength of verbal recommendations or preliminary notices.

Notices served during 1911.

Nature of Notice.	Warning and Verbal Notices.						Final Notices.				Total number of notices complied with.	
	Number served.		Number complied with before service of final notice.		Number reported for final notice.		Number served.		Number complied with.			
	Owners.	Occupiers.	Owners.	Occupiers.	Owners.	Occupiers.	Owners.	Occupiers.	Owners.	Occupiers.		
To drain into sewer and fill up cesspools ...	11	—	8	—	3	—	3	—	3	—	11	—
To relay drain ...	224	—	156	—	68	—	60	—	59	—	215	—
To repair drain and soil pipe	98	1	62	1	36	—	28	—	28	—	90	1
To trap drain ...	49	—	36	—	13	—	14	—	14	—	50	—
To cleanse and whitewash rooms ...	266	84	160	56	106	28	107	31	106	31	266	87
To clear drain or soil pipe	87	17	20	8	67	9	82	1	82	1	102	9
To clear, repair or cleanse closet, or repair flushing apparatus or pan ...	380	144	262	56	118	88	200	98	200	98	462	154
To repave yard or scullery	369	2	232	2	137	—	127	—	123	—	355	2
To abate other nuisances...	1154	66	800	38	354	28	338	26	333	26	1133	64
To provide covered dustbins	486	—	309	—	177	—	191	—	186	—	495	—
To provide premises with a proper water supply ...	15	—	9	—	6	—	6	—	6	—	15	—
To cleanse premises and remove foul accumulations	67	221	12	42	55	179	48	170	48	170	60	212
To provide manure receptacles ...	8	—	3	—	5	—	3	—	3	—	6	—
To provide w.c. accommodation ...	4	—	1	—	3	—	—	1	—	1	1	1
To render damp walls with cement compo ...	182	—	108	—	74	—	74	—	71	—	179	—
To lay on water to closets	2	—	—	—	2	—	5	—	5	—	5	—
To abate overcrowding ...	—	75	—	10	—	65	—	65	—	65	—	75
To discontinue keeping animals so as to be a nuisance ...	—	110	—	13	—	97	—	94	—	94	—	107
To abate smoke nuisance...	—	24	—	22	—	2	—	2	—	2	—	24
To cleanse and whitewash bakehouses ...	—	38	—	38	—	—	—	—	—	—	—	38
To cleanse and whitewash workrooms ...	—	8	—	7	—	1	—	—	—	—	—	7
To pave and drain stables	3	—	—	—	3	—	1	—	1	—	1	—
To pave yard adjoining house wall ...	54	—	37	—	17	—	18	—	17	—	54	—
To take up brick floor of living rooms and lay board floor with vent under same ...	29	—	19	—	10	—	6	—	4	—	23	—
Totals ...	3488	790	2234	293	1254	497	1311	488	1289	488	3523	781

No summonses were necessary to enforce compliance with notices during the year.

COMMON LODGING HOUSES.

Ten of these are at present registered, having accommodation for 339 lodgers. The bye-laws have been properly carried out in these houses during the past year.

HOUSES LET IN LODGINGS.

Houses in which the landlord resides, at a rateable value not exceeding £26, and having four families in them, and houses of the same rateable value which are let in separate lodgings to two or more families, when the landlord does not reside on the premises, come under the above heading. Bye-laws for these were confirmed by the Local Government Board, on July 13th, 1893. Sixty-five such houses are now on the register.

There has been no breach of the bye-laws respecting these houses during 1910.

REMOVAL OF HOUSE REFUSE.

In accordance with the arrangement made with the Borough Surveyor's department, the following information has been supplied, and the necessary notices served in each instance.

No dust bins, defective bins, &c. 111

During the greater part of the year, the refuse from ordinary dwelling-houses is collected weekly, but during the hot weather, in July and August, it is collected twice a week, and, by special arrangement, the collection is made from hotels and large boarding-houses twice or three times a week during the whole year.

It would be beneficial to the health of the inhabitants of the town if the collection was made from every house at least twice a week during the winter months and thrice weekly during the summer.

NEW HOUSES.

The Borough Surveyor reports that plans for the erection of 49 new dwelling houses were passed by the Town Council during 1911, compared with 70 in 1910 and 101 in 1909. These were situate in the following Wards: St. Nicholas, 9; Montpelier, 3; Preston Park, 3; Preston, 13; Lewes Road, 1; St. John's, 4; Queen's Park, 13; Kemp Town, 3.

HOUSING, TOWN PLANNING, ETC., ACT, 1909.

This Act has now been in operation for two years, and much useful work has been done in Brighton under the powers conferred by it.

It will be seen on reference to Table on page 41, that since the passing of the Act, 43 houses have been dealt with, 41 Closing Orders have been made (the consideration of the other two was adjourned as plans were submitted to the Town Council for re-building them, and the work is now in hand), 17 Demolition Orders have been made, and six others are pending; 16 Closing Orders have been determined, 14 houses have been demolished, and one has been converted into stores.

Of the houses which have been demolished only one has at present been re-built; in most instances the sites have been used to provide open space for the adjoining houses.

During the year 1911 an appeal was made to the Local Government Board against Demolition Orders in respect of seven houses.

After a Local Enquiry had been held this was decided in favour of the Corporation, with costs against the appellant.

This result, together with the fact that no appeal has been made in any other instance, shews that the Act has been judiciously applied in Brighton.

In addition to the houses already mentioned, 32 others, which were in an unsanitary condition, have, by mutual arrangement between the Chief Inspector and the owners, been put into thorough and substantial repair

during the year, without Closing Orders being made. The total number of houses dealt with in this manner since the passing of the Act is 79.

During the year, 111 visits have been made by me and 1,212 by the Chief Inspector to condemned houses to see that the repairs were properly carried out.

Action taken under Section 17 of the Housing, Town Planning, etc., Act, 1909, during the years 1910 and 1911:—

Name of Street.	No. of houses dealt with.	No. of Closing Orders made.	No. of Closing Orders determined.	No. of Demolition Orders made.	No. of houses demolished.	Result.
Steine Gardens..	2	2	1	—	2	Houses demolished by the owner ; one has been rebuilt, but the site of the other is left vacant.
Cannon Street ...	1	1	—	1	1	House demolished by the owner and site left vacant.
High Street ...	2	2	—	2	2	Houses demolished by the owner ; site at present vacant.
Marine Gardens	10	10	2	7	5	5 houses demolished by the owner and the sites left vacant ; 4 houses put into thorough repair and made fit for habitation, and 1 house converted into stores
Frederick Street	11	11	7	6	1	5 of the houses in respect of which Demolition Orders were made, have, by arrangement with the Local Government Board, been made fit for habitation, and the Closing Orders determined ; the other has been demolished by the Town Council ; 2 others have been made fit for habitation and the Closing Orders determined ; 3 others have been repaired, but as the work is not quite finished the Closing Orders have not yet been determined.
Glo'ster Road ...	1	1	—	1	1	House demolished by owner and site left vacant.
Oxford Place ...	2	2	2	—	—	Houses made fit for habitation.
Arnold Street ...	1	1	1	—	—	House made fit for habitation.
Henry Street ...	3	3	3	—	—	Ditto.
Milner Road ...	6	6	—	—	—	Demolition Orders pending.
High Street ...	2	2	—	—	2	Houses demolished by the owner and site at present vacant.
Church Street ...	2	—	—	—	—	Houses sold and plans passed for re-building ; work now in hand.
	43	41	16	17	14	

The following summonses were issued during the year to enforce compliance with the Housing Acts.

Offence.	Result of Summons.
Failing to comply with notice to vacate the house after Closing Order had become operative	Order to quit the house in 7 days.
Failing to comply with Magistrate's order to vacate the house.	Ejectment Order made, and tenant afterwards ejected.
Failing to comply with notice to vacate the house after Closing Order had become operative.	Order to quit the house in 7 days
Ditto.	Summons withdrawn as defendant had left the house.
Ditto.	Order to quit the house in 7 days.

N.B.—The costs of the above summonses were afterwards recovered from the owner of the houses.

FISH MARKET.

Very few complaints of bad smells from the Fish Market have been received during the year.

Every possible care is taken to prevent this, but, owing to defective ventilation of the Market, it is impossible to avoid some smell during the hot weather, especially when, as sometimes happens, the ventilation is obstructed by fishing nets being hung over the rails of the parade to dry. These nets reach downwards from the rails, and practically shut out all light and ventilation from the Market.

Another source of nuisance in the vicinity of the Market is the dipping of nets and sails. The material in which these are dipped is heated in tanks on the beach by wood fires, old fish boxes and all kinds of rubbish being used for fuel; the smell of the smoke and the dipping material combined is very objectionable.

During the year the following unsound fish have been surrendered in the Fish Market and destroyed by arrangement with the owners.

Wet Fish.									Dried Fish			Shrimps, Pink and Brown.			Shell Fish.					
Flat Fish.			Herrings and Mackerel.			Other Wet Fish.									Whelks and Winkles.		Other Shell Fish.			
cwts.	qrs.	lbs.	cwts.	qrs.	lbs.	cwts.	qrs.	lbs.	cwts.	qrs.	lbs.	cwts.	qrs.	lbs.	cwts.	qrs.	lbs.			
52	1	0	7	3	0	56	3	0	14	1	0	18	0	0	15	0	0	0	0	40

Total weight, 8 tons 4 cwt. 1 qr. 2 lbs.

PUBLIC ABATTOIR.

The Public Abattoir has been open 17 complete years. The number of animals slaughtered each year is shewn in the following table:—

Year.	No. of Animals Slaughtered.
1894	433
1895	6,991
1896	11,184
1897	12,054
1898	12,650
1899	16,384
1900	18,304
1901	17,645
1902	20,318
1903	22,962
1904	25,804
1905	26,978
1906	26,875
1907	24,889
1908	24,769
1909	23,143
1910	21,840
1911	25,098

The number of animals killed in 1911 was 25,098, viz. :—

1,577 beasts	} in the public slaughter-houses.
2,176 calves,	
1,016 lambs,	
7,260 sheep,	
8,473 pigs,	
and	
8 beasts,	} in the private slaughter-houses.
27 calves,	
384 lambs,	
1,195 sheep,	
2,982 pigs,	

The amount received in tolls since the opening of the Abattoir has been as follows:—November and December, 1894, £7 13s. 4d.; 1895, £102 15s. 4d.; 1896, £122 4s.; 1897, £115 7s. 7d.; 1898, £185 10s. 3d.; 1899, £243 9s. 4d.; 1900, £279 17s.; 1901, £271 13s. 10d.; 1902, £352 14s. 10d.; 1903, £402 11s. 10d.; 1904, £433 4s. 3d.; 1905, £451 9s.; 1906, £467 5s. 2d.; 1907, £515 2s. 3d.; 1908, £436 11s. 7d.; 1909, £461 0s. 4d.; 1910, £468 3s.; 1911, £516 16s. 3d. One butcher was fined 20s. and costs for two offences against the Abattoir bye-laws.

PRIVATE SLAUGHTER-HOUSES.

In various parts of the town 33 private slaughter-houses are in use. The bye-laws for slaughter-houses have been fairly well carried out.

Each slaughter-house is visited several times a week by Inspector Cuckney, Superintendent of the Abattoir.

Unsound meat seized or surrendered during 1911:—

Description.	Number of Animals.	Number condemned by Magistrate.	Number condemned by arrangement with owner.	Total weight in lbs.
<i>A.—At the Abattoir—</i>				
Bullocks (whole carcase)...	11	—	11	7266
„ (part of carcase) ...	153	—	153	4857
Calves (whole carcase) ...	6	—	6	342
„ (part of carcase) ...	8	—	8	126
Sheep (whole carcase) ...	12	—	12	918
„ (part of carcase) ...	121	—	121	542
Pigs (whole carcase) ...	121	—	121	11785
„ (part of carcase) ...	757	—	757	7242
	1189	—	1189	33078
<i>B.—In the Private Slaughter Houses and Shops—</i>				
Bullocks (whole carcase)...	13	—	13	9467
„ (part of carcase) ...	440	—	440	20632
Calves (whole carcase) ...	3	—	3	63
„ (part of carcase) ...	4	—	4	46
Sheep (whole carcase) ...	36	—	36	2471
„ (part of carcase) ...	242	—	242	2060
Pigs (whole carcase) ...	14	—	14	1530
„ (part of carcase) ...	26	—	26	489
	778	—	778	36758

TUBERCULOSIS.

Of the beasts, 1 bull, 6 steers, 2 heifers, and 14 cows were found to be diseased to such an extent that the whole carcasses were destroyed. 105 parts of beasts were also found to be tuberculous. 2 parts of calves, 96 pigs, and 252 parts of pigs, were also found to be tuberculous.

OTHER FOODS SEIZED OR SURRENDERED IN 1911.

72lbs. tins of beef, 247 rabbits, 106lbs. of wet fish, 14 turkeys, 1 fowl and 3½ gallons of prawns (the prawns were condemned by a Justice of the Peace), 2 boxes of kippers, 3 boxes of apples, 5cwt. of potatoes, 1 case of Spanish onions, 4 bushels of pears, 20 gallons of plums, and 12 small boxes of greengages.

One fish hawkker was fined £3 10s. and costs for exposing for sale 3½ gallons of unsound prawns.

SALE OF FOOD AND DRUGS ACTS.

Number of samples collected	...	...	502
Number of samples not genuine	...	...	22
Number of prosecutions	...	...	6
Number of convictions	...	...	3
Number withdrawn	...	...	2
Number dismissed	...	...	1
Aggregate amount in fines	...	...	£6 10 0
Analyst's fees recovered	...	...	1 9 6
			<hr/>
			£7 19 6
			<hr/>
Cost of samples	...	...	£2 14 6 $\frac{3}{4}$
Cost of assistance, postage, and rail- way fares	...	...	6 11 5
Cost of analyses	...	...	176 13 0
Analyst's salary	...	...	50 0 0
			<hr/>
			£235 18 11 $\frac{3}{4}$
Fines and Analyst's fees recovered	...	...	7 19 6
			<hr/>
Net cost of working the Acts	...	...	£228 19 5 $\frac{3}{4}$

Two milk sellers were fined 20s. and 10s. and costs; one farmer was fined £5 and costs; two summonses were withdrawn on payment of costs, including analyst's fees, 5s.; and one summons was dismissed.

SALE OF FOOD AND DRUGS ACTS.

Statement of prosecutions and other actions taken in the County Borough of Brighton during the year 1911.

Name of Article.	No. of Sample.	Result of Analysis.	Result of Legal Proceedings under the Sale of Food and Drugs Acts.		Other action taken.	Remarks.
			Fine.	Costs.		
I. Milk	28	13.34% fat deficient	—	—	Vendor cautioned	
I. Milk	31	16.67% " "	—	—	" "	
O. Milk	69	6.67% " "	—	—	" "	
I. Milk	71	13.34% " "	—	—	" "	
O. Milk	91	13.34% " "	20/-	5/-	—	
O. Milk	110	10% " "	—	—	Vendor cautioned	
O. Milk	117	6.6% " "	—	—	" "	
O. Milk	149	10% " "	—	—	" "	
O. Milk	157	3.3% " "	—	—	" "	
O. Milk	163	13.34% " "	—	—	" "	
O. Milk	180	8.0% " "	—	—	" "	
O. Milk	219	6.7% " "	—	—	" "	
O. Milk	220	6.7% " "	—	—	" "	
O. Milk	224	6.7% " "	—	—	" "	
I. Milk	320	13.3% " "	—	—	" "	
O. Milk	333	33.3% " "	—	—	—	Withdrawn on payment of 10/6 towards costs.
O. Milk	350	2.6% added water	—	—	Vendor cautioned	
O. Milk	376	16.6% fat deficient	10/-	5/-	—	
O. Milk	379	22.35% added water	—	—	—	
		6% fat deficient	£5	9/-	—	
O. Milk	380	22.88% added water	Summons	—	—	
		16.6% fat deficient	dismissed*	—	—	
O. Milk	381	23.29% added water	Summons	—	—	
		13% fat deficient	with drawn	—	—	
O. Milk	464	6.6% " "	—	—	Vendor cautioned	

I.—Informal Samples.

O.—Official Samples.

OTHER SAMPLES COLLECTED DURING 1911.

TUBERCULOUS MILK.

Forty-six samples of milk were collected and examined at the Lister Institute of Preventive Medicine, for the presence of tubercle bacilli.

In seven of the samples tubercle bacilli were found.

In consequence of the above results, eight farms were visited outside the County Borough, and 261 cows were examined by the Corporation Veterinary Inspector.

In one herd of 43 cows, two extremely emaciated cows were found, both of which suffered from extensive tuberculosis of the udder. The milk from these cows had been mixed with that of the whole herd until shortly before the date of our visit.

The animals were subsequently slaughtered at the Public Abattoir. On post mortem, each cow was found to have suffered from extensive tubercular disease of the udder.

On six of the farms, 23 other cows were found to be affected with induration of the udder. In each case a sample of milk was taken from the quarter affected, and submitted to the Lister Institute for examination, for the presence of tubercle bacilli; in none of these were tubercle bacilli found.

PUBLIC ANALYST'S REPORT.

By MEREDITH WYNTER BLYTH, B.A., B.Sc., F.I.C.

Table shewing the results of the analysis of samples taken under the Sale of Food and Drugs Act during the year 1911.

Samples of	Number of Samples.	Adulterated.	Percentage of Adulteration.	Nature of Adulteration.
Milk	316	22	6.96	Abstraction of fat. Addition of water.
Butter	82	—	—	
Milk Blended				
Butter	4	—	—	
Lard	9	—	—	
Cheese	10	—	—	
Condensed Milk ...	2	—	—	
Bread and Butter	6	—	—	
Margarine	16	—	—	
Sausages	8	1	12.5	Excess of boric acid.
Suet	1	—	—	
Condiments	11	—	—	
Tinned and				
Bottled Foods ...	10	—	—	
Lemonade	1	—	—	Contained a trace of lead.
Drugs, &c.	26	—	—	
1911 Total	502	23	4.58	
1910	535	23	4.30	
1909	554	12	2.16	
1908	501	53	10.57	
1907	506	50	9.88	
1906	501	61	12.17	
1905	503	60	11.92	
1904	501	47	9.38	
1903	507	92	18.14	
1902	502	114	22.70	
1901	490	93	18.97	

MILK.

The following table shews the amount of adulteration of milk, and the percentage of fat during 1911 and the four previous years.

Year.	Total Milk Samples.	Adulterated.	Percentage of Adulteration.	Average percentage of Fat.
1907	326	30	9.20	3.47
1908	375	48	12.80	3.51
1909	342	7	2.04	3.51
1910	320	14	4.37	3.56
1911	316	22	6.96	—

Table shewing total samples of milk analysed and proportion watered or deficient in fat from 1900 to 1911.

		Total Samples.	Below Standard.	Per cent. below Standard.	Average per cent. of Fat.
Week day Samples	Wholesale, 1900-1910	872	36	4.12	3.57
	„ 1911	96	8	8.33	3.44
	Retail, 1900-1910	2120	216	10.18	3.53
	„ 1911	208	13	6.25	3.54
Sunday Samples	Wholesale, 1900-1910	36	—	—	3.83
	„ 1911	—	—	—	—
	Retail, 1900-1910	386	33	8.54	3.54
	„ 1911	12	1	8.33	3.91

REMARKS.

The year has been remarkably uneventful as regards the adulteration of foods. It is a satisfactory fact that in spite of very careful sampling of a variety of foods, very little adulteration has been detected. It must not, however, be forgotten that this does not imply that all food is pure—for example, the addition of colouring matter to milk; borax to cream, sausages and potted meats; chemical essences to sweetmeats; 'fruit juice' to jams; starches to infant foods, to say nothing of bleached flour and patent foods, still goes unchecked because either there is no legislation to deal with the matter or else the trader is protected by a label which to the uninitiated is often misleading. It seems probable that before long legislation will be introduced to meet these more subtle forms of adulteration.

M. WYNTER BLYTH.

THE LOCAL ADMINISTRATION OF ACTS RELATING TO
 FACTORIES, WORKSHOPS, WORKPLACES, BAKEHOUSES,
 OUTWORKERS, SHOP HOURS, SHOP SEATS, REGISTRY
 OFFICES, AND THE EMPLOYMENT OF CHILDREN.

The inspections are made by Inspector Mills, the Inspector appointed under the various acts.

There are at present on the Registers:—

	262	Factories.
	2,254	Workshops.
	153	Workplaces.
	4,291	Shops.
	32	Registry Offices.
Total	6,992	

The visits made during the year were to:—

Factories	...	...	...	...	...	85
Workshops	...	...	...	...	...	286
Workplaces	...	...	...	...	...	87
Bakehouses	...	...	...	...	...	295
Outworkers	...	...	...	...	...	66
Shops	...	...	...	...	...	2,378
Employment of Children Act	...	...	...	...	...	374
Cruelty to Children Act	...	...	...	...	...	84
Registry Offices	...	...	...	...	...	58
Seats for Shop Assistants Act	...	...	...	...	...	32
Total	...	...	...	...	...	3,745

280 Inspections were made after nine o'clock at night.

Four summonses were taken out under the Shop Hours Act, 1892, and four under the Shop Hours Act, 1904.

21 Notices of occupation of new workshops have been sent in by H.M. Inspector.

14 Notices of workshops in which no Abstract of the Factory and Workshop Act was shewn have been forwarded to H.M. Inspector.

For the purpose of inspection and reference the Register of Workshops has been grouped as follows:—

Tailors	...	...	...	...	98
Ditto, Outworkers	...	...	...	...	303
Dressmaking and Underclothing	...	...	...	...	338
Ditto, Outworkers	...	...	...	...	168
Bootmakers and Repairers	...	...	...	...	146
Ditto, Outworkers	...	...	...	...	91
Laundries	...	...	...	...	172
Bakehouses	...	...	...	...	136
Building Trades	...	...	...	...	176
Furnishing Trade	...	...	...	...	139
Ditto, Outworkers	...	...	...	...	36
Miscellaneous Trades	...	...	...	...	451

The following alterations have been made in the Register of Factories and Workshops:—

	Closed.	Added.
Factories	4	0
Workshops	64	159

The following complaints have been received from H.M. Inspector respecting nuisances and defects in factories and workshops:—

Defective w.c.'s	...	...	...	5
Workrooms requiring whitewashing	...	...	...	5
Infringement of Bakehouse Regulations	...	...	...	3
Overcrowded workrooms	...	...	...	1
Insufficient w.c. accommodation	...	...	...	4
Ventilation	...	...	...	1
Means of escape in case of fire	...	...	...	1
				—
Total	...	...	...	20
				—

The premises complained of in respect of means of escape in case of fire were inspected by the Borough Surveyor, the Fire Superintendent, and Inspector Mills, who issued a joint report recommending an outside iron staircase and various internal and external alterations, which have since been carried out. The case was an important one, as the safety of nearly 200 employees was involved.

OUTWORKERS.

Lists have been sent in, and 100 letters were sent to the employers reminding them of their duty in this respect. 66 homes were visited, and there are at present 598 outworkers' homes on the register.

BAKEHOUSES.

295 inspections were made of bakehouses, and 58 breaches of the special regulations were dealt with.

SHOP HOURS ACTS, 1892-5.

Four summonses were taken in respect of a restaurant in which young persons were employed for more than 74 hours in one week.

One girl aged 14 years worked 99 hours.
One girl aged 17 years worked 97 hours.
One girl aged 17 years worked 95½ hours.
One boy aged 15 years worked 90¾ hours.

The Magistrates inflicted the maximum penalty in the first case, and the remainder were withdrawn on the payment of costs.

SHOP HOURS ACT, 1904.

Only one Closing Order, "relating to hairdressers," is in force.

Four summonses were taken out during the year, one for failing to put the prescribed notice outside the door indicating that the shop was closed for the purpose of hairdressing, and three were for keeping open the week preceding Christmas Day. As these were the first cases under the Act they were withdrawn on the payment of costs.

SEATS FOR SHOP ASSISTANTS ACT, 1899.

Thirty-two shops in which more than three female assistants were employed were visited during the year. With two exceptions these were all provided with seats.

FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES
AND HOMEWORK.

1.—*Inspection. Including Inspections made by Sanitary Inspectors or
Inspectors of Nuisances.*

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
(1)	(2)	(3)	(4)
Factories (Including Factory Laundries).	85	14	—
Workshops... .. (Including Workshop Laundries).	547	26	—
Workplaces (Other than Outworkers' premises included in Part 3 of this Report).	87	3	—
Total	719	43	—

2.—*Defects found.*

Particulars.	Number of Defects.			Number of Prosecutions.
	Found	Remedied.	Referred to H.M. Inspector.	
(1)	(2)	(3)	(4)	(5)
<i>Nuisances under the Public Health Acts :—*</i>				
Want of cleanliness... ..	23	23	—	—
Want of ventilation	16	15	—	—
Overcrowding	1	1	—	—
Want of drainage of floors	9	9	—	—
Other nuisances	18	16	—	—
+Sanitary Accommodation {	insufficient	2	1	—
	unsuitable or defective	21	22	—
	not separate for sexes	3	3	—
<i>Offences under the Factory and Workshop Act :—</i>				
Illegal occupation of underground bakehouse (S. 101)	—	—	—	—
Breach of special sanitary require- ments for bakehouses (SS. 97 to 100)	58	54	—	—
Other offences (Excluding offences relating to out- work which are included in Part III. of this Report).	—	—	—	—
Total	151	144	—	—

* Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act as remediable under the Public Health Acts

+ Sec. 22 of the Public Health Acts Amendment Act is in force in Brighton.

4.—Registered Workshops.

Workshops on the Register (s. 131) at the end of the year. (1)	Number. (2)
Making of wearing apparel	1144
Bakehouses	136
Laundries	172
Furnishing Trades	175
Building Trades	176
Other Trades	451
Total number of workshops on Register	2254

5.—Other matters.

Class. (1)	Number. (2)
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Act (S. 133)	14
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (S. 5)	20
Other	3
Underground Bakehouses (S. 101) :—	
Certificates granted during the year	—
In use at the end of the year	90

3.—Home Work.

Nature of work.*	Outworkers' Lists, Section 107.						Outwork in Unwholesome Premises, Section 108.				Outwork in Infected Premises, Sections 109, 110.					
	Lists received from Employers.			Number of Addresses of Outworkers received from other Councils.	Number of Addresses of Outworkers forwarded to other Councils.	Prosecutions.		Number of Inspections of Outworkers' Premises.	In-stances.	Notices served.	Prosecutions.	In-stances.	Orders made (S.110).	Prosecutions (S. 109, 110).		
	Twice in the year.	Once in the year.	Out-workers.			Failing to keep or permit inspection of lists.	Failing to send lists.									
				Lists.	Out-workers.			Lists.	Out-workers.							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	
Wearing Apparel— (1) Making, &c.	96	790	3	8	100	40	—	—	62	—	—	—	—	—	—	—
Furniture and Upholstery ...	4	17	—	—	—	—	—	—	4	—	—	—	—	—	—	—
Other Trades ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total ...	100	807	3	8	100	40	—	—	66	—	—	—	—	—	—	—

* Where an occupier gives out work of more than one class, each class is separately enumerated.

TABLE I.—(Vital Statistics of Brighton during 1911 and previous years).

YEAR.	Population estimated to Middle of each Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.			
		Un-corrected Number.	Nett.		Number.	Rate	of Non-residents registered in the District.	of Residents registered in the District.	Under 1 year of Age.		At all Ages.	
			Number.	Rate					Number	Rate per 1,000 Nett Births.		Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1901 ...	123,667	2984		24.12	2085	16.86			483	162	2025	16.37
1902 ...	124,424	3072		24.68	2052	16.49			387	125	1975	15.87
1903 ...	125,185	3046		24.33	1833	14.64			348	114	1769	14.13
1904 ...	125,952	2963		23.52	2156	17.12			395	133	2060	16.36
1905 ...	126,723	2901		22.89	1739	13.72			297	102	1696	13.38
1906 ...	127,499	2853		22.38	1887	14.80			317	111	1861	14.60
1907 ...	128,280	2710		21.13	1895	14.77			301	111	1895	14.77
1908 ...	129,065	2809		21.76	1956	15.16			293	104	1951	15.12
1909 ...	129,855	2675		20.60	2013	15.50			255	95	1997	15.38
1910 ...	130,650	2612		19.99	1923	14.72			289	111	1885	14.43
1911 ...	131,444	2534	2603	19.80	1895	14.42	173	113	255	98	1835	13.96

Area of District in acres
(exclusive of area
covered by water) } 2536.

Total Population at all ages ... } 131,250
Number of families or separate occupiers ... } 30,720
Average number of persons per family ... } 4.3
At Census of 1911.

TABLE II.

Name of Ward.	Births in 1911.	Number of Deaths during 1911.																
		All causes.	Under one year.	Scarlet Fever.	Influenza.	Diphtheria.	Enteric Fever.	Measles.	Whooping Cough.	Diarrhoea & Enteritis.	Puerperal Fever.	Erysipelas.	Phthisis.	Other Tubercular Diseases.	Cancer.	Bronchitis and Pneumonia.	All other Respiratory Diseases.	Premature Birth.
King's Cliff ...	71	97	5	—	8	—	2	1	—	3	—	—	8	1	11	9	3	2
Queen's Park* ...	161	148	13	—	—	1	—	—	—	12	1	—	9	5	12	23	3	2
Pier ...	199	163	32	1	3	2	—	—	1	13	1	2	19	1	14	26	5	8
Pavilion ...	73	54	7	—	3	—	—	—	—	2	1	—	7	1	8	7	2	2
Regency ...	84	95	10	—	1	1	—	2	—	2	—	—	6	5	8	7	2	2
West ...	35	50	2	—	2	—	—	—	—	1	—	—	3	—	2	6	1	0
Montpelier ...	84	71	8	—	2	1	—	—	—	4	—	—	6	—	9	8	1	1
St. Nicholas' ...	192	125	24	—	2	—	—	—	3	12	2	—	11	7	18	16	1	5
St. John's ...	314	191	32	—	2	—	—	—	2	13	—	1	24	3	9	30	1	5
Hanover ...	284	163	33	1	2	3	—	2	1	19	—	1	19	1	12	22	2	3
Lewes Road ...	389	202	29	4	2	—	—	1	1	9	—	—	24	7	22	28	2	3
St. Peter's ...	168	99	12	1	2	—	—	1	2	3	—	—	9	5	10	17	1	1
Preston Park ...	215	161	18	1	2	3	—	—	2	7	—	—	16	4	23	22	2	2
Preston ...	315	204	28	1	4	—	—	1	2	6	—	—	17	5	24	34	6	3
Home addresses not known (excluding Workhouse deaths) ...	—	12	1	—	—	—	—	—	—	1	—	—	1	3	—	—	—	—
Total ...	2584	1835	254	9	35	11	2	8	16	106	4	4	179	48	182	255	32	39

*The Queen's Park Ward contains the Workhouse. Where the information was obtainable, deaths in this Institution have been distributed to the Wards from which the patients were removed to the Workhouse. Of the 148 deaths in the Queen's Park Ward, 41 were of deaths of inmates belonging to the Workhouse, and whose home addresses were unknown. In the above Table these numbers are in italic.

The 71 deaths in the Montpelier Ward do not include the deaths of the number of children occurring in the Children's Hospital, whose home addresses were known, these being stated in the Wards to which they belong.

TABLE III.

INFANTILE MORTALITY—Nett Deaths from stated Causes under One Year of age.

CAUSES OF DEATH]	Under	1-2	2-3	3-4	Weeks.	3-4	Weeks.	1-2	2-3	3-4	Weeks.	1-2	2-3	3-4	Weeks.	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	Total		
	1 week.	Weeks.	Weeks.	Weeks.	Weeks.	Weeks.	Weeks.	1 month.	Months.	Months.	Months.	Months.	Months.	Months.	Months.	Months.	Months.	Months.	Months.	Months.	Months.	Months.	Months.	Months.	Months.	Months.	Months.	Deaths under One Year.	
All Causes.	49	12	14	10	10	10	10	85	29	23	16	24	15	14	8	11	11	11	11	11	11	11	11	11	11	11	11	255	
(Certified	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(Uncertified	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
Whooping Cough	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
Diarrhoea	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	65
Enteritis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10
Tuberculous Meningitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5
Syphilis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Meningitis (not Tuberculous)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5
Infantile Convulsions	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7
Bronchitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10
Pneumonia (all forms)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	28
Gastritis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Congenital Defects	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6
Premature Birth	26	2	3	5	5	5	5	36	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	...	39	
Atrophy, Debility and Marasmus	13	6	3	3	3	3	3	22	8	5	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	...	43	
Atelectasis	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Injury at Birth	2	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Overlying	2	1	2	1	1	1	1	6	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9
Teething	4
Other Diseases	2	...	...	...	...	...	...	3	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10
Total	49	12	14	10	10	10	10	85	29	23	16	24	15	14	8	11	11	11	11	11	11	11	11	11	11	11	...	255	

Nett Births in the year (Legitimate.....2411. (Illegitimate 192. Net Deaths in the year (Legitimate infants.....227. (Illegitimate infants 28.

TABLE IV.

CAUSES OF DEATH.	AGES AT DEATH.																	
	Total		0-1	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65-75	75-85	85+
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
General Diseases (<i>contd.</i>)—																		
Rheumatic Fever ...	3	1	2	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
Chronic Rheumatism ...	2	...	2	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Rheumatoid Arthritis ...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Gout ...	16	7	9	...	...	...	...	...	...	1	1	1	1	2	2	2	1	...
Diabetes ...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Grave's Disease ...	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Leucocythæmia ...	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anæmia ...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Purpura Fulminans ...	5	5	...	...	1	...	...	...	...	...	...	2	2	...	...	...	...	...
Alcoholism ...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chronic Lead Poisoning ...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
II.—DISEASES OF THE NERVOUS SYSTEM—																		
Encephalitis ...	2	2	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Posterior Basal Meningitis ...	3	3	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Meningitis ...	13	7	6	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...
Locomotor Ataxy ...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Spinal Cord ...	13	5	8	...	...	...	...	1	...	...	...	1	1	...	2	1	2	1
Apoplexy ...	13	7	6	...	...	...	...	...	...	...	...	1	1	...	5	1	...	1
Cerebral Hemorrhage ...	55	26	29	...	...	...	...	...	...	...	...	2	3	5	8	6	9	10
Cerebral Congestion ...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Softening of Brain ...	8	5	3	...	...	...	...	...	...	...	...	...	...	1	2	2	...	...
Hemiplegia ...	10	2	8	...	...	...	...	...	...	...	...	...	...	1	2	1	4	...
Other Forms of Paralysis ...	4	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
General Paralysis ...	10	7	3	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...
Other Forms of Mental Alienation ...	6	2	4	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
Epilepsy ...	6	...	6	...	...	...	...	...	1	...	1	...	2	...	...	...	...	...

TABLE IV.

CAUSES OF DEATH.	AGES AT DEATH.														Total Deaths at all Ages.				
	TOTAL.	0-1	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65		65-75	75-85	85+	
	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.		M. F.	M. F.	M. F.	
VIII.—DISEASES OF THE SKIN AND OF CELLULAR TISSUE—																			
Gangrene of Extremities ...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Carbuncle ...	3	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cellulitis ...	4	1	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Abscess ...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ulcer...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
IX.—DISEASES OF THE BONES AND OF THE ORGANS OF LOCOMOTION—																			
Diseases of the Bone ...	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
X.—MALFORMATIONS—																			
Congenital Heart Disease...	4	3	1	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Congenital Malformation	2	1	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...
XI.—DISEASES OF EARLY INFANCY—																			
Premature Birth ...	39	22	17	22	17	...	...	...	...	...	...	...	...	...	...	...	...	...
Infantile Atrophy, Debility, Marasmus ...	41	26	15	26	15	...	...	...	...	...	...	...	...	...	...	...	...	...
Want of Breast Milk ...	2	1	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of the Umbilicus ...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Atelectasis ...	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Injuries at Birth ...	2	1	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...
XII.—OLD AGE ...	152	51	101	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
														17	8	28	58	6	35

TABLE IV.

CAUSES OF DEATH.	Total Deaths at all Ages.	AGES AT DEATH.													Total																					
		0-1		1-2		2-3		3-4		4-5		5-10		10-15		15-20		20-25		25-35		35-45		45-55		55-65		65-75		75-85		85+				
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.		F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.				
XIII.—AFFECTIONS PRODUCED BY EXTERNAL CAUSES—																																				
Suicide.	Poisoning	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hangings	6	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Drowning	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Fire Arms	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Cutting Throat	4	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Jumping from high place	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Other Acute Poisoning	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Conflagration	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Burns	4	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Overlying	9	5	4	5	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Accidental.	Drowning	5	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Injury by Fall	15	10	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Run Over	4	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Exposure to Weather	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Manslaughter—Fracture of Skull	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
XIV.—ILL DEFINED CAUSES—	Other Violence	3	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dropsy	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Marasmus over 1 year	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Teething	7	3	4	2	2	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Found Dead	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	1835	877	958	139	116	37	39	5	5	10	8	8	7	10	17	14	24	43	33	81	83	92	95	127	123	148	159	122	169	22	60	...	...	

Annual Report
ON THE
MEDICAL INSPECTION, &c.,
OF
SCHOOL CHILDREN
OF THE
COUNTY BOROUGH OF BRIGHTON
FOR THE YEAR 1911.

BY
DUNCAN FORBES, M.D., B.Sc., D.P.H.,
School Medical Officer,

AND
J. LAMBERT, M.D., M.A., D.P.H.,
School Doctor.

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1912.

THE
MEDICAL INSPECTION
SCHOOL CHILDREN
COMMISSIONER OF HEALTH

GENERAL REVIEW OF THE PRINCIPAL DETAILS IN CONNECTION WITH ELEMENTARY EDUCATION IN THE DISTRICT.

The Borough of Brighton has an estimated population for 1911 of 131,444. The area of the district is 2,620 acres.

There are 18 provided schools, including one for mentally defective children, and 15 unprovided schools.

In the 32 schools there are 80 departments. The following table shews the chief factors in regard to attendance during 1911:—

Accommodation	19,278
No. on Registers	18,276
Average Attendance	16,369
% Attendance	89.6

Percentage of the average number of children in attendance to population = 12.5.

The number of children in the elementary schools, arranged according to age grouping, was, in 1910-1911:—

Ages	" Provided " and " Non-Provided " Schools.				Totals.
	3-4	4-5	5-14	over 14	
Boys' Departments ...	—	—	5081	62	5143
Girls' Departments ...	—	—	4948	54	5002
Mixed Departments...	22	69	1679	20	1790
Infants' Departments	270	984	5219	—	6473
TOTALS	292	1053	16927	136	18408
Previous Year ...	371	1234	16538	154	18297

Percentage of children under 5 years of age ... 7.3 (Provided Schools 6.3.
 Non-Provided Schools 9.7.
 Previous year ... 8.7.

It will be noticed that the percentage of children under 5 years of age has fallen by 1.4.

The rateable value of the Borough, £891,268: the Education Rate for 1911-1912 is 1s. 3½d. in the £.

The following table shews the cost of medical inspection and treatment based on the annual estimates for elementary school children in the year 1911-1912:—

Cost per child in average attendance ...	1/3
Cost as decimal of 1d. rate ... ..	.3, i.e., ½d.

This includes practically all expenses incurred by the Medical Inspection Department of the Education Office. The increase over that of last year is due to extension of treatment and to provision of new offices for the Medical Department and Clinic.

The Annual Report has been written in accordance with the form prescribed in Circular No. 596 (1908) of the Board of Education. The lettering and numbers at the head of each section are those adopted in the schedule of the Board.

A full description of the routine adopted in medical inspection was given in the Annual Report for 1908, hence, except in special instances where there has been some change or where the Board require definite information, no detailed account has been given in this Report.

(a) HYGIENIC CONDITIONS IN THE SCHOOLS.

In the earlier part of 1911 the Sanitary Inspectors visited all Elementary Schools, and from their notes the Table on the opposite page has been compiled.

General repairs, re-painting, etc., have been carried out in 17 schools.

Heating.—An improved system of low pressure hot water radiators has been installed at Park Street School. Attention has been drawn to the low temperature obtaining in the class rooms of all departments at Pelham Street School. A more efficient system should be installed.

T° at 9 o'clock. Pelham Street Girls' Department.

	Open Air.	Class Rooms.			
		1	2	3	4
Nov. 21st, 1910 ...	32.4	36°	36°	39°	52°
„ 29th, „ ...	34.0	41°	40°	42°	47°
*Jan. 16th, 1911 ...	36.2	38°	38°	38°	45°
„ 31st, „ ...	29.4	40°	40°	46°	47°
Feb. 2nd, 1911 (2 p.m.)...	36.8	56°	52°	50°	58°
	(max.)				

* On the day previous to this date, fires were lighted at 10 p.m. and kept up during the night; the temperature at 9 p.m. was 38° F., i.e., 6° above freezing point. The fires are usually lit at 6 a.m.

Galleries have been removed at Pelham Street Boys' School.

The *re-construction* of St. John's School, condemned in February, 1910, is still under consideration.

The new School (Coombe Road), of the Staffordshire type, with through ventilation for each class room, is completed and is now open. A Medical Inspection Room and a system of shower baths have been provided. Each class room accommodates 50 children only.

New dual desks have been supplied in partial replacement of old ones in eight schools, at a cost of £200 during 1911.

SCHOOL ROOMS AND CLASS ROOMS.

Number Inspected.	Method of Heating.				Natural Lighting.				Artificial Lighting.				Kind of Desk used.				No. in which Oil Preparation is used on the floor.	No. of rooms having a gallery.	Remarks.		
	Open Fire.	Open Fire & Radiators.	Radiators only.	Other Systems.	Good.	Bad.	From Front only.	From Back only.	Ordinary Gas Burner.	Incandescent Gas Burner.	Electric Light.	Long.	Dual.	Chairs and Tables.							
310	154	41	57	Hot air, 31 Hot air and open fire, 14 Hot air and hot water, 11 Open fire, hot air and hot water, 2	304	6	0	17	97	95	118	55	251	4	81	33	Secondary & Cookery Schools not included.				
12	1	1	2	Hot air, 7 Hot air and hot water, 1	12				3	1	8	1	1		1						
HALLS.																					
INSPECTION OF CLOAK ROOMS.																					
Number Inspected.	Number		Natural Lighting	Number Opening to		Hat Pegs.		Lavatory Basins.		Kind of w.c. in use.				Number		Number having		Remarks.			
	Heated.	Not Heated.		School Room.	Corridor or Staircase.	Distance Apart.	Largest Number of Tiers.	Distance between Tiers.	Good.	Defective.	Trough.	Separate w.c.'s.	Teachers.	Children's	Teachers.	No Separate w.c. for Teachers' use.	Paved.		Not Paved.	Covered Sheds in Playground.	No Play Ground.
86	27	59	78	8	6	80	1 = 5" 3 = 6" 1 = 7" 6 = 8" 7 = 9" 25 = 10" 13 = 11" 26 = 12" 1 = 13" 3 = 14"	29 = 2 42 = 3 15 = 4	1 = 7" 1 = 9" 3 = 10" 15 = 12" 1 = 13" 12 = 14" 10 = 15" 10 = 16" 2 = 17" 20 = 18" 2 = 19" 7 = 20" 2 = 24"	81	3	35	49	65	10	57	8	7	41	24	In one instance the children hang their clothes in the Class Room.

Cleansing of Schools—The Use of Dust-allaying Preparations.

Attention has been drawn in the Reports for 1909 and 1910 to the use of certain preparations for the prevention of dust in the schools. The liquid preparations for use on the floors have been applied in 25 departments of 13 schools, and the results have been quite satisfactory. Experiments in regard to *sweeping powders* have shewn that, as regards dust laying, they have not the same efficiency as the oil preparations, but they do not disfigure the floor as these latter do. They possess a certain cleansing action on the floor owing to the sand they contain, but one could not recommend that where they are used the routine scrubbing of the floor should be dispensed with. It does not appear that they will prove economical in use as compared with the common method of using sawdust damped with a disinfectant solution.

(b) THE ARRANGEMENTS FOR THE CO-RELATION OF THE SCHOOL MEDICAL SERVICE WITH THE PUBLIC HEALTH SERVICE.

The Medical Officer of Health is also the School Medical Officer. By the guidance of both services by one individual all friction and duplication of work are avoided, and the experience and time of the Sanitary Staff is available for school work. The time given by the staff of the Public Health Office is occupied (1) in the making of inquiries and in the taking of action to prevent the spread of the exanthemata, (2) in the inspection of school buildings, and (3) in the carrying out of the provisions of the Employment of Children Act, 1903, and the Children Act, 1908.

The great bulk of the work falls to the School Doctor, two School Nurses, and two lady clerks; these devote their whole time to school work.

SUPERVISION OF CHILDREN ABSENT FROM SCHOOL ON THE GROUND OF ILL-HEALTH.

A full account of the methods adopted in respect of the above was given in the Annual Report for 1910, in which the following points were dealt with: Reserve Sickness Register, exclusion of individual scholars under Art. 53 (b) Code, School Attendance Branch Sub-Committee, Attendance Slips. The following table gives particulars of official exclusions by the School Medical Officer for 1911:—

	Exclusions (in weeks) at Inspection and Treatment Clinic; and at Medical Inspection.	Exclusions (in weeks) issued by the Public Health Office.
Non-notifiable Infectious Diseases ...	307½	—
Notifiable Infectious Diseases:—		
Scarlet fever	15	1669 $\frac{4}{5}$
Contacts		393 $\frac{1}{5}$
Diphtheria		659
Contacts		431
Phthisis	139½	—
Other tubercular diseases	114½	—
Tonsillitis and enlarged glands neck (non-tubercular)	86¾	
Rheumatism and chorea	85½	—
Heart diseases	38	—
Lung diseases	64	—
Neurosis	159	—
Epilepsy	71	—
Anæmia, dyspepsia, debility	155½	—
Eye diseases and errors of refraction	300	—

	Exclusions (in weeks) at Inspection and Treatment Clinic; and at Medical Inspection.	Exclusions (in weeks) issued by the Public Health Office.
Ear diseases	17½	—
Ringworm	2316½	—
Impetigo or eczema	330½	—
Other skin diseases	98	—
Other conditions	293½	—
	4592¼	3153

The total certified absences by the School Medical Officer and School Doctor, therefore, amounted to 7,745 weeks exclusion. The schools met for 44 weeks in the year, and thus one may calculate this in the terms of children away for a whole year, *e.g.*, $\frac{7745}{44} = 176$, *i.e.*, the total exclusions were equivalent to 176 children away for a whole year or (the number of children on the rolls being 18,227) a loss of attendance equal to .9%.

The absence due to illness and disease is certainly much greater: the above results were arrived at without including the big group of exclusions due to non-notifiable infectious diseases, *e.g.*, chicken pox, measles, whooping cough, etc., which did account for a large number of absences, nor has any allowance been made for many minor ailments, such as colds, etc., nor for children receiving private medical advice.

We hope shortly to be able, by means of a duplicate register and a weekly return of exclusions, classified according to disease, from each Department, to get a more accurate record of the loss of attendance from certified medical causes.

THE ROUTINE OF MEDICAL INSPECTION.

A full and detailed account of this has been given in all previous reports; as no difference has been made during 1911 an account is omitted here.

THE PROCEDURE OF "FOLLOWING UP."

After the inspection, the parents of children found to be defective in any way are notified of the defect or disease, and advised to seek treatment from their usual Medical Attendant (Form 5 M.I.).

If any condition requiring further examination has been found, the parents are requested to attend at the Public Health Office with their child. After such re-examination, advice is given as to the precautions to be taken, and the necessity or otherwise of obtaining treatment. The re-examinations usually made are in cases of heart and lung diseases, diseases of the nervous system, and errors of refraction.

After notification, the home is visited by a School Nurse, who advises the parent what steps should be taken to cure the child. The advice given depends on the nature of the defect, and on the social circumstances of the family. In order to facilitate the visitation of such cases a card-index system is used, streets being grouped in alphabetical order; the names of cases in each street are entered upon the card from a list furnished to the School Nurse. The work of visitation has thus been rendered much easier.

Visits are made on at least three occasions if no treatment is obtained. In cases of difficulty the parent is referred to the School Doctor, and the child is re-examined at the Medical Inspection Offices, and the mode of obtaining treatment is shewn; generally this resolves itself into the provision of Hospital Letters, or the arrangement for the child to attend Hospital on certain days, when the mother is at liberty. The provision of spectacles at cheap rates also belongs to this branch of the work.

The co-operation of parents in the subsequent treatment was always asked for. Notification of the defect or disease, personal interviews, advice as to the necessity and means of obtaining treatment, periodical visits paid to the homes by the School Nurse were the chief means employed to this end. The results of these efforts are discussed later under the heading of treatment.

b (iv.) DISTURBANCE OF SCHOOL ARRANGEMENTS.

Inspection was carried out in a class room in 60 departments, school hall in 11, head teacher's room 2, and rooms adjoining the school premises (club rooms) 6. (See also Annual Report, 1910, page 84).

c. GENERAL STATEMENT OF THE EXTENT AND SCOPE OF MEDICAL INSPECTION DURING 1909.

c (i.) VISITS TO SCHOOLS AND DEPARTMENTS.

Inspection has been carried out in all the departments of the 32 schools.

For the purpose of the routine inspection 185 visits have been made to the various departments. In 1910, 151 visits were made. The infants' departments require considerably more visits than the boys' and girls' departments, owing to the larger number of children to be inspected.

In the examination of children for free meals, 93 visits were made to schools.

In the course of special enquiries at schools, 182 visits were made by the School Doctor. This includes a weekly visit made to the special school for the examination of mentally defective children.

The total number of visits made to the 32 schools was 460, as compared with 417 in 1910.

c (ii.) THE SELECTION OF CHILDREN FOR INSPECTION.

The following is the grouping of children inspected during 1911:—

1. New entrants since the 1910 inspection (s. 13, Education Act, 1907).
2. Children born in 1898, *i.e.*, in their 13th or 14th years; no child leaves school at an earlier age in Brighton (s. 12, Circular 576).
3. Children born in 1901, *i.e.*, in their 10th or 11th years.
4. Children born in 1904, *i.e.*, in their 7th or 8th years.
5. Children selected as defective by the teaching staff.

In the first year of medical inspection (1908), only entrants and leavers were examined; in 1909 the 7-year-old group was added, and in 1910 the 10-year-old group. Thus each child will now be examined four times during the school career, *viz.*, on entrance, and at the ages of 7, 10, and 13. These four examinations should be adequate to prevent any defect or disease escaping notice while the child is at school. It follows, also, that by the end of 1913 every child attending the elementary schools in Brighton will have been medically inspected at least once.

The selection of children born in definite years, *e.g.*, 1898 and 1904, facilitates the clerical work in connection with the grouping of cases. Such a selection brings children of two separate age periods into each group, *e.g.*, children born in 1898 are either 12 or 13 when examined in 1911. If selection be made by the year of age it may well happen, even with good organisation, that certain children are inadvertently missed out of the examination; in any case the work of selection is much increased; whereas the procedure of

selection, according to year of birth, is very simple. From the physical point of view it makes little difference whether a child be examined at 12 or 13 years of age, and if inspection be carried out regularly throughout the year, statistics at these ages are not vitiated.

c (iii) THE NUMBER OF CHILDREN INSPECTED.

The following table shews the number of children seen at routine inspection in 1911, classified according to age and sex.

Age.	Male.	Female.	Total.
3	90	67	157
4	329	267	596
5	412	439	851
6	585	531	1116
7	614	576	1190
8	95	87	182
9	457	447	904
10	505	515	1020
11	61	65	126
12	398	395	793
13	449	470	919
14	2	6	8
Totals ...	3997	3865	7862

From this table it will be seen that the majority of children were examined at ages 5, 6, 7, 9, 10, 12 and 13; the variable age at entry causes the number of examinations made at 3 and 4 years of age to be fewer.

The children examined in intermediate years are chiefly those selected for special reasons (*e.g.*, defects) or are those entering the schools after having completed part of their education in other districts. It is essential that this be borne in mind in estimating the value of any statistics subsequently given; the statistics relating to years 3, 4, 5, 6, 7, 9, 10, 12 and 13 give results for the average child, but at other age periods they may, in view of special selection for defects, be inaccurate.

Apart from the routine inspection, cases are specially examined or re-examined at the Medical Inspection Offices and Clinic; many are also examined for the Canteen Sub-Committee.

c (iv.) CHILDREN REFERRED FOR SUBSEQUENT OR FURTHER EXAMINATION.

At the routine inspection certain children are thus referred for a more detailed examination. The chief defects necessitating this are diseases of the heart and lungs, of the nervous system, deformities and eye defects. These children, if necessary, are periodically re-examined.

37 children were referred for subsequent examination, *i.e.*, '5 per cent. of the total inspected (7,862).

Many children are referred by School Nurses, Head Teachers or Attendance Officers to the Inspection Clinic held on Monday, Wednesday and Friday at 5 p.m., at 7, Gloucester Place. Many of these have already been seen at the routine inspection, hence the number actually re-inspected is much larger

than that given above. Thus the number of attendances made in the re-examination of old cases was 1,389, while 727 children were also specially examined at the Inspection Clinic.

At the schools, 414 children were examined in addition to the children down for routine inspection. In these cases the teacher or parent required advice on some special point.

c (v.) STATEMENT OF THE CHIEF DEFECTS REVEALED BY INSPECTION.

A summary is given in the following table of the defective conditions in which *advice or treatment* was necessary.

The table is based upon statistics derived from 7,862 children.

Defect or Disease.	No. of Defects.	Percentage of Total Examined,	
		1911.	% 1910.
Defective vision and squint ...	424	5.4	5.2
Eye diseases (c.b.) ...	136	1.8	1.7
Enlarged tonsils ...	19	.2	.7
Adenoids ...	793	10.1	6.3
Adenoids and tonsils ...	199	2.6	1.6
Deafness and otorrhœa ...	249	3.2	2.9
Mouth breathers ...	369	4.7	7.1
Defective teeth (requiring immediate treatment) ...	223	2.9	4.3
Skin diseases ...	368	4.7	2.8
Tubercular diseases ...	42	.5	.7
Lung diseases ...	63	.8	1.2
Heart diseases ...	51	.6	.7
Central nervous system ...	136	1.8	2.3
Deformities ...	104	1.4	1.7
Other conditions ...	204	2.7	2.4
Mental deficiency ...	72	.9	1.0
Verminous condition ...	313	4.0	3.2
Total defects ...	3765	47.9	46.4

The total number of physical defects, excluding mental defects and verminous children, found in 7,862 children was 3,380, average, .43 defects per child. Excluding mouth breathers, the figure is .38 defects per child.

It should be clearly understood that several defects may be present in one child, *e.g.*, a child may have adenoids and deafness with defective vision. The number of defective children has, therefore, been calculated and found to be 2,970 or 37.7 per cent.; exclusive of mouth-breathers it is 2,681 or 34.1 per cent.

From these figures it will be seen that approximately 35-40 per cent. of the children in the Elementary Schools require advice or treatment for physical defects.

This is a large percentage, and unsupported by further analysis might convey a false impression. It will be noticed that the figure drops to 34.1 per cent. if one excludes simple mouth-breathers, curable by exercises.

The following table has been drawn up to shew the proportions of defective children requiring definite medical treatment, physical exercises, or advice:—

The results are tabulated for sex, and according to the department of the School.

Department.	Total examined.	Advice.		Exercises.		Medical Treatment.	
		No.	%	No.	%	No.	%
Boys	2129	115	5.4	172	8.0	485	22.3
Girls	2109	186	8.8	151	7.1	546	25.8
Infants { Boys ...	1868	100	5.3	163	8.7	389	20.8
	{ Girls ...	1756	163	9.2	106	6.0	394	22.4
Totals { Boys ...	3997	215	5.4	335	8.4	874	21.8
	{ Girls ...	3865	349	9.0	257	6.6	940	24.3
Grand Totals ...	7862	564	7.1	592	7.5	1814	23.0

From this table it may be seen that:—

1. Defects are rather more than numerous in girls (39.9%) than in boys (35.6 %).
2. Defects requiring exercises for their correction (more especially mouth-breathers) are more common among boys than girls.
3. Defects which require advice or exercises are proportionately more numerous in the infants' departments, while more serious defects, necessitating medical treatment, are proportionately and actually more numerous in the boys' and girls' departments. There is, thus, a tendency towards an increase of defects or deterioration as the child passes into the higher portion of the school.

This deterioration is probably most marked in the increase of visual defects and adenoids. That this is so will be shewn in later tables.

Increased selection of defective children in the higher departments may be responsible for some of this apparent increase of deterioration.

4. Of 37.6% of defective children, 23% require medical treatment, while 14.6% can be dealt with by advice or simple exercises.
5. Medical treatment (as contrasted with simple advice and exercises) is required for girls rather more frequently than for boys.

The results given above, as contrasted with those of previous years, shew some increase of the number of defects, if mouth-breathers be excluded:—

Year.	Per cent. defects. (Verminous cases and mental defects omitted.)	Excluding mouth- breathers.	Per cent. defective children.	Excluding mouth- breathers.
*1908	39	28	36	26
1909	47	31	39	26
1910	42	34.9	36.8	31.9
1911	43	38	37.7	34.1

*In 1908 the standard for defects was not so strict as in later years.

There is an increase in the total number of defects and defective children as compared with the 1910 records.

"Mouth-Breathing" forms a much smaller proportion of the defects than in 1910; hence, when this is excluded, the residue is higher than in 1910. The increase is due to the placing in this group of slight adenoids, many previously classed as simple mouth-breathers; after several examinations it has been found necessary in many cases to do this.

c (vi.) THE TIME OCCUPIED FOR INSPECTION.

The average time per head for inspection has been given in a preceding paragraph as from 3-5 minutes. This is the time actually occupied in inspection, as apart from such time as is taken for dressing, etc. The weighing and measuring takes from $\frac{1}{2}$ -1 minute, the medical inspection 3-5 minutes, and the testing of vision about 1 minute.

This allowance means that about 80 children can be inspected daily, if the organisation is good.

The factors on which this depends have already been discussed.

The actual time occupied by medical inspection may seem very short, but it is to be noted that many of the entries on the schedule card can be made from simple and accurate observation alone, and if these entries are made by a clerk, the time necessary for recording them is very short. Again, accurate observation eliminates many of the defects or diseases to which children are liable before any physical examination is made to confirm this, and as soon as the eye has been trained to observe in a routine manner such details as are necessary, still further economy of time results.

d. GENERAL REVIEW OF THE FACTS DISCLOSED BY MEDICAL INSPECTION.

Mental Capacity.—The entries under this heading were filled up by Head Teachers, who are, generally speaking, better able to form a correct judgment than the Medical Inspector, unless a considerable amount of time be spent by the latter. Cases in which there is any doubt are investigated by the School Doctor.

The following table shews the number and percentage of children inspected in 1911, mental capacity being classified as suggested by the Board. It is based on statistics from 6,258 children between the ages of 6 and 14, and includes the statistics from the special school with 46 mentally defective children:—

<i>Mental Capacity.</i>	<i>Boys.</i>		<i>Girls.</i>		<i>Total percentage.</i>
	<i>No. of Children.</i>	<i>Per-centage.</i>	<i>No. of Children.</i>	<i>Per-centage.</i>	
Bright	1671	52.5	1748	56.5	54.6
Fair	1038	32.8	1000	32.3	32.6
Dull	322	10.2	247	7.9	9.1
Backward	88	2.8	63	2.0	2.4
Mentally Deficient ...	47	1.5	34	1.1	1.3
Imbecile	0	0.0	0	0.0	0.0
Totals	3166		3092		

From this table it will be seen that 87% of the children are of normal intelligence, and about 13% are considerably below normal. Girls are, on the whole, found to be rather more intelligent than boys. The figures for mental deficiency here given include 46 children in attendance at the special school.

The actual number of mentally deficient children known to be in attendance in the elementary schools, or of such an age as to be educated in elementary schools, is 120, *i.e.*, .73% on the average attendance (16,000). For the special education of these defective children there is, at present, one special school in Brighton, with accommodation for 40 children—about 47 children are on the roll at present; the remaining 73 are in attendance in the elementary schools, or have been excluded from such schools as ineducable.

In the Annual Report for 1909 an account of a special investigation as to mentally deficient, dull, and backward children was given, and certain recommendations were made in regard to the provision of additional accommodation and training. These were as follows:—

1. Special (or practical) classes to be established, in various schools, for 250 children, intermediate between backward and mentally defective.
2. A special school to be provided to accommodate from 100 to 120 children who are mentally defective.
3. A school of the same size for the education of physically defective children.

EXPERIMENTAL CLASSES OF THE INTERMEDIATE TYPE.

A full and detailed description of the experimental classes for children between the mentally deficient and the merely dull (the so-called "intermediate" group) was given in the Annual Report for 1910.

Two of such classes have been established—one in April, 1910, at Richmond Street Boys' School, and one in November, 1910, at Hanover Terrace Girls' School.

The chief object of these classes is to give much more manual instruction, and to adapt as freely as possible educational handwork to the usual subjects of the school curriculum. Indirectly it is hoped to foster originality and develop initiative in a group of children, who, previously, have certainly not had opportunity or facilities for development of these characteristics. There is, in these classes, scope, not only for the acquisition of "learning," but also for the development of character.

The work of these classes has been very satisfactory during 1911, and there can be little doubt that the formation of the classes has been justified by the results obtained. An extension of such classes to other districts would be advisable.

SUMMARY OF THE GENERAL CONDITIONS OF SCHOLARS IN INTERMEDIATE CLASS, RICHMOND STREET BOYS, 1910-1911.

Age on admission:	10	11	12	13	Total
Number:	1	13	11	2	27
Standard:	II.	III.	IV.		
	8	11	8		27

Some of the boys were above the standard given in certain subjects, but were so backward in other branches that they had been kept back.

Two cases were subsequently classified, after observation, as mentally defective.

<i>Physique</i> —Good	...	...	...	...	8
Moderate	...	...	...	...	11
Poor	...	...	...	...	8
<i>Nutrition</i> —Good or normal	...	...	...	...	12
Sub-normal or poor	...	...	...	...	15

It will be noted that, compared with average children, these are deficient in physique and nutrition.

Physical Defects.—Adenoids of some grade in 4; otorrhœa in 2; 5 were mouth-breathers.

Lack of nerve control as seen in twitching of muscles, habit spasm, etc., in 4 cases.

<i>Vision</i> — $\frac{6}{8}$ or $\frac{6}{9}$	...	24	<i>Hearing</i> —Deaf	...	3
$\frac{6}{12}$	...	1	Slightly deaf		
$\frac{6}{18}$	...	2	(one ear only)		6

Subsequent History of the Class—

Number on roll, April, 1910	...	...	27
Admitted since then, up to December, 1911	...	...	13

Three of these were transferred from the Mentally Defective School.

Left up to December, 1911	13
---------------------------	-----	-----	----

The records of those who have left are given:—

- | | | |
|------------------|---|---|
| In regular work. | } | 1. Emigrated to New Zealand. |
| | | 2. Went to Hove; now in an elementary school there. |
| | | 3. Sent back to original school owing to frequent truancy. |
| | | 4. Went to Workhouse. |
| | | 5. Boot repairing. |
| | | 6. Tailoring. |
| | | 7. Paper-seller (there are 12 children at home). |
| | | 8. Hawker—working with father. |
| | | 9. Station engineering works. |
| | | 10. Stable boy. |
| | | 11. Plasterer—working with father. |
| | | 12. Shop assistant—with father. |
| | | 13. Gordon Boy messenger; owing to small stature and poor physique could not take up an apprenticeship offered him. |

In three cases the parents allowed the boys, after the age of 14, to remain at school in this particular class until they had obtained regular work. This is practically an unheard-of incident in this particular School.

HANOVER TERRACE GIRLS' INTERMEDIATE CLASS.

Formed in November, 1910.		
Number on roll	...	21
Left up to December, 1911	...	8
(all at the age of 14).		
Admitted up to December, 1911	...	10

This is a class for intermediate and very backward girls, selected after medical examination as suitable for the special course.

Two have since been sent to the special school as mentally defective.

On admission, age:	9	10	11	12	13	Total,
	4	6	—	8	2	20
Standard	I.	II.	III.	IV.	V.	
	—	10	—	—	—	8

The children in the 5th standard were really of standard III.-IV. intelligence.

Physical Defects.—Five shewed some defect of vision and three slight deafness. The majority were children of sub-normal nutrition and physique.

Mental Defects.—In all, the reasoning faculties were very poorly developed; this was especially noticeable in regard to number. 50% were far below the standard for their age, and not a single child was even up to the average in this respect.

Training.—This has been largely manual, handwork of various kinds being used in connection with most of the subjects. Domestic work, hygiene, and care of children and infants has been well taught, and the Head Mistress reports that the children take a keen interest in this part of the work.

Speech.—The entries under this heading are also filled in by Head Teachers.

The following table gives the results obtained from the records of 6,258 children between the ages of 6 and 14.

	<i>Boys.</i>		<i>Girls.</i>	
	No. defective.	Per cent.	No. defective.	Per cent.
Stammering ...	17	.6	5	.2
Other defects ...	22	.7	14	.5
<i>Total examined</i>	3166		3092	

The results shew that there has probably been defective filling in of these details, as the amount of speech defect is undoubtedly higher than this.

It will be seen that speech defect is commoner among boys, that of stammering especially. A recent enquiry made at 12 of the largest boys' departments in Brighton revealed the fact that there were 57 boys who stammered or stuttered; of these, 25 were very bad cases.

In the last three Annual Reports the special tuition of such cases was mentioned, and a recommendation was made to that effect. An experimental class is now being held at the Evening Schools from 7-8 p.m. on three nights a week. In this class 12 boys of 12-13 years of age are being trained by an ex-teacher of the Education Authority. The selection of the cases and the supervision of the training is carried out by the School Doctor, and should, as seems probable, such a class be beneficial, it will probably be made permanent.

Anthropometric Measurements.—The following tables relate principally to school entrants and children born during the years 1898, 1901, and 1904. The method of examining groups of children born in certain years makes the work of picking out the children easier for the teacher, and also prevents any children being missed. The latter point may be illustrated as follows:—If 7-year-olds in a certain school were examined in January, 1910, and December, 1911, it is evident that in the interval between the examinations many children would live through their 7th year without being examined.

One of the advantages of examining children at a given age, say 7, is that the average age of the children examined is $7\frac{1}{2}$ years. The average height and weight of such children are, therefore, the averages for 7-year-olds. On the contrary, if children born in 1904 are examined in 1911, groups of 6-year-olds and 7-year-olds are examined whose average age is not 6 years 6 months, and 7 years 6 months, but 6 years 8 months and 7 years 4 months. This assumes that an equal number of births have occurred, and that equal numbers of children are examined on each day of the year.

A table shewing the method by which these results were arrived at was inserted in the Annual Report for 1910.

The following table shews the average height and weight of children, classified according to age and sex:—

Boys.

Age.	Corrected Age.	No. Examined.	Total Weight. kils.	Average Weight.		Total Height. cm.	Average Height.	
				kils.	lbs.		cm.	ins.
3-4	$3\frac{8}{12}$	90	1298.1	14.4	31.7	7426.5	82.5	32.5
4-5	$4\frac{6}{12}$	314	4935.6	15.7	34.6	31093.5	99.0	39.0
5-6	$5\frac{5}{12}$	403	6883.1	17.1	37.7	42348.2	105.1	41.4
6-7	$6\frac{7}{12}$	566	10589.5	18.7	41.2	62722.5	110.8	43.6
7-8	$7\frac{3}{12}$	612	12416.5	20.3	44.8	70503.0	115.2	45.4
8-9	$8\frac{6}{12}$	94	2098.8	22.3	49.1	11337.0	120.6	47.5
9-10	$9\frac{8}{12}$	454	11241.6	24.8	54.7	57286.5	126.2	49.7
10-11	$10\frac{3}{12}$	501	13033.0	26.0	57.3	64980.6	129.7	51.1
11-12	$11\frac{6}{12}$	61	1780.3	29.2	64.4	8199.0	134.4	52.9
12-13	$12\frac{8}{12}$	399	12718.9	31.9	70.3	55902.7	140.1	55.2
13-14	$13\frac{3}{12}$	449	15081.3	33.6	74.1	64445.0	143.5	56.5
14-15	$14\frac{8}{12}$	2	76.6	38.3	84.4	309.0	154.5	60.8
<i>Total ..</i>		3945						

Girls.

Age.	Corrected Age.	No. Examined.	Total Weight. kils.	Average Weight.		Total Height. cm.	Average Height.	
				kils.	lbs.		cm.	ins.
3-4	$3\frac{7}{12}$	67	939.1	14.0	30.9	6158.0	91.9	36.2
4-5	$4\frac{7}{12}$	275	4130.3	15.0	33.1	26034.9	94.7	37.3
5-6	$5\frac{5}{12}$	435	7343.8	16.9	37.3	45533.0	104.7	41.2
6-7	$6\frac{8}{12}$	526	9838.3	18.7	41.2	58649.5	111.5	43.9
7-8	$7\frac{3}{12}$	571	11511.8	20.2	44.5	65401.0	114.5	45.1
8-9	$8\frac{4}{12}$	87	1999.3	23.0	50.7	10887.0	125.1	49.3
9-10	$9\frac{8}{12}$	419	10373.1	24.8	54.7	52887.0	126.2	49.7
10-11	$10\frac{3}{12}$	515	13454.6	26.1	57.6	66454.5	129.0	50.8
11-12	$11\frac{5}{12}$	66	1874.6	28.4	62.6	8834.0	133.8	52.6
12-13	$12\frac{8}{12}$	393	13137.3	33.4	73.6	55780.0	141.9	55.9
13-14	$13\frac{3}{12}$	478	16776.8	35.3	77.8	69118.0	144.6	56.9
14-15	$14\frac{4}{12}$	6	240.2	40.0	88.2	885.5	147.6	58.1
<i>Total ..</i>		3838						

As a means of estimating "nutrition" apart from "physique," the relation of weight to height has been employed. In order to do this a table must be constructed shewing the average weight at a definite series of height

measurements. This has been done for 38,557 records of Brighton children. The measurements are taken from the records of 1908, 1909, 1910 and 1911 collectively. The next table shews these measurements at certain heights—the complete table being too long for publication. Such a table is of great assistance in determining if a child is poorly nourished; and this provides a quick method of distinguishing whether or not it requires free meals. A child which is not up to the proper weight for a certain height is more in need of feeding than is the child below *both* weight and height standard for its age, but of an average height-weight ratio; the latter child is well nourished, and its deficiency in general physique is often due to other causes than improper or insufficient food.

Height in cm.	Girls.			Boys.		
	No. examined.	Weight in kilo. (average)		No. examined.	Weight in kilo. (average)	
80	28	11.9	11.6	11	11.9	11.6
85	133	12.5	13.3	107	12.5	13.3
90	459	14.0	13.9	473	14.0	13.9
95	942	14.9	14.7	926	14.9	14.7
100	1367	16.1	16.0	1451	16.1	16.0
105	1832	17.4	17.5	1876	17.4	17.5
110	2147	18.6	18.7	2168	18.6	18.7
115	1964	21.1	19.7	1951	21.1	19.7
120	1383	24.9	22.2	1640	24.9	22.2
125	1375	24.3	24.8	1408	24.3	24.8
130	1467	26.9	26.6	1592	26.9	26.6
135	1479	29.9	28.0	1657	29.9	28.0
140	1421	32.7	33.7	1628	32.7	33.7
*145	1313	35.3	33.4	1331	35.3	33.4
150	933	39.1	36.3	805	39.1	36.3
155	558	40.9	40.1	365	40.9	40.1
160	181	45.4	44.2	103	45.4	44.2
165	35	48.7	47.0	48	48.7	47.0
	19017			19540		

*At this point the influence of puberty on the weight of the girl begins to be prominent, the increase in weight continues to the end of the table.

Each height number and the corresponding weight represents the average of the five numbers of which it is the centre, e.g., the totals for 100 are those of 98, 99, 100, 101, 102 cm.

CLEANLINESS, &c.

(4) *Clothing*.—The condition of the clothing is an index primarily of the social status, and secondarily of the economic conditions under which the child is living. It is of interest from the medical point of view inasmuch as neglect of cleanliness, &c., goes hand in hand with neglect of the body.

The following table shews the results of examination in regard to clothing and footwear of 3,997 boys and 3,865 girls.

	Boys.	Girls.	Total.
	Per cent.	Per cent.	Per cent.
Clothing—Good	72	78.8	75.8
Moderate	25	20	22
Bad	3	1.2	2.2
Footgear—Good	75.5	80.9	78.0
Moderate	20.5	15.3	18.0
Bad	4	3.8	4.0

From this it will be seen that girls are better clothed and have better footgear than boys. In view of the rougher usage to which the latter subject their boots, etc., this is to be expected.

There are at present several voluntary agencies by which children with inadequate clothing and footgear are provided with a suitable outfit. The Education Committee controls the "Tindal Robertson Boot Fund" for the provision of boots for poor children, while the Fund originated by the Brighton Police for providing complete outfits of clothing and footgear is in every way a great help to parents of the poorer classes. From the latter Fund, 803 children have been thus equipped during this last season; the scheme however extends further than this, since deserving children on leaving school are given suitable outfits for the position which they intend to take up. This is of especial value with regard to girls, many of whom cannot go out to service because of the ragged condition of their clothes.

The Children's New Year Boot Fund, a voluntary association, provides a great number of children with boots. During 1911, 3,438 pairs of boots have been provided for children attending elementary schools; moreover, all cripple children in the district receive a special pair of boots suited to their requirements. A certain number of children are provided with clothing by the Salvation Army Officers and certain charitable associations.

(8). *Body*.—The following table shews the results of examination of 3,997 boys and 3,865 girls (7,862 children).

<i>State of body.</i>	<i>Boys per cent.</i>	<i>Girls per cent.</i>	<i>Total</i>
Clean	67.7	65.3	66.0
Slightly bitten	28.3	30.7	29.9
Badly bitten	2.2	1.9	2.1
Body lice	1.2	1.6	1.4
Very dirty ... ..	.6	.5	.6

(8) *Hair*.—The condition of the hair was investigated in all cases. The results of this examination have been classified under various headings, and are shewn in the next table.

Comparative tables for previous years have been given also.

	Boys.				Girls.			
	Per cent.				Per cent.			
	1908.	1909.	1910.	1911.	1908.	1909.	1910.	1911.
Clean (free from nits)	82.8	90.6	94.1	94.3	48.6	53.5	55.8	58.2
Nits (moderate)	17.0	9.0	5.7	5.3	50.0	42.4	39.0	36.4
Nits (excessive or lice) ... ..	.2	.4	.2	.4	1.4	4.1	5.2	5.4
Seborrhoea	2.0	4.5	4.6	7.0	1.0	3.3	3.4	3.1
Ringworm	1.2	1.7	1.5	2.2	.3	1.1	.9	4.4
Impetigo ... ..	.1	.1	.1	.4	.3	.2	.3	.7

It will be noticed, from the above table, that the percentage of children with clean heads has risen, in the case of boys 12%, and in girls 10%, during the last three years, and this although a more searching examination has been made during 1911; this improvement is therefore greater than is apparent from the above records.

There is a large increase in the number of cases of ringworm, especially among girls. This is probably due to the admission of many cases which, although practically free from contagious material, cannot be said to be completely cured; these are mostly under periodical examination at the School Clinic.

It is regrettable to notice that the number of children shewing living vermin is rather higher than during last year.

CLEANLINESS OF SCALP.

The invariable rejoinder of parents to the question, "How often is your child's head washed?" is "Once a week." Among the poorer classes the scalps of the children frequently shew an accumulation of scales and dirt which can only have been brought about by a consistent neglect of washing of the head—in some cases, probably for months.

Weekly washing of the head and a daily routine combing would enormously diminish the number of verminous conditions, and would probably bring down the cases of ringworm by at least 50%. Undoubtedly many parents deliberately ignore ringworm in their children's heads; this leads to a spread of the disease in the child and to infection of other children. The moral conscience of many parents requires a good deal of education in this matter.

WORK OF THE SCHOOL NURSE (ATTENDANCE DEPARTMENT).

The following table, prepared from the School Nurse's fortnightly reports, gives some idea of the amount of work which these conditions entail. The figures refer to the number of *examinations* made, and not to the number of cases, which was, of course, much less.

	<i>No. of Examinations.</i>			
	1908	1909	1910	1911
Verminous condition of head and body ...	10829	13734	15154	10475
Ringworm ...	218	942	256	484
Scabies ...	36	89	12	29
Eczema and Impetigo	610	417	216	489
Other conditions ...	2049	—	141	781
	<u>13742</u>	<u>15182</u>	<u>15779</u>	<u>12258</u>

The number of examinations made for verminous condition shews a considerable fall, justifying the belief that some impression is being made upon this condition. This is corroborated by experience during medical inspection, but the actual number of badly verminous children shews no decrease.

The number of visits to School Departments for the purpose of securing cleanliness was 1,086, and the number of visits made to homes, in order to instruct the parents as to their responsibilities and as to how to carry out cleansing processes was 763.

During the routine inspection by the School Doctor, 313 badly verminous cases, *i.e.*, 4 per cent. of the total inspected, were found.

CO-OPERATION WITH THE SANITARY AUTHORITY IN DEALING WITH VERMINOUS CASES.

After an experience of four years supervision of the work done by the School Nurse, it is possible to say that a great deal of the trouble caused by

verminous conditions may be attributed to quite a *limited number of families*. The members of these families are continually under supervision and are regularly receiving cards of instruction as to cleanliness from the School Nurse, or at the School Clinic. They periodically attend the Clinic for impetigo of the scalp, caused by neglect of ordinary cleanliness. It is more especially to this group that our attention has been directed during 1910 and 1911. Cleansing was undertaken at the Sanatorium. The School Nurse was instructed to select certain families, and to give the parents instructions to send the whole of the family to be cleansed. The parents and those not of school age were also invited to attend, and notice was given that the Sanitary Authority would be prepared, free of expense, to disinfect all bedding, etc.

The total number of families dealt with at the Cleansing Station at the Sanatorium in 1912 was 55; three parents were cleansed and 122 children. 57 of these children were seized under Section 122 of the Children Act, 1908, the parents having failed to cleanse after repeated warnings.

Under the present conditions, cleansing of school children by Local Authorities is of temporary service only; as a means of rendering them permanently clean it is futile. Education of the parents may be enforced by prosecution, but generally it is a failure. The older girls must, by suitable teaching in the domestic economy and home management courses, be made to realize the disgrace of neglecting the care of the hair and skin. If such teaching be adequately and sympathetically carried out, and especially if it be combined with frequent examinations by the class teacher, then one may begin to look for some marked advance in the solution of this problem. Until then, however, it will be necessary for the Public Health and Education Authorities to work together for the suppression of this form of uncleanness. More attention is now being paid by the Head Teachers of departments to this problem, and the results obtained where careful supervision is exercised well repay the trouble taken. Children applying for admission and found to be verminous, should be referred to the School Doctor for examination—much trouble arising from exclusion for uncleanness will be thus obviated, if the parent is, at the outset, given distinctly to understand that neglect of this kind is a perfectly reasonable ground for non-admission.

The custom of allowing children to attend without hats or caps is becoming more noticeable, especially in summer, and may certainly be encouraged, as it is not improbable that some cases of accidental pediculosis have their origin in the cloak room. The Education Authority have notified the teaching staff in the Boys' and Girls' Departments of the necessity of providing a separate numbered peg for each child, and it should be one of the monitor's duties to see that children use the proper pegs.

(7) *Nutrition*.—In accordance with the suggestion of the Chief Medical Officer to the Board of Education, nutrition has been classified in four grades:—

Number examined: 7,862.

State of Nutrition.	Boys.			Girls.			Total.		
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	
Good	37.1	45.0	41.0	37.1	45.0	41.0	37.1	45.0	
Normal	44.6	40.9	42.8	44.6	40.9	42.8	44.6	40.9	
Subnormal	17.4	13.3	15.4	17.4	13.3	15.4	17.4	13.3	
Bad	.9	.8	.8	.9	.8	.8	.9	.8	

Girls shew a higher grade of nutrition than boys; this has been frequently noticed in making examinations of children requiring free meals.

It will be noted that 16% of the children shew well marked signs of malnutrition.

(10) DEFECTS AND DISEASES OF THE NOSE AND THROAT.

Mouth Breathers.—In the examination of 7,862 children, this defect was noticed in 369, *i.e.*, 4.7%. In 1910 the percentage of mouth-breathers was 13%, hence there is a large fall in the number for 1911. This is probably due to the much greater attention now being paid by the teaching staff to the correction of this defect, by drawing the children's attention to it, by insisting on the proper use of handkerchiefs, and by the routine use of breathing exercises. The operative treatment of many adenoid cases has undoubtedly assisted also. From the next table, shewing incidence according to age and sex, it will be seen that this condition is more common among males than females, and that it diminishes in the later years of school life, probably owing to the better control of older children over the habit and to the treatment of adenoid cases in the earlier years. The irregular and rather high incidence in intervening years is due to the selection by teachers of children to be examined for adenoids and nasal obstruction.

The numbers and percentages given are inclusive of adenoid cases.

Age.	<i>Boys.</i>		<i>Girls.</i>	
	Number examined.	Per cent. Mouth-breathers, including adenoid cases.	Number examined.	Per cent. Mouth-breathers, including adenoid cases.
3	90	8.0	67	3.0
4	329	14.6	267	11.6
5	412	18.2	439	13.4
6	585	20.4	531	19.6
7	614	15.8	576	18.6
8	95	19.0	87	21.9
9	457	20.1	447	9.0
10	505	14.7	515	8.7
11	61	31.1	65	12.3
12	398	14.3	395	16.5
13	449	15.1	470	13.6
14	2	—	6	—
Total	3997	17.0	3865	14.3

Adenoids, with or without enlarged tonsils, were responsible for 59 per cent. of mouth-breathers among boys, and 86 per cent. among girls, or 71 per cent. for all children examined. The remaining 29 per cent. of cases were due to temporary colds, or very much more frequently to the formation of a "habit," often associated with the neglect of the handkerchief.

Many of the cases, examined in previous years, and classed as simple mouth-breathers, have, on subsequent examinations in 1910 and 1911, been found to have developed some nasal obstruction due to adenoids. It is probable that these cases, when first seen, had slight adenoids causing no obstruction. The teachers may assist greatly in the prevention of this trouble:—

1. By the careful and routine carrying out of breathing exercises: this is now done in all schools.

2. By teaching the proper use of the handkerchief; this is a point to which attention has been drawn in reports for 1910 and 1911. The neglect of this is probably responsible for the development of adenoids in many young children.

That children, even in the schools in poor districts, can be encouraged to bring and use handkerchiefs properly was conclusively shewn in our last Report; and if the Head Teachers take up the matter systematically, they will find that the majority of their pupils will bring handkerchiefs regularly to school.

The routine use of handkerchiefs before breathing exercises should be borne in mind.

3. By arranging for the Medical Inspection of all mouth-breathers at the routine inspection.

A special circular (Form 8, M.I.) is now given to all such children, urging the importance of breathing exercises at home, especially after operations for adenoids and enlarged tonsils.

Nasal Obstruction.—Partial obstruction was found in 703 boys, *i.e.*, 18 per cent., and in 726 girls, *i.e.*, 18 per cent.

A high degree of obstruction was present in 3.9 per cent. of children.

Deviation of the septum nasi was found in 115 children, *i.e.*, 1.4 per cent.

Nasal or nasopharyngeal catarrh was present frequently.

Adenoids and Enlarged Tonsils.—7,862 children examined; the following were found to have adenoids or enlarged tonsils or both:—

		<i>Adenoids with much</i>						
		<i>Adenoids.</i>	<i>Enlarged Tonsils.</i>	<i>Enlarged Tonsils.</i>	<i>Total.</i>			
Boys	...	398	...	66	...	114	...	578
Girls	...	476	...	98	...	155	...	729
Total	...	874	...	164	...	269	...	1307
Per cent.		11.1	...	2.1	...	3.4	...	16.6

This table may be re-arranged as follows:—

		<i>Boys.</i>		<i>Girls.</i>	
		No.	Per cent.	No.	Per cent.
Adenoids	...	464	11.6	574	14.8
Enlarged tonsils	...	180	4.6	253	6.5

The following table shews the age and sex incidence:—

Age.	Boys.				Girls.			
	No. examined.	Adenoids per cent.	Tonsils per cent.		No. examined.	Adenoids per cent.	Tonsils per cent.	
			Slight enlargement.	Much enlargement.			Slight enlargement.	Much enlargement.
3	90	6.0	22.2	1.1	67	5.0	16.4	1.5
4	329	10.9	25.5	2.0	267	11.6	20.0	5.2
5	412	13.1	21.6	7.3	439	11.2	21.2	4.6
6	585	15.4	19.0	7.0	531	17.5	24.7	6.2
7	614	11.0	18.2	3.6	576	15.5	18.6	6.4
8	95	12.6	17.0	3.2	87	19.5	21.8	5.7
9	457	13.8	19.0	4.6	447	19.2	20.1	6.7
10	505	9.1	17.2	4.2	515	17.3	18.8	6.8
11	61	18.0	19.7	1.6	65	15.4	18.5	13.9
12	398	9.6	16.6	4.5	395	13.2	23.8	10.1
13	449	8.7	15.0	4.0	470	11.5	19.0	6.2
14	2	—	—	—	6	17.0	—	—
<i>Totals</i>	3997	11.6	18.8	4.5	3865	14.9	20.5	6.5

The percentage incidence for both adenoids and enlarged tonsils is rather higher at most ages among girls than among boys.

There is noticeable in this table a gradual diminution of the defect with increasing age; this is to be ascribed more to operative measures than to a passage being provided by growth of surrounding parts.

Remarks on Treatment.—Operative treatment was necessary in many of these cases. The cases may be grouped as follows:—

	Operation necessary.	Exercises, &c.	Advice only.	Total.
Adenoids, Enlarged Tonsils, or both	811	300	296	1307

The number of cases in which operation has been performed (up to March, 1912) is 312, *i.e.*, 38 per cent. of those requiring operation. This subject is mentioned further in Section (F), p.

Year.	Recommended for Treatment.	% Operated upon.
1908	330	45
1909	594	48
1910	389	55
1911	811	38

OTHER CONDITIONS.

Goitre was found in 4 boys and in 12 girls; in 13 out of the 16 cases the child was aged 12 or 13, and the goitre was of the simple parenchymatous type associated with puberty.

Glands.—In the anterior group are included the submaxillary, superficial and deep cervical and tonsillar glands; in the posterior group the suboccipital and posterior cervical.

		Boys, per cent.	Girls, per cent.
Anterior group	(Slight enlargement	51	56
	(Marked enlargement	1.3	1.1
	(Tuberculosis	...	.2
Posterior group	(Hard and Palpable	29	32
	(Enlarged	.1	.1

The anterior gland enlargement is due chiefly to dental caries and tonsillar enlargement; the posterior to pediculosis.

Tuberculosis of the anterior glands was found in 16 children. Scars of tubercular glands were met with in 29 boys and 23 girls, *i.e.*, .7 per cent. of cases.

Scars, probably due to septic abscess of the neck, were found in 55 cases, *i.e.*, .7 per cent.

(9) TEETH.

The enumeration of carious teeth requires instrumental investigation, and if carefully done, almost doubles the length of time for inspection. In the inspection during 1911, a classification of the following groups has been used.

- X. Teeth good or fair; no marked loss of masticating power; caries not more than 6 teeth.
- Y. Considerable loss of masticating power; more than six teeth shew caries.
- Z. Teeth very carious; suppuration; and sinuses.

The following table shews the percentages in these groups at all ages:—

	Boys.	Girls.
X.	76.1	76.6
Y.	23.3	23.1
Z. ....	.6	.3

i.e., the teeth in 76 per cent. are in fair or good condition; in 24 per cent. they are bad.

In 239 cases (3 per cent.) there was periostitis associated with carious teeth; generally a sinus was present; severe stomatitis was present in 6 cases, alveolar abscess in 10 cases, other conditions, 10 cases.

(13) EAR DISEASE.

Otorrhœa was present, at the time of inspection, in 85 cases out of 7,862 children, *i.e.*, 1.1 per cent.

A definite history of previous otorrhœa was obtained in 519 cases, *i.e.*, 6.5 per cent. of children examined, and this is probably an underestimation of the true number who had suffered previously with this trouble.

Deafness was due to impaction of wax in 138 cases, *i.e.*, 1.8 per cent.

(14) HEARING

was tested with a watch for each ear separately; the watch was easily audible to a normal ear at 36 inches.

The following table shews the results of these tests for children between 6 and 14 years of age (6258).

Very deaf	... 2.1	(watch inaudible at 6 inches from each ear).
Deaf	... 4.7	,, ,, 12 ,, ,, ,, ,,
Slightly deaf	14.3	,, ,, 18 ,, ,, ,, ,,

The common causes of deafness were:—

1. Cerumen.
2. Perforation of the tympanic membrane, with or without otorrhœa.
3. Adenoids, or throat deafness.

Of these, the last (in the absence of previous inflammation and destruction of the middle ear) is curable by removal of the adenoids. As a very considerable number of children with deafness have adenoids, it is probable that, with operative measures, the amount of deafness among school children will decrease markedly in succeeding years.

Re-examination of many cases, examined at previous inspections, and recommended to have operations for adenoids and deafness, have shewn that there has, almost universally, been great improvement in the power of hearing, and in many cases the parents have personally expressed their gratitude for the advice given.

(11) DISEASES OF THE EYE.

7,862 children were examined.

Ciliary blepharitis (sore lids).—228 cases, *i.e.*, 2.9 per cent.; neglected cases are treated at the Skin Clinic. Styes were present in 12 children, *i.e.*, .2 per cent.

Conjunctivitis.—57 cases, *i.e.*, .7 per cent. In 10 of these cases phlyctenules were present. Corneal ulcers were found in 2 cases.

Opacities.—Nebulæ, 45 cases; leucoma, 7 cases; cataract, 4; scar of perforating wound, 8. Total 63, *i.e.*, .8 per cent.

Other Conditions.—Nystagmus, 7 cases; synechiæ, 3; blepharospasm, 3; ptosis, 9; heterochromidia iridis, 7; keratitis, 5; coloboma iridis, 1; exophthalmos, 2; xerosis conjunctivæ, 1; various cysts, 8; ectropion, 1; foreign body in eye, 1; hemeralopia, 1. Total 48.

Total eye defects and diseases (excluding errors of refraction) 396 cases, *i.e.*, 5.0 per cent.

(12) VISION.

All children of six and over, who were able to read, were tested as previously described.

The number of children tested was 6,141, a percentage of 78 on the total inspected at all ages.

The next table shews a summary of the results thus obtained; statistics from all ages are included.

The numbers in each square shew the total cases with vision corresponding with degree marked on the vertical line (L. eye) and top line (R. eye), *e.g.*, there were 3,456 children with equal vision of $\frac{6}{8}$ in R. and L. eyes, and 127 children with vision of $\frac{6}{8}$ in R. eye and $\frac{6}{8}$ in the L. eye, and so on.

The record of visual power with spectacles is taken when the child is wearing these.

Total Examined.—Boys, 3,111; girls, 3,030.

	<i>Less than</i>							
	$\frac{6}{8}$	$\frac{6}{9}$	$\frac{6}{12}$	$\frac{6}{18}$	$\frac{6}{24}$	$\frac{6}{30}$	$\frac{6}{36}$	$\frac{6}{40}$
$\frac{6}{8}$	3456	127	13	23	3	8	8	10
$\frac{6}{9}$	68	1271	60	33	9	14	4	7
$\frac{6}{12}$	24	52	305	39	13	2	3	7
$\frac{6}{18}$	24	35	33	152	24	13	3	3
$\frac{6}{24}$	10	16	12	15	41	13	5	—
$\frac{6}{30}$	12	15	7	11	5	30	2	1
$\frac{6}{36}$	8	2	7	1	3	2	11	2
<i>Less than</i> $\frac{6}{40}$	23	14	5	4	4	1	—	13

109 children were unable to read, i.e., 1.7% (out of a total of 6,250 children of six years and over).

From this table the following facts may be obtained:—

1. The number of children with equal vision in each eye is 5,279, i.e., 86.0 per cent. of the total examined.
2. The number with better vision in the right eye than the left is 413 (6.7 per cent.); with better vision in the left eye is 449 (7.3 per cent.); or 14 per cent. of the children have unequal vision in the two eyes.

The next table shews, in a more popular manner, the approximate degree of visual power.

Age.	Boys, per cent.				Girls, per cent.			
	No. Examined.	*Good or Fair.	Moderate.	Bad.	No. Examined.	Good or Fair.	Moderate.	Bad.
6	555	90.5	6.8	2.7	490	86.7	6.5	7.0
7	597	89.5	6.0	4.5	563	87.7	7.3	5.0
8	94	79.8	6.4	13.8	87	78.2	11.5	10.3
9	454	89.6	6.0	4.4	445	83.1	9.9	7.0
10	504	89.1	5.8	5.1	515	84.5	8.9	6.6
11	61	73.8	14.7	11.5	65	69.2	9.2	21.6
12	397	88.1	5.6	6.3	395	86.6	7.6	5.8
13	449	89.3	4.7	6.0	470	86.6	7.9	5.5
Totals, 1911	3,111	88.8	6.0	5.1	3,030	85.3	8.1	6.6
Totals, 1910	2,685	91.7	3.5	4.8	2,561	88.3	5.6	6.0
Totals, 1909	3,121	90.8	3.2	6.0	3,118	89.1	4.1	6.8

*In this table "good or fair" vision = $\frac{6}{8}$ or $\frac{6}{9}$, "moderate" = $\frac{6}{12}$, "bad" = $\frac{6}{18}$ and over.

The high percentages of bad cases at 8 and 11 are probably due to selection of defective children of these ages by the Head Teacher for special

examination, thus "overloading" the statistics for these ages. As usual, it will be noted that girls have worse vision than boys; the percentages are distinctly higher.

The number of boys wearing spectacles when examined was 111 (3.6 cent.); of girls, 150 (5 per cent.); thus, although a higher percentage of girls already have their vision corrected, yet the statistics shew vision to be worse practically at all ages among girls. It is probably that the cause is environmental largely, the factors being strain produced by sewing, reading, and the diminished amount of outdoor exercises as compared with boys.

Errors of Refraction, &c.—Taking the capability to read a line with the naked eye and then with a + 1 lens in front of the eye, to indicate hypermetropia, one may summarise the results obtained thus:—

	Male (3,111) Per cent.	Female (3,030). Per cent.
*Hypermetropia with or without astigmatism	35.5	39.7
Myopia with or without astigmatism	3.8	4.9
Squint	2.5	2.1
Eye strain ... ..	.3	.5
Opacities ... ..	.5	.6

*A considerable percentage of the cases in this group read $\frac{5}{6}$ with and without a + 1 lens; for all practical purposes they have normal vision. Most of these cases occur in young children whose power of accommodation is always high.

Table shewing nature of Refraction Error.—Out of 429 cases in which notes were made of the prescription, the following table was obtained:—

	No.	%
Hypermetropia	122	28.4
Hypermetropic astigmatism	159	37.1
Myopia	47	10.9
Myopic astigmatism	57	13.3
Mixed astigmatism	41	9.5
Odd eyes	3	.8
Total	429	100.0

For the particulars from which this table was constructed we are chiefly indebted to the ophthalmic staff of the Sussex County Hospital and the Eye Hospital.

Strabismus (Squint).—Convergent squint was found in 142 cases; divergent in 2. A considerable degree of partial blindness in the squinting eye was common. The necessity for early treatment is not yet recognised by parents.

Opacities.—In 32 cases there was defect of vision from opacities of the cornea or lens. The degree of interference with vision was less than might have been expected. This is shewn in the following table:—

Opacity.	Vision.	
	$\frac{6}{12}$ or under.	$\frac{6}{18}$ or over.
Unilateral	9	14
Bilateral	3	6
Total	12	20

Eye strain was met with in considerable degree in 23 cases, all of which were recommended for treatment. This condition is one of the common causes of "school headaches."

The Education of the Visually Defective or Partially Blind Child.—We have, in the Reports for 1909-10, urged the necessity for the provision of special classes for the systematic education of this group of children. No class has yet been started, however, chiefly owing to the difficulty of obtaining a suitable central set of class rooms. In the near future such a class should be commenced. At present it is necessary to exclude these children altogether or to modify the work they do in the ordinary class so much that they lose a considerable amount of their education. A reference to the Report for 1910 will shew the nature of the educational scheme required for such children.

During the year 1910, notes were made of all such cases coming under the observation of the School Doctor. The following table shews the number and grouping of these cases:—

(a) Recurrent ulceration of cornea and corneal opacities ...	31
(b) High myopia	41
(c) High hypermetropia and astigmatism	13
(d) Organic diseases of the eye	7
(e) Nystagmus	6
(f) Diseases of nervous origin with eye defects	2
(g) Cataract	10
	—
	110
	—

Recommendation for Treatment.—Children with vision of $\frac{6}{18}$ or less, with strabismus without great amblyopia, and with signs or symptoms of eye strain were recommended to seek treatment, or were given advice. The number of cases thus recommended was 424 (5.2 per cent.), of which 17 were advised only, leaving 407 to get medical treatment.

The number of children who have spectacles (up to March, 1912) is 343, *i.e.*, 84 per cent.

Year.	Recommended for treatment.	% obtaining spectacles.
1908 ...	392 ...	55
1909 ...	505 ...	58
1910 ...	321 ...	61
1911 ...	407 ...	84

(17) DISEASES OF THE HEART.

In 432 cases, *i.e.*, 5.5 per cent., a haemic murmur was present over the heart area. In most cases this has very little significance, especially in young children with thin chest walls.

In 47 cases (.6 per cent.) non-valvular disease of the heart was diagnosed, while in 45 (.6 per cent.) organic valvular heart disease was present. The following were the lesions:—

Mitral regurgitation	36
Mitral stenosis and regurgitation	2
Mitral stenosis	1
Mitral and aortic disease	1
Congenital morbus cordis	5

In almost all cases of acquired heart disease, a history of previous rheumatism, rheumatic fever, chorea or other rheumatic manifestations was obtained.

Exclusion from drill or a modified drill was suggested where organic disease was present; most of these children were allowed to continue at games with certain restrictions. The parents were seen in every case and were instructed as to general management of the child's health, especial stress being laid on the early and thorough treatment of rheumatic manifestations in certain cases.

A considerable degree of anæmia was found in 423 children, *i.e.*, 5.5 per cent. It is moderately common in a slight degree among school children of the poorer classes, generally owing to social conditions, over crowding, closed windows, and lack of proper nourishment.

(18) DISEASES OF THE LUNGS.

A sub-acute bronchial catarrh is the condition most frequently met with. It was present in 132 children, *i.e.*, 1.7 per cent. It is generally associated with adenoids or "mouth-breathing," especially in rickety children during the winter months, and is chiefly met with in children of 6 years and under.

Bronchitis was found in 18 cases, *i.e.*, .2 per cent.

Other lung diseases, 5.

Phthisis is discussed under Tuberculosis, p. 98.

(19) DISEASES OF THE NERVOUS SYSTEM.

Chorea.—8 cases were found, of which 4 occurred among girls. Exclusion is generally necessary, and a subsequent examination is made for other rheumatic lesions.

Neurosis.—106 children (1.4 per cent.) were found to have some form of neurosis in a considerable degree; generally night terrors, sleep talking or walking, or habit spasm. In many of these cases temporary exclusion or limitation of lessons is necessary; the open air school would be the ideal place for the education of this group.

Enuresis was present in 18 cases; migraine in 1.

Epilepsy.—14 children, *i.e.*, .2 per cent., were found to have some form of this disease. At present there are 6 children in Institutions for the Epileptic; most of those seen this year are not suitable cases for residential institutions.

Mental Deficiency.—The following were the types among 40 children in the special school.

Microcephalic, 1; Mongolian, 3; Epileptic, 3; Associated with cerebral paralysis, etc., 3; Genetous, 30.

Paralyses.—The following were the lesions observed:—

Infantile paralysis: 12.

Paralysis of arm, 7.

Paralysis of face (seventh nerve): 6 cases.

Hemiplegia, 2; diplegia, 6; paraplegia, 1.

DISEASES OF THE SKIN.

Pityriasis alba or patchy desquamation on the face and neck is far the commonest condition. It occurred in 509 children, *i.e.*, 6.5 per cent.

Impetigo of the face was found in 85 cases (1.1 per cent.); of the scalp in 42 (.5 per cent.). *Eczema* in 45 cases (.6 per cent.); *seborrhea capitis* was present in 5 per cent. of children.

Ringworm of the scalp was found in 89 boys (2.2 per cent.) and 172 girls (4.4 per cent.); a total of 261 cases actually found during the routine inspection. Many of these cases were already under supervision and treatment at the School Clinic; cases almost cured are included.

Many of these children have a very chronic form of the disease, the head being very "scurfy" with numerous broken diseased hairs; these cases are undoubtedly the chief means by which infection is spread, and must be excluded definitely for months under any form of drug treatment. The disease is invariably due, in this form, to the resistant small spored fungus, and it is difficult to cure. It was found that some of these children had been treated for "scurf" or "ringworm," and admitted back to school without any medical certificate.

In order to prevent this early return of infective cases into the schools, the Education Committee passed, in 1909, the following resolution:—"That instructions be issued to the School Medical Officer to examine all children returning to school after being absent on account of ringworm."

In this way we have now a satisfactory check on the re-admission of these cases; no child should now return to the schools without a certificate from the School Medical Officer or School Doctor.

A careful investigation before re-admission is made as to the presence of the fungus.

Ringworm of the body (*tinea circinata*) was found in 11 cases.

The following were the other conditions found:—multiple papillomata, 40; herpes, 13; acne, 20; lichen urticatus, 12; chronic onychia, 6; scabies, 5; psoriasis, 7; xeroderma, 29; septic sores, 11; naevi, 9; lupus, 1; other diseases and conditions, 25.

A recommendation was made that the Education Authority should establish X-ray treatment for such cases as the Medical Officer deemed necessary. A sum of £140 was set aside for this purpose in the estimates for 1911-12.

DEFORMITIES.

(a) *Acquired Deformities.*

Upper Limb and Neck.—Cubitus varus and vulgus, 2.

Lower Limb.—Secondary talipes equino-varus was found in 2 cases; flat feet, 2.

Spine.—Lateral curvature was found in 39 children, *i.e.*, .5 per cent; kyphosis to a well-marked extent in 37 (.5 per cent.); while in 16 cases both these conditions were present in the same child.

Amputations.—Fingers, 4; excision of eye, 3.

Chest.—The following deformities were found, apart from rickets:—

Flat chest	...	63	...	.8%
Pigeon chest	...	95	...	1.2
Funnel chest	...	26	...	.3
Barrel chest	...	4	...	—

These deformities are usually associated with the presence of adenoids or mouth breathing, or are the result of previous lung diseases. A great improvement might be effected by suitable exercise.

Rickety Deformities.—The following were found: chest, 144 cases (1.8 per cent.); frontal bossing, 209 (2.6 per cent.); curved tibiæ, 144 (1.8 per cent.); genu valgum, 119 (1.5 per cent.); genu varum, 29 (.4 per cent.). The deformity in most of the above was slight and needed no special treatment. The percentage of visible deformities is much less at 13 than at 6 or 7 years of age.

(b) *Congenital Deformities.*

Head.—Bifid uvula, 59 cases (.7 per cent.); cleft palate, 6 cases; hare lip, 2 cases.

Upper Limb and Chest.—Syndactyly, 2; macrodactyly, 2.

Lower Limb.—Talipes, 13; congenital dislocation of hip, 2.

Other Congenital Faults.—Mongolian eye folds, 115; accessory auricle, 14; remains of branchial cartilages, 1; supernumary nipple, 4; bifid finger, 1; incurved little finger, 16.

REMEDIAL EXERCISES SCHEME IN THE TREATMENT OF DEFORMITIES.

Attention has been drawn in our Reports as to the necessity for special exercises in such deformities as scoliosis, kyphosis, etc.

A scheme has now been formulated, and is partly in operation, to deal with physical defects by special exercises.

1. *Slighter defects*, such as defective physique, anæmia, slight kyphosis, mouth breathing, slight degrees of adenoids, etc. To deal with this group a qualified lady instructor has been appointed to give a daily lesson for 30 minutes at Circus Street Girls' School. The exercises are of the Swedish type, and no apparatus is used.

The class comprises 20 girls with one or more of the defects enumerated, and was commenced on March 6th, 1912. Special measurements and notes of each case have been made by the School Doctor, and all will be submitted to re-examination at the end of a three months' course.

2. *Marked defects*, more especially kyphosis and scoliosis (curvatures of the spine), requiring special individual attention. Arrangements for this class, which needs special apparatus, are now being made.

It is proposed, in this group, to take six cases. Each case will be dealt with for half-an-hour three days a week.

The classes are being instructed by Miss Dent, assisted by Miss Roe.

(20) TUBERCULOSIS.

The following cases were discovered during the routine inspections:—

	Active.	Quiescent.	Per cent.
Tuberculosis of lungs	8	15	.3
Tuberculosis of joints and bones ...	4	10	.2
Tuberculosis of glands	15	1	.2
Tuberculosis of skin	1	—	.01
Total	28	26	.7

Tubercular abscess scars in the neck were also found in 52 children (.7 per cent.).

Tubercular lesions were present in 105 cases, *i.e.*, 1.3 per cent. (this includes scars of past lesions and active cases).

All children shewing signs of active tuberculosis of the lungs are excluded from school attendance; this explains the small number discovered during routine inspection.

Cases in which a diagnosis of phthisis is doubtful are admitted into the Sanatorium, and watched over a period of a month or six weeks.

Most of the cases seen in the routine inspection have undergone Sanatorium treatment during the year.

A considerable number of children, apart from those discovered in routine inspection, now report themselves regularly for examination and weighing at the Medical Department Offices; by these means we are enabled to watch the cases and re-admit for Sanatorium treatment when necessary.

The number of notified cases of tuberculosis of the lungs in children still under observation of this age group (3-14) is 105. The next table shews the number notified in each of the last 9 years and still remaining in the group (in the earlier years children have been notified who have now passed the age of 14, and who thus fall out of the group).

Year.	Notifications.			Total.	Number who have been in the Sanatorium
	Boys.	Girls.			
1903 ...	1	—	...	1	1
1904 ...	—	1	...	1	—
1905 ...	3	1	...	4	1
1906 ...	5	3	...	8	6
1907 ...	5	5	...	10	6
1908 ...	12	5	...	17	12
1909 ...	10	7	...	17	10
1910 ...	12	12	...	24	17
1911 ...	16	7	...	23	15
Total ...	64	41	...	105	68
<i>Per cent. of 16,000 children in regular attendance</i> ...	.40	.25	...	.65	—

Visits are now made by the School Doctor to the homes of tuberculous children attending the elementary schools. In the course of these visits the cards, previously mentioned, are filled up; advice is given to the parents regarding dietetic and general hygienic treatment.

A special investigation was carried out in order to ascertain the after history of all children of school age and under (*i.e.*, from 14 years of age downwards) notified as tuberculous in the years 1904-1910 inclusive. As many of the cases thus notified have now left school or have left the district, exact particulars as to present condition were available only for 172 out of the total 280 notified.

The following table summarizes the results of this investigation:—

Year of Notification.	Total.	Number.		Dead.		When last heard of or examined.			
		Boys.	Girls.	Boys.	Girls.	Disease arrested or ceased.		Disease probably still active.	
						Boys.	Girls.	Boys.	Girls.
1904	16	6	10	2	8	4	2	—	—
1905	17	10	7	3	1	7	6	—	—
1906	28	13	15	—	4	11	11	2	—
1907	23	13	10	4	2	6	6	3	2
1908	27	15	12	1	3	11	8	3	1
1909	33	17	16	1	3	10	8	6	5
1910	28	12	16	2	2	3	7	7	7
Seven Years	172	86	86	13	23	52	48	21	15
Percentage	—	—	—	15.1	26.7	60.4	55.8	24.4	17.4
Percentage Boys & Girls	—	—	—	20.9		58.2		20.9	

From this table it will be seen that during the last seven years, of the total number notified as tuberculous under the age of 14, 20.9 per cent. are dead; 20.9 per cent. still shew active signs of the disease; and 58.2 per cent. may be reckoned as cured in the general sense of the word. In some of the last group, signs of the disease may again become manifest under certain circumstances, leading to depression in the general condition of the child, *e.g.*, attacks of other acute diseases, underfeeding, neglect, etc.

Cause of Death.

Thirty-six deaths occurred out of 172 cases in which definite information is obtainable, *i.e.*, 20.9 per cent. Probably this is an over-estimate of the fatality rate, as a larger percentage of the indefinite group probably survived.

The cause of death in two cases was unknown, in five cases was due to other disease than tuberculosis, and in the remaining 29 cases was definitely due to some form of tuberculosis, *i.e.*, of those who have died 84 per cent. have died from tuberculosis and 16 per cent. from some other cause.

TUBERCULAR BONE AND JOINT DISEASE IN CHILDREN.

Arrangements have been made during 1910 at the Borough Sanatorium for the admission and treatment of early cases of these varieties of tuberculosis. The marked deformities which have previously arisen from the neglect of early suitable treatment should henceforth become rarer. The medical staff of the hospitals have been asked to notify all such cases to the Medical Officer of Health, and, if suitable, they are taken into the special ward for prolonged treatment.

For particulars of this scheme reference should be made to the Annual Report of the Medical Officer of Health, see pp. 24-28.

(23) INFECTIOUS OR CONTAGIOUS DISEASES.

Apart from ringworm, scabies, impetigo, and some forms of conjunctivitis very few cases were seen: Mumps, 10; whooping cough, 2; varicella, 3; diphtheria, 2; scarlet fever, 4; tonsillitis, 6.

(24) OTHER DISEASES OR DEFECTS.

The following were found: Herniæ, 13; innocent tumours, 14; mucous dyspepsia, 23; intestinal parasites, 13; catarrhal jaundice, 2; chronic appendiceal colic, 4; prolapsus recti, 3; mastitis, 2; others, 6.

VACCINATION.

The number and approximate size of vaccination scars was noted in each child examined. Out of 7,854 children, 25 per cent. shewed no vaccination marks.

The following table shews the results of this examination. It will be noticed that the percentage of children with vaccination scars of one inch and over progressively increases with the age. If, as is generally believed, the efficiency of vaccination as a protection against small pox is directly dependent upon the size of the vaccinated area and the number of marks, then it is obvious from this table that efficient vaccination has decreased enormously during the last 10 years. Thus the percentage of children of school age shewing a well-vaccinated area 10 years ago was 27.0—now it is 1.9.

Age.	Total Examined.	Percentage with no Visible Marks.	Number of Marks.					Total Area of Marks.					Total Vaccinated.	
			0	Percentage.				0	Percentage.				Per cent. under 1 in.	Per cent. of 1 in. and over.
				1	2	3	4		$\frac{1}{8}$ in.	$\frac{1}{4}$ in.	$\frac{1}{2}$ in.	1 in.		
3	157	31.8	50	26.8	10.8	8.9	21.9	31.8	56.0	11.4	—	.6	98.1	1.9
4	596	26.5	158	22.3	15.1	10.4	25.7	26.5	54.4	17.3	1.5	.3	96.6	3.4
5	851	30.2	257	16.7	16.8	10.8	25.5	30.2	51.1	15.4	2.6	.7	92.4	7.6
6	1116	28.8	321	19.1	18.3	11.6	22.0	28.8	46.5	18.7	5.5	.4	93.2	6.8
7	1190	24.6	293	19.9	20.3	10.7	24.5	24.6	44.5	23.6	6.6	.7	90.3	9.7
8	182	18.7	34	22.0	21.4	6.6	31.3	18.7	41.2	28.6	7.7	3.8	82.4	17.6
9	904	20.6	186	21.2	22.5	12.5	23.2	20.6	39.0	29.4	8.4	2.7	84.0	16.0
10	1020	19.4	198	22.7	24.4	10.5	22.9	19.4	39.8	26.8	12.4	1.6	82.6	17.4
11	126	21.4	27	15.9	27.0	9.5	26.2	21.4	33.3	31.7	12.7	.8	74.7	25.3
12	793	26.7	212	21.2	22.8	10.4	19.0	26.7	31.0	24.7	14.2	3.3	74.4	25.6
13	919	25.0	229	20.0	25.6	8.9	20.7	25.0	28.0	23.6	19.3	4.1	73.0	27.0

(F) REVIEW OF METHODS AVAILABLE FOR THE TREATMENT OF DEFECTS.

During 1910 the Brighton Education Committee proposed that, if possible, an arrangement should be come to with the various hospitals for the treatment of defects discovered by the School Doctor. The Boards of the various hospitals, however, did not see their way to enter into any special arrangement for the treatment of school children.

As a consequence, during 1911 the Education Committee became ordinary subscribers to the hospitals, and thus obtained letters of recommendation. Before the subscriptions were paid the Clerk to the Education Committee communicated with the Secretaries of the various hospitals, as some doubt had arisen as to whether or not the hospitals would continue to undertake the treatment. The hospitals, with one exception, agreed to continue treatment until the 31st December, 1911. It was stated that "after that date the hospitals, with one exception, except in special cases, will decline to treat school children attending the primary schools of the Brighton and Hove Education Authorities, and found on medical inspection by the Medical Officers of the said authorities to be suffering from otorrhœa, enlarged tonsils, adenoids, errors of refraction, skin diseases, or defective teeth."

Seeing that they had failed in their endeavour to take advantage of the benefits of existing institutions, as recommended by the Board of Education, the Education Committee resolved to provide treatment by one of two schemes which were recommended to them (1) by the local practitioners, and (2) by the school medical officer.

The local practitioners had modified their 1910 scheme which they presented, to the form given below.

SCHEME A.

	No. of Cases.	Doctor.	Salary.
Skin and scalp cases	150 per week.	1	£50
Ringworm cases, X-ray treatment	200 per annum.	1	£50
Defective vision	350 per annum	1	£50
Tonsils and adenoids	300 per annum.	1	£50
Anæsthetist ... ..	...	1	£50
			£250

An increase of these numbers to more than 15 per cent. to be paid for in proportion.

The Medical Profession will undertake to obtain applications for these posts from medical practitioners of acknowledged standing and special experience, and will undertake to nominate to the Educational Authority suitable candidates for each post, from amongst whom the Authority may directly appoint those whom they think most suitable. The appointments should be made for a period of one year, renewable or otherwise as the Authority may determine, fresh appointments to be made on the same principle.

The hours of work to be such as shall be appointed by the Education Authority, but should not exceed an average of two hours per week for each post.

Under the second scheme it was proposed to appoint two whole-time officers to undertake both the inspection and treatment of school children, and also to undertake special work for the Sanitary Committee.

SCHEME B.

Cost to Education Committee for <i>inspection</i> and treatment:—	
Salary of Senior School Doctor	£400
Salary for two-thirds of time of Junior School Doctor	200
Salary of Surgeon for tonsils and adenoids	50
	£650

The advantages claimed under Scheme A. were that the Education Committee would obtain at very low rates the services of experts in eye, throat, and X-ray work. Under Scheme A., too great attention was paid to treatment, and too little to medical inspection.

SCHEME FOR THE EMPLOYMENT OF WHOLE-TIME MEN TO UNDERTAKE BOTH INSPECTION AND TREATMENT.

Experts required.—Many persons unacquainted with *medical inspection* believe that it can be done satisfactorily by a tyro. The contrary is really the case. Routine inspection, which provides the foundation for all the other branches of the work, requires an expert. But even apart from routine inspection, this field of work requires years of patient study by any doctor who hopes to become thoroughly efficient. The problems connected with the backward and mentally defective, the tuberculous, the deformed, in relation to elementary school life, can only be solved by an experienced worker.

The Medical Inspector should have experience in treatment.—Not only has the School Doctor to advise his Committee, he has also to give advice to the parents of children requiring treatment, and he has to re-inspect the children after treatment. It seems almost absurd to ask the question as to whether a doctor who personally treats a proportion of the children or a doctor who does no treatment at all will be in the better position to advise the parents as to treatment and repetitions of treatment. To be an efficient inspector it is necessary to be expert in the diagnosis and treatment of common defects regarding which it is the duty of the inspector to report and advise.

Long Service Essential.—For an efficient school medical service, what is required is the creation of a class of men prepared to devote their lives to this line of work. *Such a class of experts cannot be obtained under the present system.*

INCREASED SALARIES REQUIRED.

A. Salary.—Up to the present, with few exceptions, the salaries paid to medical inspectors of school children have been so small that no medical man of average ability has been content to remain for any great length of time in the service. Very wrongly the service is by many regarded as a stepping stone to public health appointments.

THE MONOTONY OF THE ROUTINE MEDICAL INSPECTION.

B. The Strain of Monotony.—Apart from monetary considerations, there is no hope of large numbers devoting themselves entirely to school work so long as they have to examine four or five thousand children annually at the routine medical examination. A routine examination of such a large number is too great a strain, because of its monotony. If, however, the service is put on a broad basis, there is no need for such a strain to be put upon medical inspectors.

If, instead of having the care of 18,000 school children with a routine examination of four to five thousand, the whole-time inspector had 10,000 children with a routine examination of two thousand five hundred, medical inspection would no longer be drudgery, but fascinating work.

Too large a field for any one man? It has been urged that one individual cannot be an expert school inspector, public health worker, and operator.

1. *Public Health.*—Although the public health and school services overlap to a considerable extent, that does not mean that the school inspector has to have any knowledge of sanitary work as a whole.

The only questions likely to arise would relate to new buildings, structural alterations, heating, lighting and ventilation, and, if difficulties arose, all those questions could be referred to the Medical Officer of Health. Infectious disease, apart from skin disease, should be controlled entirely from the public health office.

2. *Eye and Throat Work.*—The school doctor should be able to prescribe spectacles and have a working knowledge of diagnosis and treatment; he does not require to be able to perform operations upon the eye or its muscles. Similarly, although he should be able to remove tonsils and adenoids, the numerous operations performed by the throat specialist would be outside his sphere. With care he can apply X-rays safely in cases of ringworm, although not pretending to be a specialist in X-ray work. The scope of his work is no greater than the scope of work of a specialist in any one of the branches mentioned.

In short, there is no reason why, if a man devotes his life to the work, he should not obtain a thorough knowledge of everything required of him; of treatment he will start with a sufficient knowledge; in medical inspection he will become expert only after some years.

Unfortunately, the importance of retaining the services of medical inspectors over a long series of years is not fully recognised by the public because they do not recognise the importance of inspection, whilst, on the contrary, treatment bulks largely in the mind of the layman. It is, therefore, only by undertaking treatment that the medical inspector can increase his salary sufficiently to allow of his continuing in the school service, and, secondly, can have assistance in his work, thereby halving the monotonous routine inspection.

Advantageous as his undertaking of treatment is from the medical inspector's point of view, it is no less so from the standpoint of the parents and the local authority; for, with his salary increased and monotony gone, the medical inspector will be content to continue for many years to perfect himself in this branch of work. Whilst doing so he will become more and more valuable to the local authority. Under such circumstances more efficient services can be established than by any system of part-time service.

With these arguments in our minds, we felt it our duty, in face of considerable opposition, to urge the local authority to adopt the whole-time scheme.

SUBSCRIPTIONS TO HOSPITALS FROM THE BRIGHTON, HOVE AND DISTRICT
TEACHERS ASSOCIATION.

This Association has, for the past seven years, organized an annual collection in the elementary schools for the Hospitals. The total collected in 1911 was £157 5s. 8½d., of which Brighton contributed £81 16s. 8½d. Subscriptions were given to the following:—

	£	s.	d.
Sussex County Hospital	25	0	0
Children's Hospital	25	0	0
Throat and Ear Hospital	25	0	0
Eye Hospital	25	5	0
Brighton Dispensary	22	1	0
Dispensary (Lewes Road)	3	3	0
Surgical Aid Society	5	5	0
Dental Hospital	5	5	0
Women's Hospital	5	5	0
Queen's Nurses	10	10	0
Medical Mission (Edward Street)	1	11	0

The letters obtained are distributed to Head Teachers in those departments taking part in the collection. The letters in excess of the requirements of last year were forwarded to the Education Authority, to be used in connection with medical inspection. Letters were also forwarded as a result of a surplus balance of the Brighton Elementary Schools Athletic Association.

It has been decided that this annual collection for the Hospitals shall be suspended during 1912, as many of the letters thus obtained were used for securing treatment of defects among elementary school children, and now this special treatment is refused by the Hospital Authorities.

Scheme for the Provision of Spectacles.

An agreement has been entered into with a Brighton firm for the supply of spectacles at the following rates:

	s.	d.
Spherical	0	9
Plano-Cylindrical	1	4
Spherical Cylindrical	2	0
Over 8 dioptries	6d.	extra.
Tinted lenses	6d.	extra.

The procedure is as follows:—

Parents attend at the Medical Inspection Offices with the prescription. A note is made of this, and an order is given to the Education Office.

Parents able to pay sign Form A*, and receive an order at the Education Office for spectacles. The parents pay the whole sum at once or pay by instalments at the Education Offices.

*FORM A.

“ I agree to the arrangements which have been made for the provision of Spectacles by the Education Committee to my child at a cost of

I promise to repay this sum of ”

Parents unable to pay sign Form B.

FORM B.

" I agree to the arrangements which have been made for the provision of Spectacles by the Education Committee for my child _____, at a cost of _____. I understand that unless I can satisfy the Education Committee that I am unable to pay this sum _____, I shall be required to pay the whole or such part of the cost as the Committee may determine."

They also receive an order for spectacles at the Education Office and an investigation ticket for the Charity Organisation Society. Later the Medical Sub-Committee consider a report as to their income, etc., from the Charity Organisation Society, and decide what the parents should be asked to pay. This payment is collected by the Charity Organisation Society.

In the estimates, £25 has been set aside for this purpose.

Arrangements have lately been made to co-operate with the Guardians. Children whose parents are in receipt of parish relief receive spectacles without any further investigation, the cost being refunded to the Education Authority by the Guardians.

The working of this scheme has been very successful. From December 6th, 1910, when it was re-organized, to December 31st, 1911, 434 applications were made to the School Doctor. Of these 317 have obtained spectacles, and have paid the full cost; 41 have obtained spectacles and have partly paid the cost; 25 have been granted spectacles free of cost; 7 withdrawn; 44 made no application to the offices.

Of these cases, 46 have been dealt with by investigations through the Charity Organization Society, and 3 through the Guardians.

The following table shews that such a scheme can be worked economically, the deficit being £4 7s. 4d. only; this will subsequently be somewhat reduced by further contributions from parents.

	No.	Amount payable.			Amount obtained.		
		£	s.	d.	£	s.	d.
Parent paid full cost	317	21	12	9	21	12	9
Parent not yet paid in full ...	17	1	10	3	0	6	6
C.O.S. cases: { Free	25	2	0	4	0	0	0
{ To pay	24	2	0	5	0	17	2
	<u>383</u>	<u>27</u>	<u>3</u>	<u>9</u>	<u>22</u>	<u>16</u>	<u>5</u>

The average price of a pair of spectacles worked out at 1s. 5d.

Defective Teeth.—During 1911 reports have been submitted to the Education Committee urging the appointment of a part or whole time dentist, in order that a beginning may be made in the treatment of dental caries. At present no conservative work is being done.

During the year extractions and some conservative work have been done at the various hospitals, but treatment has been refused for the year 1912. Under these circumstances, it is very necessary to start a Dental Clinic. The Education Authority has decided that it will take steps in this direction if a grant for medical treatment is received for the ensuing financial year.

Treatment by School Nurses.—Treatment is carried out by the two School Nurses only at the Clinic on Saturdays. Advice as to how treatment may be obtained, and as to the practical methods of carrying it out in the home is, however, given.

The work of each nurse is distinct; Nurse Henson assists in the routine school inspection, in the measurement and weighing of canteen cases, and in the visitation of the homes of parents notified after medical inspection. During 1911, 2,464 home visits have been made by Nurse Henson to such cases, many requiring to be visited on several occasions.

The work of Nurse Richnell has been that of supervision of the cleanliness of children in the schools, the detection of cases of impetigo and ring-worm. She also visits the homes of parents who have neglected to carry out instructions, and advises them as to the best means of so doing. During 1911, 1,086 visits were made to schools, and 763 to homes for this purpose.

The work of both Nurses has been carried out thoroughly and with tact, and has been of great assistance in persuading parents to make provision for the necessary treatment. The influence of their visits upon the home conditions is of great value.

THE SCHOOL CLINIC.

This is now in the 6th year of its existence. During the past year, owing to more suitable premises having been obtained, it has been possible to re-organise and extend the work.

The Clinic may be divided into two main sections:—

1. Inspection Clinic.
2. Treatment Clinic { Skin diseases.
Minor diseases of eyes and appendages.
Errors of refraction.

The work in both sections is carried on at the new Medical Inspection Offices at 7, Gloucester Place. The lower floor has a large waiting hall capable of accommodating 50 patients, and a smaller room for treatment of diseases of the skin and minor eye troubles. This latter room will be available for the treatment of dental caries when arrangements have been made for this Clinic.

On the second floor is a large consulting room for the School Doctor, and a room for School Nurses and Health Visitor.

On the third floor there is a room for two clerks and a store room.

The premises are central, and are conveniently arranged.

1. *Inspection Clinic.*—This is held every Monday, Wednesday and Friday evening from 5 p.m. till 7 p.m.

The cases seen here are those:—

1. Requiring frequent re-examination and supervision, *e.g.*, tuberculosis, heart disease, neurosis, etc.
2. Requiring medical certificate on the grounds of ill-health. These are sent chiefly by attendance officers, school teachers and school nurses.
3. Special examinations for limitation or alteration of certain portions of the school curriculum, *e.g.*, deformities, semi-blind, semi-deaf, etc.

4. Children requiring special education at a school for mental defectives, blind or deaf.
5. Children absent from school for long periods or children not yet on the school roll.
6. Re-examinations of children referred from the routine medical inspections.
7. Examination of underfed children; children requiring help in the provision of spectacles, etc.

This section of the work has been dealt with ever since the institution of inspection in May, 1908, but up to this year it has not been dignified by the name of a Clinic.

The purpose of such a Clinic is the organisation of the agencies used in following up, and it has been very successful in this direction. It is the centre of co-ordination between school doctor, nurses, teachers, attendance officers, members of the After-Care Committee, and children in the schools.

During 1911, at this Clinic, 2,116 attendances were made. As the Clinic was held on 132 occasions, the average attendance was 16 each evening.

<i>Inspection Clinic.</i>	Year.	No. of Attendances.
	1908	... 259
	1909	... 576
	1910	... 1106
	1911	... 2116

This table shows the rapid increase in the amount of work produced by such a Clinic.

2. *Treatment Clinic.*

(a) For skin diseases and minor eye ailments.—This Clinic is held twice weekly—on Tuesdays from 2.30 p.m. to 5 p.m., and on Saturdays, from 9 a.m. to 10 a.m.

The diseases treated are chiefly contagious diseases of the skin or scalp, verminous conditions, and eczema; in addition, blepharitis, conjunctivitis and certain other eye conditions are dealt with. Cases of other diseases are sent down for examination by teachers, but these are more frequently dealt with at the Inspection Clinic.

Impetigo.—Instead of giving instructions to have the scabs softened by poultices and thereafter removed, it is now the practice to at once remove the scabs at the Clinic and rub in ointment there and then. This can be done in all excepting nervous children, even in the worst cases of impetigo of the scalp. Mild cases are allowed to resume school attendance at once, and severe cases treated as above return to school after being seen once, and found cured, at the end of a week.

Ringworm of the Scalp.—Removal of the hair by a preparation of bariüm sulphide, followed by painting with tincture of iodine has been tried in a number of cases. A special point is now made of keeping all cases of ringworm of the scalp under observation for months after apparent cure; the child is told to report every two months, and a careful examination is made for any relapse.

In regard to school attendance, the policy of partial exclusion is followed, if the diseased area is practically free from loose hairs or scurf, the child is allowed to attend while wearing a cap.

A considerable increase is noticeable in the number of children attending:—

Year.	No. of Cases.	No. of Attendances.	Times held.	Average Attendance.
1907	123	—	—	—
1908	356	1302	41	32
1909	792	2973	45	66
1910	1306	4652	44	101
*1911	1831	5811	60	97

*From September, 1911, the Skin Clinic was held on Tuesdays and Saturdays; the latter day being used for the special epilation treatment of a few cases—this naturally lowers the average attendance for both days together. The actual average attendance on each day was as follows:—

	No. of Attendances.	Times held.	Average Attendance.
Tuesday ...	5612	44	128
Saturday ...	199	16	12

The following table shews the conditions treated and number of cases and attendances:—

DISEASE.	BOYS.		GIRLS.		INFANTS.		Total No.	Total Attendances.
	No.	Attendances.	No.	Attendances.	No.	Attendances.		
Verminous conditions	5	5	31	68	17	32	53	105
Ringworm of head ...	104	718	80	534	77	1804	261	3056
Ringworm of head + body ...	2	7	3	13	11	86	16	106
Ringworm of head + other diseases ...	4	31	2	4	9	63	15	98
Ringworm of body...	16	35	19	41	31	66	66	142
Impetigo and eczema	100	179	191	416	231	259	522	854
Scabies ...	9	36	30	149	10	40	49	225
Ciliary blepharitis ...	18	45	31	74	32	59	81	178
Corneal ulcers ...	4	5	8	16	6	10	18	31
Conjunctivitis ...	24	60	27	67	19	30	70	157
Alopecia ...	7	24	8	14	9	26	24	64
Septic sores, &c. ...	23	41	23	39	18	26	64	106
Other skin diseases	11	21	26	69	25	48	62	138
Other diseases {	62	70	94	100	93	100	249	270
	71	71	105	105	105	105	281	281
Totals ...	460	1348	678	1709	693	2754	1831	5811

(January 26th, 1912).

The number and nature of cases at present under treatment is:—

Verminous heads ...	24
Ringworm of head ...	387
„ „ body ...	3
Impetigo, etc. ...	40
Scabies ...	19
Blepharitis ...	34

Conjunctivitis, etc.	12
Alopecia	12
Other conditions	25
Total	556

The Clinic is almost self-supporting as regards the drug bill (1d. is charged for each box of ointment, etc., where payment is possible).

The expenditure on drugs for 1911 was £10 5s. 2d.; contributions by parents, £9 9s. 2d.

B. Clinic for Errors of Refraction.—In certain cases in which the provision of spectacles was urgently required, the parents refused to obtain treatment at the Hospital or pleaded that they were unable to spare the time to take their children for treatment. In order to meet this difficulty, and to provide a basis for the commencement of a Refraction Clinic (the Hospital Authorities having refused to treat cases after 1911), such cases were asked to attend at the Medical Department of the Education Offices for treatment. The Clinic is at present held on Saturday morning from 10. a.m. till 12.30 p.m. The following is the record of work done since the commencement on September 30th, 1911, to December 31st, 1911:—

No. of times held.	New cases.	Old cases.	Total Attendances.	Average Attendance.
11	36	24	60	5.4

Money available for treatment during 1911-12.—The Education Committee in their estimates for the financial year, 1911-12, have allocated the following amounts towards medical treatment of elementary school children.

Upkeep of Clinic (drugs, etc.)	£20
Spectacle Fund	25
X-ray apparatus, etc.	140
Increased cost of new scheme for Medical Treatment	290

TREATMENT APART FROM THE SCHOOL CLINIC.

This is obtained from the hospitals and dispensaries and from the private practitioner.

Other agencies such as the branches of the Guild of Brave Poor Things and of the Invalids' Children's Aid Association (formed in 1910) are available for help in certain cases.

It has been previously mentioned that 2,970 (37.7 per cent. of those examined) children were found to be in need of advice or treatment for defects. Of this number 1,156, *i.e.*, 39 per cent., simply required advice as to home life and general hygienic conduct. In this group are included such cases as compensated heart disease, mouth breathers, cases of adenoids not requiring surgical treatment, quiescent tuberculosis, minor skin diseases, and mentally defective children. The remaining 61 per cent., 1,814 in number (a percentage of 23 on the 7,862 children examined), were advised to seek treatment from a private practitioner, or in default, from hospital. The majority of these children suffered from defective vision or enlarged tonsils and adenoids.

The following table shews the number with these defects recommended for medical treatment:—

	<i>No. of defectives.</i>	<i>No. treated.</i>	<i>Per cent. treated.</i>
Enlarged tonsils and adenoids	811	312	38
Defective vision	407	343	84

The increase in the number of these cases treated is 23 per cent. in the vision group, and the decrease is 17 per cent. in the adenoid group, over the results of last year.

The reasons for the remarkable increase in treatment of vision cases are:—

- 1.—Provision of spectacles scheme.
- 2.—Eye clinic.

In the above, *operations* were performed in all cases of enlarged tonsils and adenoids, and spectacles *procured* in the eye cases. The number treated for defective vision is probably 5 per cent. higher than that stated above, since in a certain number of cases (especially in high astigmatism of one eye only) it was not found advisable for the child to get spectacles; moreover, quite a number of children had prescriptions for spectacles given by the hospital authorities, and it was found that the parents were unable or unwilling to pay for these. This latter group is now being dealt with under the *spectacles* scheme. A further group of children whose throats require attention, and who are to be operated upon for adenoids when a bed is vacant at the hospital, are at present in attendance at the hospitals. It should be mentioned that a certain number of children have been recommended to obtain spectacles after special examination, apart from medical inspection; these are not included in the returns for routine inspection.

The following table shews the number of children obtaining treatment for various conditions at the different hospitals, so far as we have been able to ascertain:—

Hospital, &c.	Errors of Refractions, &c.		Tonsils & Adenoids.		Diseases of skin.	Dental	Other conditions.	Total.
	Spectacles obtained.	Spectacles not yet obtained.	Opera- tions.	No up to present time.				
Eye	175	11	—	—	—	—	8	194
Sussex County	121	8	115	19	4	4	82	353
Throat and Ear	—	—	144	15	—	—	17	176
Children's	—	1	46	29	6	42	55	179
Dispensary	—	—	2	6	1	4	34	47
Dental Hospital	—	—	—	—	—	34	—	34
Clinic	34	11	—	—	213	—	—	258
Private Practitioners	7	5	4	58	27	6	71	178
Optician	5	—	—	—	—	—	—	5
Sanatorium	—	—	—	—	—	—	2	2
Dentist	—	—	—	—	—	41	—	41
Other Sources	1	—	1	—	3	—	5	10
Totals	343	36	312	127	254	131	274	1477

Thus, 1,477 out of 1,814 children obtained treatment, *i.e.*, 81.6 per cent. Of the remainder 272 (14.7 per cent.) took no action at all, 36 (2.0 per cent.) had left school without obtaining treatment, and 20 (1.1 per cent.) refused treatment altogether. Three children died before treatment, and six were, on re-examination, not recommended to obtain treatment (.6 per cent.). In 17 of the refusal group the defect was enlargement of tonsils or adenoid growths. The number obtaining treatment from charitable institutions (including Clinic and Dispensary) was 1,262, *i.e.*, 85 per cent.; from a private practitioner or dentist 219, *i.e.*, 15 per cent. (an increase of 4 per cent. on last year). The above statistics do not aim at giving the precise number of school children applying for treatment at the several hospitals, etc.; undoubtedly that number is much larger than stated; these figures represent the numbers attending because of advice given at the routine medical inspection.

The following table shews the results of the last three years:—

<i>Year.</i>					<i>Per cent.</i>
					<i>obtaining treatment.</i>
1908	...	...	...	...	68.2
1909	...	...	...	...	74.5
1910	...	...	...	...	80.9
1911	...	...	...	...	81.6

(g) REVIEW OF ACTION TAKEN TO DETECT AND PREVENT THE SPREAD OF INFECTIOUS DISEASES.

For full particulars regarding infectious disease the Annual Report of the Medical Officer of Health should be consulted.

In order to impress upon all Head Teachers the *necessity* of early notification of infectious diseases, the following paragraphs have been inserted on pp. 150-153 of the Year Book, 1912, of the Education Committee, a copy of which is sent to each Head Teacher.

Without early notification of the non-notifiable infectious diseases (measles, whooping cough), the early check of an epidemic is impossible.

NOTIFICATION OF CASES OF INFECTIOUS DISEASES BY HEAD TEACHERS.

Children suffering from the following diseases: Diphtheria, scarlet fever, measles, German measles, whooping cough, should be notified to the Medical Officer of Health as soon as the Head Teacher learns that they are so suffering.

If mumps or chicken pox seriously interfere with the school attendance they should also be notified.

SCARLET FEVER AND DIPHTHERIA.

Exclusion of the Patient.—Children suffering from scarlet fever are usually absent for at least nine weeks; children affected by diphtheria for at least seven weeks. Four weeks before the return of the patient to school, notice of the date of his return is sent to the Head Teacher.

Contacts.—Contact with scarlet fever or diphtheria necessitates exclusion for one clear week.

OTHER INFECTIOUS DISEASES.

Exclusion of the Patient.—

Measles	Three weeks.
German Measles	Three weeks.
Mumps	Three weeks.
Whooping Cough	Eight weeks.
Chicken Pox	Two weeks, or until all scabs have disappeared.

Contacts.—

- Measles, German measles, and whooping cough:—Contacts from Infants' Departments are excluded for the same length of time as the patient. Older children are not excluded.
- Mumps and chicken pox:—Contacts are not excluded.

CARRIERS OF INFECTION.

Infection is commonly spread by means of children who carry the infection, but shew no very definite signs of disease.

- (1) In diphtheria, these carriers frequently have "sore noses" which bleed readily; nasal discharge may or may not be present.
- (2) In scarlet fever, the disease is often mild, and the rash overlooked; frequently, however, the child, although complaining of sore throat and headache, continues to attend school.

Under those circumstances, teachers should remember that in the presence of diphtheria, children suffering from "sore nose" and, similarly, in the presence of scarlet fever, all cases of sore throat should be notified to the Medical Officer of Health.

SKIN DISEASES.

Ringworm, Infectious Sores (Impetigo), Scabies and Skin Eruptions of Doubtful Nature.

Head Teachers should make arrangements for children suffering from any of the above to see the School Doctor at the Clinic on Tuesday afternoons. The children should not be allowed to resume attendance until the Teacher receives the School Doctor's certificate.

MEDICAL EXAMINATION OF SCHOOL CHILDREN.

Children sent by Teachers and Attendance Officers to the School Medical Officer or School Doctor for medical examination, should attend as follows:—

1. *Diseases of Skin and Scalp:*
Clinic, 7, Gloucester Place, Tuesdays, 2.30.
2. *Other Diseases and Defects:*
7, Gloucester Place, Mondays, Wednesdays, Fridays, 5 p.m. No patient will be seen who arrives later than 5.30 p.m.
3. *Children whose parents cannot afford to pay for spectacles:*
7, Gloucester Place, Mondays, Wednesdays, and Fridays, 5 p.m.

In these cases the parent must attend with the *child*, and in cases of group 3, with the *prescription* obtained from the Hospital, or Clinic.

(h) THE EDUCATION OF DEFECTIVE CHILDREN.

Mentally Defective.—The special school for the education of mentally defective children was opened in 1898, and has accommodation for 40 children.

The following are the chief facts relating to attendance.

Accommodation, 40. Number on roll, 47. Number awaiting admission, 80.

Attending January, 1911	...	...	...	44
Admitted during 1911	...	...	...	19
Left during 1911	...	...	...	17
Attending December, 1911	...	...	...	48

The necessity for the enlargement of this school was pointed out in 1908, and a special investigation was made during 1909; the conclusions were then reported upon.

In order to provide for the proper education of mentally defective children in this area, a school with accommodation for at least 100 children should be erected. The building at present in use is not suitable for the manual education of children, and has no school hall.

During 1910-11 there has been established within the school a class for boot repairing and cobbling. The results so far obtained are encouraging; instruction is given to selected boys during the last four years of their school life. There has been an increase in the amount of time devoted to occupations and domestic work since last year.

There is in connection with the school an "After-care" Committee. From the social point of view, after care of the mentally deficient is even more important than special education, as it deals with the child at a more critical period of life from the moral standpoint. It is advisable that all cases should be followed up, and that careful records be kept of the after school life, and that the visitor be asked to advise on all questions affecting the welfare of the child. Arrangements have now been made for this to be done.

Physically Defective.—No special arrangements at present exist for the special education of this group. A few children have been accommodated in the ordinary elementary schools. The necessity for the provision of a special school was dealt with in a report made in 1910.

Epileptics.—There are at present 6 children in residential institutions, approved by the Board.

Deaf and Dumb.—Two children at present receive instruction in the local institutions for the Deaf and Dumb.

Blind.—Twelve children are receiving education in the Barclay Home or the Blind Asylum in Brighton.

Moral Defectives.—The Education Authority, in conjunction with the London County Council, have a residential industrial school at Portslade, to which such cases are sent.

The following table gives statistics relating to the after care and after school life of children educated by the authority at various schools and institutions for the defective. As far as possible the records have been brought up to date by particulars obtained by the Head Mistress of the special school and the School Doctor.

The results of the education given are not encouraging; they point to the absolute necessity of further supervision after school age for fully 50 per cent. of the cases.

After Care Statistics (Children left).

	Mentally Deficient		Blind.		Deaf.		Epileptic.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
Number under observation	48	27	6	7	8	2	2	1
Transferred to other Schools	14	5	...	...	...	...	...	...
Discharged through illness or unteachable	10	2	...	...	...	...	...	...
Deaths	3	1	...	...	...	...	...	...
Lost trace of	5	6	3	3	1	...	1	...
Institutions—								
Colony	1	...	...	...	...	...	...	...
Workhouse	2	3	...	...	...	...	...	...
Prison	1	...	...	...	...	...	...	...
Epileptic	1	...	...	...	...	...	...	1
Blind ... ..	...	...	2	1	...	...	...	...
Asylum ... ..	...	...	...	...	...	1	...	...
Useful at home	2	5	...	...	1	1	...	...
Not useful at home	1	5	...	...	1	...	1	...
Earning regular wages	8 (average wage, 3/6)	...	1 (4/-)	3 (3/-)	2 (4/-)	...	...	...
Period under supervision...	May, 1906	Oct., 1911.	1899.	July, 1910.	1897.	July, 1910.	1907.	July, 1910.

(i) INSTRUCTION IN PERSONAL HYGIENE AND TEMPERANCE.

Definite instruction in Hygiene and Temperance, on the lines of the Official Syllabus issued by the Board of Education, is given in all of the 52 departments for senior children. In accordance with Circular 758 on the training of girls in infant care and home management, this branch of instruction has been correlated as far as possible with other school work, and in many departments a practical and systematic training is given, based on the scheme described in "Home Management" (Chambers & Co.: Wilena Hitching). This has been energetically taken up by the Head Teachers in many Girls' Departments, and is looked upon as a most important branch of the older girls' education.

MUNICIPAL SCHOOL FOR HOME TRAINING AND MODEL HOME.

This school, which was opened in September, 1910, provides a thorough training in domestic work for girls who have just left elementary schools, with practical work in a Model Home; a full account of the method of working and curriculum was given in the Report for 1910. It has proved very successful, and is now well attended by girls leaving the elementary schools at the age of 14.

Instruction in Cookery.—All girls of 11 in Standard IV. and upwards receive two courses of instruction in cookery during the last three years of school life; each course represents 100 hours instruction, half of which is spent in practical work. There are six centres, which are admirably equipped and managed, for such instruction.

Physical Exercises.—These are carried out according to the course suggested in the new code (1909), *i.e.*, on a modified Swedish system.

The drill in some of the schools was well done, and the children were well disciplined; in others, the number of children at drill was too great to enable adequate supervision to be exercised, the consequence being that many of the children benefitted little by it.

The exercises should be thoroughly enjoyed by the children. Care must be taken to prevent the children becoming "bored," as they do if the lesson be taken slackly. Lack of freedom, from improper dress, is also objectionable. While one cannot expect to obtain for all children a rational costume, yet in summer, for boys, it should be quite practicable to get all vests and coats removed before the drill commences.

General Arrangements for Boys.—Physical drill on 2 days during week, $\frac{1}{2}$ hour lesson; or on 1 day, 1 hour lesson. Swimming, 1 day in week, lesson of $\frac{1}{4}$ to $\frac{3}{4}$ hour. Organized games, 1 day in week, 1 to 2 hours.

Girls.—Physical drill in one or two schools for short periods only of 15 minutes, 4 times a week, instead of 1 hour once weekly.

Infants.—Physical drill and organized games daily in most schools. As a rule physical drill only with older children, and organized games chiefly for younger children. Times given vary greatly, 1 hour to 6 per week.

Breathing Exercises are in most schools carried out systematically; it would be of great advantage if this was so in all schools, as by such means the teachers would immediately detect all cases of pronounced nasal obstruction, and would be able to bring these children out for the medical inspection. There has been a marked drop in the number of mouth breathers during the last year, and this is probably a direct result of medical inspection (adenoid cases being advised to secure treatment) and of the increased attention paid to this condition by teachers.

Organized Games.—During summer, classes of children are taken out to various parks and open spaces and there take part in organized games. This is admirably carried out in some schools, but naturally the success or otherwise of organized games depends upon the teachers; where sympathy is not felt with this movement it is generally a failure. In cases in which any considerable distance has to be traversed before arriving at the park, it would be advisable to limit the amount of exercise for the more delicate children.

Suggestions for organized games in elementary schools were drawn up and circulated among Head Teachers in 1909—a copy of these suggestions was included in the Report for that year.

Where the organized games are carried on at a distance from the school, arrangements have now been made to allow the session to be completed by open-air instruction, instead of the class having to return to the school.

Swimming.—Instruction is now given from May to October to selected pupils of 11 to 13 years of age (boys and girls). The tuition is carried out at the Corporation Baths, the Swimming Bath at St. Luke's Terrace, and Brill's Baths. One instructor takes a class of 20 children. Scholarships giving free admission to the Public Baths are awarded by the Baths Committee to one scholar from each of the 25 boys' and 22 girls' departments affiliated to the Elementary Schools Athletic Association. Certificates are awarded to all

children who have learnt to swim. The Education Committee give 12 free tickets, for use in the Public Baths, to each holder of a certificate. Lessons last 45 minutes; there are three male and two female instructors—one male being engaged for full time. Baths cleaned and refilled twice weekly.

During 1911, 658 boys and 262 girls were taught to swim out of a total of 1,309 boys and 817 girls attending for instruction.

ORGANIZATION AND ADMINISTRATION OF THE BRIGHTON ELEMENTARY SCHOOLS ATHLETIC ASSOCIATION.

For many years past the teachers of Brighton have taken a very active part in the organization of school games and sports among elementary school children. The following are the chief points of interest in this work:—

1. *Swimming*.—Annual sports are held for boys and girls separately. Water polo matches are arranged between the schools—the semi-final and final rounds being fought during the sports. These sports aid greatly in encouraging children to learn to swim.

2. *Athletic Sports* (since 1887).—Annual sports are held in July. The races are graduated carefully; the entrants being approximately of similar ages, and from similar types of schools. Races are for both girls and boys.

Elementary Schools Football Association (since 1892).—There are senior and junior leagues for schools in Brighton and Hove; also the Barlow Challenge Cup for competition on the knock out system. A County Shield is given for competition among clubs belonging to the Sussex Schools Association. The administration of this branch is chiefly carried on by assistant teachers. Last year the Shield was won by a combined team from the Brighton and Hove Schools.

Open Air Schools, etc.—No special arrangements were made for open air schools or holiday camps. In schools in which a suitable playground is available it is found possible to conduct some lessons in the playground; this should certainly be taken advantage of more by teachers who have suitable schools.

WORK IN CONNECTION WITH THE EDUCATION (PROVISION OF MEALS ACT), 1906.

In the Report for 1908 a short history of the movement and the administration and organization were discussed.

All children for whom an application form is received are weighed and measured, and in special cases thoroughly examined by the School Medical Officer or School Doctor. During 1910-11 the total number of examinations made was 1,643 (1908 = 2,006; 1909 = 2,392; 1910 = 1,654).

The children recommended for free meals were those of deficient physique, deficient weight in relation to height, tuberculous and anæmic children, etc. Of the applications received, 46 per cent. were recommended for free meals on medical grounds.

General Arrangements.—The cooking is carried out at one centre (Richmond Street), from which the food is distributed to other centres.

During the winter, 1910-11, two other centres have been open, viz., Elm Grove and Queen's Park.

Children in attendance at the special school are, as formerly, supplied with food provided by the Secondary School Cooking Centre.

Feeding on Saturdays was stopped in 1909.

The superintendence of meals is undertaken by voluntary lady helpers.

Canteen tickets are collected, and the registers are marked at each centre by School Attendance Officers.

Periodical visits were made to the chief centres; the materials used for meals were always found to be of good quality, and the cooking good. For menus, see last Annual Report.

An appeal was again made this last Christmas by a Voluntary Committee for funds to feed the children during the Christmas Vacation, and a sufficient sum was realized to enable all the children on the Free Meal List at that time to be provided with breakfasts.

For statistical purposes the records of the financial year, 1910-1911, are available, and those of the summer session for 1911.

	1907-8	1908-9	1909-10	1910-11
Approximate number of nominations	—	2300	1713	2100
Actual number of children who have received any free meals during the year	1213	1427	902	1050
Total number of meals	86202	113490	64246	76701
Penny tickets sold	2409	1234	2355	3679
Average number of free meals granted per day:—				
Summer session	98	257	250	219
Winter session	620	844	450	491
Highest number of meals granted per day	805	1097	700	—
Lowest number of meals granted per day	82	187	221	—
Total net cost of food supplied		£246	10 10	
Average cost per meal			$\frac{3}{4}$ d.	

Children from 22 of the 32 schools have received meals; the percentage of children thus fed to the number of children on the books of the elementary schools is 5.9 per cent. (1908-9 = 8 per cent.; 1909-10 = 5 per cent.).

The following table shews the percentage of children granted meals to the number on the books for groups of schools:—

Per cent. of Children granted Meals.	No. of Schools.		
	1908-9.	1909-10.	1910-11.
30 per cent. and over ...	1 ...	— ...	1
20 " " ...	4 ...	1 ...	1
10 " " ...	7 ...	6 ...	7
Under 10 per cent. ...	15 ...	15 ...	13

Of the 1,050 children who received any Free Meals, 550 were recommended by the School Doctor on medical grounds; 446 were not recommended by the School Doctor, but were fed on economic grounds; 54, for various reasons, were not examined.

The following table shews the records of the summer session, 1911 (April—July):—

The chief centre alone was opened.

	1908	1909	1910	1911.
Approximate number of nominations ...	— ...	450 ...	400 ...	375
Number of children who received any free meals ...	437 ...	357 ...	321 ...	235
Per cent. of children fed to number of children on the rolls ...	2.4 ...	1.9 ...	1.7 ...	1.2
Highest weekly number fed ...	320 ...	289 ...	253 ...	191
Average daily number of meals ...	257 ...	250 ...	220 ...	149
Total number of meals ...	14577 ...	14259 ...	*14288 ...	†8485

*The increase in this column is due to the earlier opening of the centres in 1910.

†The diminution is partly accounted for by a shorter term and the Coronation holidays.

The figures in each space shew a decrease during 1909, 1910, and 1911.

A special report was made on the examination and re-examination of children receiving free meals during the Winter Session, 1910-11. The report gave every encouragement to the Canteen Committee to continue the feeding of underfed school children.

THE FEEDING OF CHILDREN UNDER SCHOOL AGE.

In connection with the system of registering Canteen-fed children in the elementary schools, it was noticed that a small proportion of children under school age belonged to the same families. Obviously the same conditions in the promotion of malnourishment and underfeeding are operating in these cases also. Arrangements were therefore made by a Voluntary Committee for the use of the School Canteens for the feeding of such children. The Canteen Sub-Committee expressed their willingness to co-operate and, as an experiment, decided to allow the use of the Richmond Street Centre for the feeding of a limited number (12) of such children (aged 3-5) at a cost to the voluntary committee of 1d. per meal. A small group was, therefore, selected by the School Doctor, and these children have been fed during the latter half of the winter session. A fuller account of the results of this feeding scheme will be given in the Report for 1912.

PREVENTION OF CRUELTY TO CHILDREN ACT, 1904.

The duties under this Act (formerly carried out by H.M. Inspector of Factories) are to see that all restrictions and conditions endorsed upon the licences granted by the Magistrates to permit children to perform in places of public entertainment are properly complied with.

79 children were licensed during 1910, 66 girls and 13 boys.

53	were	employed	as	singers and dancers.
16	„	„	„	actors and actresses.
4	„	„	„	acrobats.
1	„	„	„	musician.

The children were all between the ages of 10 and 14 years.

3	were	licensed	till	9.30 p.m.
6	„	„	„	10. 0 p.m.
13	„	„	„	10.15 p.m.
51	„	„	„	10.30 p.m.
4	„	„	„	10.45 p.m.
2	„	„	„	11. 0 p.m.

Only two irregularities have occurred throughout the year. One manager was cautioned for exceeding the time allowed, and one for irregularity in regard to school attendance.

36 night visits and 48 day visits were made in the carrying out of this work.

EMPLOYMENT OF CHILDREN ACT.

Lists of children employed in shops, etc., have been regularly supplied by the Education Authorities. Some of these are very full and accurate in their information, and have been of great assistance to the Inspector.

The following table gives the total number of names submitted on the three lists sent in during 1910:—

	Boys.		Girls.
All Souls'	23	All Souls'	3
Central	107	Central	—
Christ Church	2	Christ Church	—
Circus Street	28	Circus Street	9
Ditchling Road	108	Ditchling Road	4
Elm Grove	96	Elm Grove	—
Finsbury Road	94	Finsbury Road	45
Hanover Terrace	108	Hanover Terrace	6
Lewes Road	106	Lewes Road	19
Loder Road	81	Loder Road	—
Middle Street	68	Middle Street	2
Pelham Street	110	Pelham Street	15
Preston Road	130	Preston Road	3
Park Street	60	Park Street	4
Richmond Street	68	Richmond Street	49
St. Mary's	44	St. Mary's	5
St. Paul's	41	St. Paul's	1
St. Martin's	33	St. Martin's	11
St. Joseph's	24	St. Joseph's	2
St. Luke's Terrace	95	St. Luke's Terrace	11
St. Mark's	53	St. Mark's	7
St. John's	95	St. John's	17
St. John the Baptist's	22	St. John the Baptist's	—
St. Bartholomew's	55	St. Bartholomew's	16
St. Stephen's	86	St. Stephen's	—
Stanford Road	97	Stanford Road	3
St. Mary Magdalene	3	St. Margaret's	2
	1,837		234

The following table gives the total number of children employed for the past 3 years, and the number of contraventions of the bye-laws.

1909 ...	1,917 children employed,	429 offences (22 per cent.).
1910 ...	1,948 ,, ,,	332 ,, (17 per cent.).
1911 ...	2,069 ,, ,,	271 ,, (13 per cent.).

In 1910, 168 Warning Notices and copies of the bye-laws were sent to employers.

In 1911, 81 Notices were sent. These notices have an excellent effect, those written to at once complying with the bye-laws.

290 Day and 84 Night Inspections were made. The bye-laws were generally well complied with. During exceptional weeks, such as Christmas week, etc., some irregularities occurred, but the employers invariably sent the children home as soon as their attention was drawn to the fact that they were being employed beyond the time allowed.

MEDICAL INSPECTION IN THE SECONDARY SCHOOLS, 1911.

A. Boys' Department.

No. on roll ...	640.
Average Attendance ...	580.
Total examined ...	506.

(1). HEIGHT AND WEIGHT STATISTICS.

A column has been added shewing the deficiency or excess (in kilograms and centimetres) below or above the measurements of the Secondary Boys' School.

The following tables give a comparison of the heights and weights of Secondary School boys, contrasted with those of the Elementary School, Public School and general average for the country.

WEIGHT (Kilograms.)

Age.	Total Ex. Secondary School.	Secondary School.	Elementary School.	Deficiency or Excess.	*Public School.	Deficiency or Excess.	General Population	Deficiency or Excess.
9	14	26.8	24.8	-2.0	—	—	27.4	+ .6
10	64	30.6	26.0	-4.6	30.6	0	30.6	0
11	32	31.9	29.2	-2.7	33.1	+1.2	32.7	+ .9
12	52	35.0	31.9	-3.1	36.4	+1.4	34.8	-.2
13	78	38.8	33.6	-5.2	40.2	+1.4	37.4	-1.4
14	100	42.8	38.3	-4.5	45.0	+2.2	41.8	-1.0
15	88	48.1	—	—	50.2	+2.1	46.6	-1.5
16	37	54.8	—	—	58.2	+3.4	54.0	-.8
17	19	55.4	—	—	64.2	+8.8	59.4	+4.0

HEIGHT (Centimetres.)

9	14	130.6	126.2	-4.4	—	—	126.2	-4.4
10	64	137.9	129.7	-8.2	135.6	-2.3	131.6	-6.3
11	32	141.0	134.4	-6.6	139.4	-1.6	135.8	-5.2
12	52	146.3	140.1	-6.2	144.6	-1.7	139.6	-6.7
13	78	149.6	143.5	-6.1	149.4	-.2	144.5	-5.1
14	100	155.4	154.5	-.9	154.8	-.6	150.6	-4.8
15	88	161.6	—	—	160.8	-.8	158.0	-3.6
16	37	166.0	—	—	168.8	+2.8	163.4	-2.6
17	19	167.2	—	—	172.0	+4.8	168.2	+1.0

*Rugby, &c.

NOTE.—1 Kilogram, 2½ lbs. 1 Centimetre, ⅓ ins.

The following points are of interest:

1.—In regard to *weight* secondary boys are much in advance of elementary boys; they are slightly in advance of the general population at school ages, and are slightly inferior to public school boys, but the inferiority between the secondary school boy and public school boy is very slight, while between the secondary school boy and the elementary school boy it is very marked. It should be noticed that the weights of the public school boy include clothing of 7 lbs. average, while the secondary school boys have their coats, waistcoats, and boots removed before weighing. This would mean that about 4 lbs. (or 1.8 kilogram) should be subtracted from the public school boy column to bring the weight to one which could be compared equally with the other columns.

2.—In regard to *height*, secondary school boys are greatly superior to elementary school boys and the general population of corresponding ages, and are slightly superior to public school boys.

The general conclusions are the same as those derived from 1910 records.

(2). VISION STATISTICS.

The visual power *with* spectacles is given in those cases where boys were already wearing spectacles; this raises the proportion of children with good vision.

The following is a table giving a comparison between secondary and elementary school boys for 1911:—

	Elementary School (1911).	Secondary School (1911).
Vision good or fair ($\frac{2}{3}$ or $\frac{3}{4}$)	88.8 per cent.	91.7 per cent.
Vision moderate ($\frac{1}{4}$) ...	6.0 per cent.	5.0 per cent.
Vision bad ($\frac{1}{8}$)	5.1 per cent.	3.2 per cent.
Per cent. of Boys wearing spectacles	3.6 per cent.	4.3 per cent.
Per cent. who require spectacles now or require them changing...	5.1 per cent.	4.0 per cent.

It will be noticed that the percentages favour secondary school boys; this is partly due to the fact that many of those with bad vision are already wearing spectacles, and have raised the standard accordingly.

The next table shews the percentage of visual power and myopia in the various forms. A considerable number of boys show slight myopia in Class I., but the general tendency is for myopia to increase with school age.

Form.	Number Examined.	Vision.			Myopia per cent.
		Good.	Moderate.	Bad.	
1 ...	34	97.0	2.9	—	23.5
2 ...	45	90.0	6.6	2.2	—
3 ...	104	92.3	4.8	2.8	14.4
4 ...	96	92.7	6.2	1.0	11.4
5 ...	150	90.6	5.3	4.0	12.0
6 ...	77	90.9	2.6	6.5	18.1

B. Girls' Department.

No. on roll	403.
Average attendance ...	382.
Total examined	378.

(A.). HEIGHT AND WEIGHT STATISTICS.

A column has been added shewing the deficiency or excess (in kilograms and centimetres) below or above the measurements of secondary girls' school.

WEIGHT (Kilograms).

Age.	Total Ex. Secondary School.	Secondary School.	Elementary Schools.	Deficiency or Excess.	*Public School.	Deficiency or Excess.	General Population	Deficiency or Excess.
8	1	19.3	23.0	+3.7	—	—	—	—
9	3	28.7	24.8	-3.9	—	—	—	—
10	12	28.5	26.1	-2.4	31.3	+2.8	28.1	-.4
11	41	33.3	28.4	-4.9	36.0	+2.7	30.9	-2.4
12	59	36.7	33.4	-3.3	39.1	+2.4	34.7	-2.0
13	80	40.7	35.3	-5.4	43.0	+2.3	39.5	-1.2
14	71	45.4	40.0	-5.4	47.8	+2.4	43.8	-1.6
15	53	48.9	—	—	50.5	+1.6	47.6	-1.3
16	28	52.6	—	—	52.8	+.2	51.2	-1.4
17	15	53.0	—	—	—	—	52.2	-.8
18	1	45.4	—	—	—	—	53.4	+8.0
HEIGHT (Centimetres).								
8	1	118.7	125.1	+6.4	—	—	—	—
9	3	133.6	126.2	-7.4	—	—	—	—
10	12	133.4	129.0	-4.4	135.6	+2.2	129.8	-3.6
11	41	141.7	133.8	-7.9	141.5	-.2	134.8	-6.9
12	59	147.3	141.9	-5.4	147.3	0	141.5	-5.8
13	80	153.4	144.6	-8.8	151.3	-2.1	146.8	-6.6
14	71	156.8	147.6	-9.2	154.4	-2.4	151.8	-5.0
15	53	159.6	—	—	158.9	-.7	154.8	-4.8
16	28	162.0	—	—	159.9	-2.1	156.8	-5.2
17	15	163.0	—	—	—	—	158.8	-4.2
18	1	162.6	—	—	—	—	160.0	-2.6

* North London Collegiate School.

NOTE.—1 Kilogram, 2 lbs. 1 Centimetre, $\frac{1}{2}$ ins.

1.—In regard to *weight*, the secondary school girl shews marked superiority over the elementary school girl, and a moderate increase over the average general population of corresponding ages. She is considerably inferior to the public school girl, but the inferiority is so consistent at each age that one is inclined to suspect that much of it is apparent rather than real, and that a considerable portion of it may be attributed to dress rather than to body weight. Many of the secondary school girls were weighed in gymnastic costumes, weighing considerably less than the usual dress of girls.

2.—In regard to *height*, the secondary school girl is much better developed than the corresponding elementary school girl and the average girl, and shews slight superiority generally over the public school girl.

(B.). VISION STATISTICS.

The visual power *with* spectacles is taken in those children already wearing spectacles. This raises the proportion of children with good vision.

	Elementary School (1911).	Secondary School (1911).
Vision good or fair ($\frac{3}{4}$ or $\frac{2}{3}$)	85.3 per cent.	88.4 per cent.
Vision moderate ($\frac{2}{3}$) ...	8.1 per cent.	5.8 per cent.
Vision bad ($\frac{1}{3}$)	6.6 per cent.	5.8 per cent.
Per cent. of Girls wearing spectacles	5.0 per cent.	10.0 per cent.
Per cent. who require spectacles now or require them changing ...	6.6 per cent.	7.1 per cent.

As in the case of the boys, it will be noticed that the vision is apparently rather better in the secondary girls' school than in the elementary schools: this is due to the fact that many of the cases of defective vision have already been corrected by spectacles, and now rank as cases with good vision.

Actually the vision is considerably worse, as may be seen by noticing the percentage of children already wearing glasses or requiring them in the two classes of schools.

The next table shews generally the visual power of the various forms and shews the increase of myopia during school life. It is much more marked than in the boys' department.

Form.	Number Examined.	Vision.			Myopia per cent.
		Good.	Moderate.	Bad.	
1 ...	9	89.0	11.1	—	—
2 ...	18	88.9	5.6	5.6	5.6
3 ...	136	86.0	7.3	6.6	12.5
4 ...	88	89.8	3.4	6.8	13.7
5 ...	69	91.3	5.8	2.9	23.2
6 ...	58	87.9	5.2	6.9	18.9

(11.) VIBRO EXACTIO

The following table shows the results of the experiments on the propagation of vibrations in a chain of spheres. The spheres were of equal mass and were in contact with each other. The velocity of the wave was measured by the time taken for a pulse to travel a certain distance.

Distance (cm)	Time (sec)	Velocity (cm/sec)
100	0.015	6666
200	0.030	6666
300	0.045	6666
400	0.060	6666
500	0.075	6666
600	0.090	6666
700	0.105	6666
800	0.120	6666
900	0.135	6666
1000	0.150	6666

The results show that the velocity of the wave is constant and is equal to 6666 cm/sec. This is in agreement with the theoretical value of the velocity of a longitudinal wave in a chain of spheres.

The following table shows the results of the experiments on the propagation of vibrations in a chain of spheres. The spheres were of equal mass and were in contact with each other. The velocity of the wave was measured by the time taken for a pulse to travel a certain distance.

Distance (cm)	Time (sec)	Velocity (cm/sec)
100	0.015	6666
200	0.030	6666
300	0.045	6666
400	0.060	6666
500	0.075	6666
600	0.090	6666
700	0.105	6666
800	0.120	6666
900	0.135	6666
1000	0.150	6666