

[Report 1898] / Medical Officer of Health, Eastbourne County Borough.

Contributors

Eastbourne (England). County Borough Council.

Publication/Creation

1898

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BOROUGH OF EASTBOURNE.



ANNUAL REPORT

FOR 1898 ON THE

Health of Eastbourne,

VITAL STATISTICS, SANITARY WORK, &c.

W. G. WILLOUGHBY, M.D., LOND.,

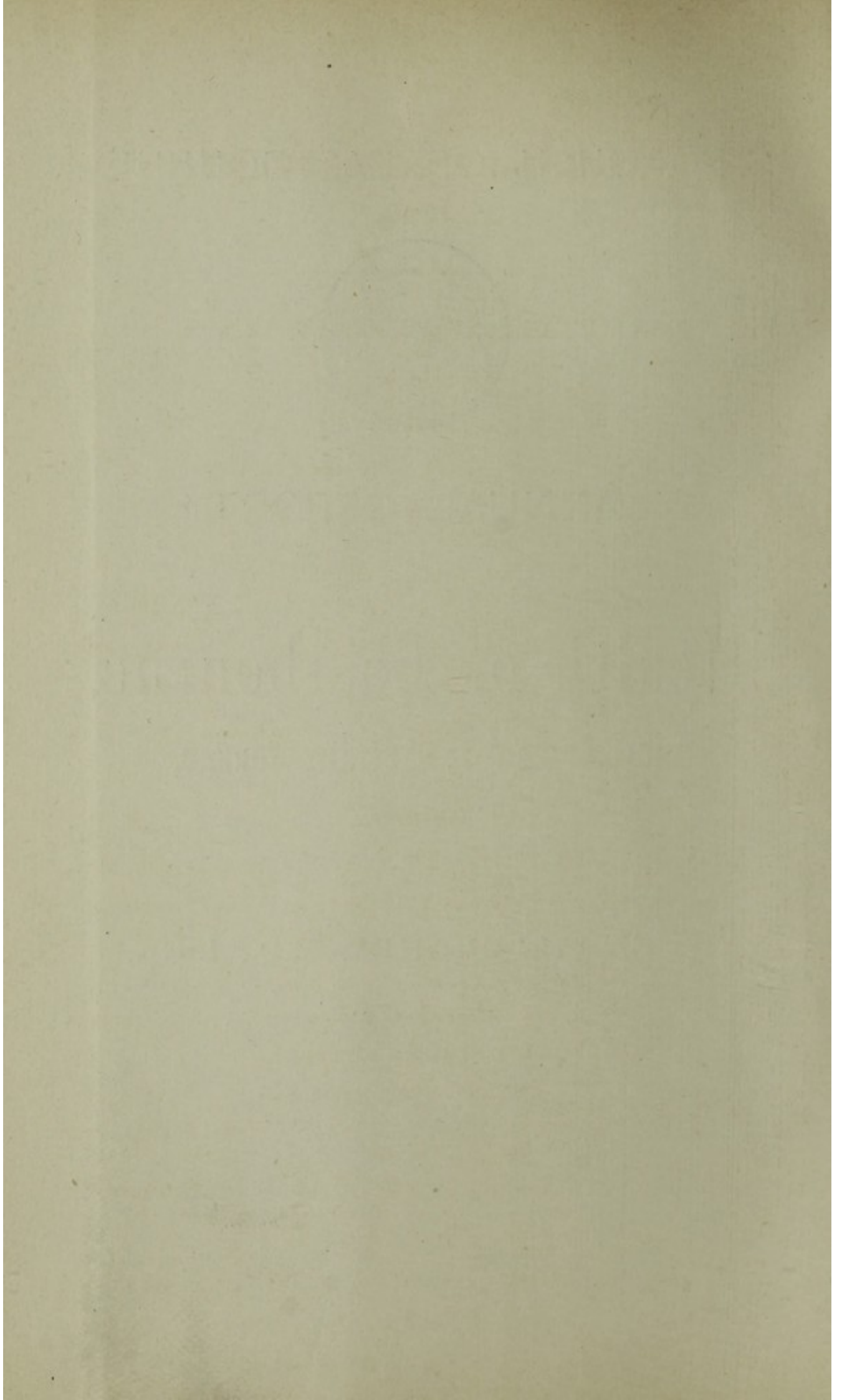
*M.R.C.S. Eng., L.R.C.P. Lond; Diplome in Public
Health of London and Cambridge Universities.*

MEDICAL OFFICER OF HEALTH.

Eastbourne :

Printed by V. T. SUMFIELD, "Standard" Office, Station Street.

1899.



SANITARY DEPARTMENT.
1898.

SANITARY COMMITTEE, 1897-8.

Mr. Alderman STRANGE, J.P., *Chairman*.

Mr. Councillor BREACH, *Deputy-Chairman*.

The Mayor, The Duke of DEVONSHIRE, K.G.

Mr. Alderman SKINNER, J.P.

Mr. Councillor MARTIN.

„ Councillor ADAMS.

„ „ MITCHELL.

„ „ BRADFORD.

„ „ NEWMAN.

„ „ O'BRIEN HARDING.

„ „ SHERWOOD.

Mr. Councillor WHITE.

1898-9.

Mr. Alderman KEAY, *Mayor*, Mr. Councillor HILLMAN, and Mr. Councillor ROWE, *vice* Messrs. Councillors ADAMS and MITCHELL.

STAFF.

Medical Officer of Health:

DR. W. G. WILLOUGHBY.

Sanitary Inspectors:

Mr. W. GRANT, Mr. J. H. OLLETT, and Mr. R. M. METCALFE.

Clerks:

MESSRS. R. PEIRCE and C. H. TAYLOR.

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APPENDIX.

Tables of Society of Medical Officers of Health and others.

BOROUGH OF EASTBOURNE.

1898.

SITUATION.—Latitude, $50^{\circ} 46'$ N. ; Longitude, $0^{\circ} 17'$ E.

ELEVATION OF THE AREA BUILT OVER.—Varies from 140 feet above (at West End) to 4 feet below high-water mark (in the East of the Borough).

SLOPE.—From West to East. ASPECT.—South and South-East.

AREA.—Of the Borough, 5,410 Acres; of the Town (about) 1,000 Acres.

DENSITY OF POPULATION.—For the Borough, 8.4 persons per acre ; for the Town, 45.5.

NO. OF INHABITED HOUSES.—At Census (April, 1891), 5,190 ; at end of 1898, about 6,550.

POPULATION.—Census (1891), 34,969 ; Estimated at the middle of 1898, 45,500.

BIRTH-RATE.—20.52 per 1,000 ; Males, 478 : Females, 456.

DEATH-RATES.—Including all deaths, 10.85 ; and excluding deaths of visitors, 10.2 per 1,000.

Zymotic, total, 2.06 ; and from the seven principal zymotic diseases, 1.84 per 1,000.

Infantile Mortality, 139 per 1,000 births.

MEAN ANNUAL TEMPERATURE.—51.6.

HOURS OF BRIGHT SUNSHINE RECORDED.—1791.9.

TOTAL RAINFALL.—23.64 inches.

To His Worship the Mayor, and to the Aldermen
and Councillors of the Borough of Eastbourne.

GENTLEMEN,—

In accordance with Section 14 of the Local Government Board Order as to the duties of the Medical Officer of Health, I have the honour of submitting herewith my Annual Report on the Health of Eastbourne, Vital Statistics, &c., for 1898.

This is the fifth Annual Report I have had the honour of submitting to you, and in it I have kept to the same form of Report as in previous years, so that any parts of the various reports may be compared and easily referred to.

The death-rate for the year 1898 in Eastbourne has been 10·8 per 1,000, that in the country at large 17·6.

The average death-rate for the past five years, 1894-8 inclusive, has been just under 10·63 per 1,000 per annum. The average death-rate for the previous five years—namely, 1889 to 1893 inclusive—was 13·77, the past five years therefore showing a most satisfactory decline in the death-rate.

In 1896 one only of the 100 large towns in the Kingdom had a lower death-rate than Eastbourne. In 1897 Eastbourne had absolutely the lowest. In 1898, when the rates are published I think it will be found that Eastbourne, the seventy-fifth town in England and Wales in population, is still close to the lowest, the total death-rate for the country, like that of Eastbourne, having been higher in 1898 than in 1897.

The rates I have referred to above are, of course, inclusive rates, and do not exclude any deaths whatever which took place within the Borough.

Although I am unable to report a record death-rate, I have much pleasure in reporting that 1898 was a record year in that fewer notifications of Infectious Disease were made than in

any year since the Notification Act was passed—namely, 1889, notwithstanding the yearly increase of population. It is also very satisfactory to be able to report that over 90 per cent. of the cases notified, of the diseases received into the Sanatorium, were removed to that Institution.

The table on page 35, showing how the death-rate of Eastbourne compares quarter by quarter with that of England and Wales, is particularly interesting.

Owing to the growth of the Borough and the increasing number of persons who wish to take advantage of the Sanatorium, it is becoming urgent that the proposed extension should be commenced, powers for compulsory purchase having been obtained.

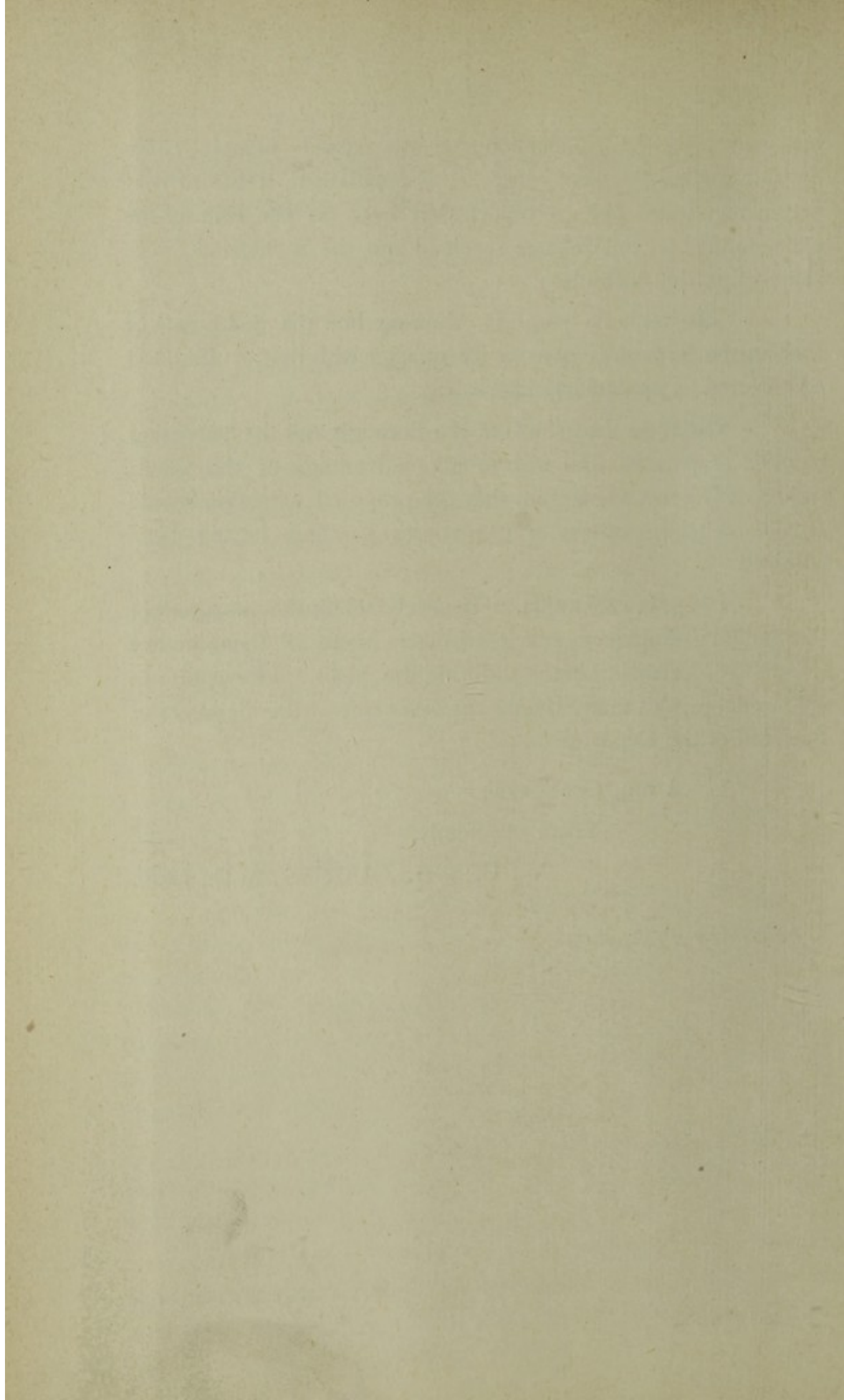
I beg, in conclusion, to sincerely thank the members of the Sanitary Authority, and particularly those of the Sanitary Committee, for their kindness during the year. I have also to acknowledge with many thanks the assistance of the members of the Staff of the Department.

I am, Gentlemen,

Yours obediently,

W. G. WILLOUGHBY, M.D., LOND.

February 17th, 1899.



THE BOROUGH.

The Borough of Eastbourne is formed by the combined civil parishes of Eastbourne and Norway. These two parishes are now one for most purposes, and in this report Norway is simply treated as part of the East Ward.

The acreage of the Borough is as follows :—

Eastbourne Parish ...	...	...	4,755
Norway ...	...	...	655
			—
The Borough ...	...	...	5,410

The name "Eastbourne" throughout this report refers to the Municipal Borough, *i.e.*, Eastbourne and Norway parishes, and the statistics given apply to the Borough and not to the parish alone or to the registration district of that name as mentioned in the Registrar General's reports.

A large portion of the Borough, especially on the West and North, consists of agricultural and other land not occupied by houses. Of the total 5,410 acres, rather over 1,000 acres are built on and form the town. The area built on is surrounded by agricultural land or sea in all directions, and the buildings in no case extend to the Borough boundaries except towards the sea.

The Borough is divided into four wards and into ~~eight~~^{nine} Ecclesiastical sub-districts, as follows :—

WARDS.—East, Central, West, and St. Mary's.

ECCLESIASTICAL PARISHES.—St. Mary's, St. John's, All Saints', St. Saviour's, Holy Trinity, All Souls', St. Anne's, ~~and~~ Christ Church, *and St. Peter's.*

The wards are of unequal population, but for statistical and sanitary purposes the division into wards is very convenient.

There being three Inspectors of Nuisances, each in charge of a part of the Borough, there are three Sanitary Districts, as follows :—1, St. Mary's Ward ; 2, West and Central Wards ; 3, East Ward.

The principal institutions from a sanitary point of view are the following :—

The Borough Infectious Diseases Hospital in St. Mary's Ward.

The Isolation Cottage in the East Ward.

The Langney Hospital, closely adjoining the East Ward.

The Union Workhouse and Infirmary in St. Mary's Ward.

All Saints' Convalescent Home in the West Ward.

The Princess Alice Hospital in St. Mary's Ward.

Site, Soil, etc.

The Borough is situate on and at the foot of a slope running chiefly from the downs on the West to the level ground at the East end of the South Downs.

The highest point of the Borough on the Downs is about 590 feet above sea level, but the elevation of the portion covered by houses varies from about 150 feet above in the West to 4 feet below high water mark in the East. The Downs shelter the town from the West and South-west, the latter being the direction of most of the storms or gales. The front of the town is open to the sea facing South and South-east, and this ensures a very large amount of sunshine, as is shewn by the sunshine record.

One of the most satisfactory characteristics of Eastbourne is the large extent of the Borough and of the area built over compared with the number of its houses and population. The large extent and number of open spaces and gardens conduces to its healthiness.

The geological survey shews much variation in the soil in the different parts of the Borough. Eastbourne is for the greater part on chalk. There is a certain amount of clay soil in the central part of the town and a strip of upper greensand, which is narrow along the Grand Parade and widens as it passes

from West to East to about Bourne Street, where it narrows again until it ends about half-a-mile East of the Pier. The remainder of Eastbourne in the East is on alluvium and on the beach.

Of the Four Wards, the whole of the West Ward; and, with a very small exception, the whole of St. Mary's Ward is on chalk; the East Ward is to a small extent on chalk and greensand, but mainly on alluvium and shingle; the Central Ward is on chalk principally, but also on alluvium, and, to some extent, on greensand and clay.

In the valleys the chalk and greensand are covered by valley gravel.

Meteorology.

The Meteorology of the Borough is carefully recorded in Mr. Sheward's Annual Report where full details can be obtained. Some of the data have been arranged in a table in the Appendix; a coloured chart is also given there, showing in a graphic manner some of the items and the deaths week by week. Among the special features of the meteorology of 1898 were the small rainfall, the high mean temperature in the winter months both of air and sea, and the large amount of sunshine. There were but 71 sunless days during 1898.

Water Supply.

The sources of the Water Supply of Eastbourne are now three in number, viz. : Friston, Holywell (including the Warren), and Wannock. The fourth source referred to last year, Bedford Well, has been abandoned towards the close of the year, though for most of 1898 some water from that source was needed to maintain what always exists, viz. : a constant supply at a good pressure.

The three sources referred to above form the new water-works which were necessary owing to the Borough having outgrown the possibilities of supply from Bedford Well. This latter source of supply through over-pumping and consequent salinity

has had to be abandoned, as better water became obtainable at the three present sources. In consequence mainly of necessary permanent works at Friston, a lot of excellent water had to be pumped to waste from the headings in which men were working, otherwise the Bedford Well would have been used still less than it has been during 1898. As Bedford Well had to be used to some degree until towards the close of the year, the chlorine in the water was somewhat high in the summer months, and the water was harder than it should be.

Constant analyses (including bacteriological analyses) of the waters were made during 1898, samples being taken from each of the sources and from the high and low level supplies. The subjoined analyses by the Borough Analyst are typical. The samples from the sources were taken Dec. 14th, 1898 :—

ALL RESULTS IN GRAINS PER GALLON.

*Sample from.	F.	H.	W.	B.
Total Solids.....	22'05	24'5	19'6	97'65
Loss on ignition	7'6	6'0	7'0	28'0
Chlorine	2'3	3'1	1'9	35'1
Free Ammonia.....	'0014	'0014	'0028	'0042
Albuminoid Ammonia	'0028	'0021	'0028	'0021
Oxygen consumed in 1 hour at 100° C	'128	0'6	'100	'128
Nitrogen as Nitrates	'39	'17	'096	'48
Alkalinity as CaCo.....	8	8	8	10
Sulphates	trace	trace	trace	2'26
Nitrites	none	none	none	none
Hardness—Permanent	8	8	7	43
Temporary	8	8	8	10
Total.....	16	16	15	53

* F—Friston.

H—Holywell.

W—Wannock.

B—Bedford Well (abandoned
towards end of 1898).

The above are typical results of the examinations of the sources. The following by Sir E. Frankland are typical results of the examination of the supplies united :—

RESULTS OF ANALYSIS, EXPRESSED IN PARTS PER 100,000.

Description.	Total solid matters.	Organic Carbon.	Organic Nitrogen	Ammonia	Nitrogen as Nitrates and Nitrites.	Total combin'd Nitrogen	Chlorine.	Hardness.			Remarks
								Temporary.	Permanent.	Total.	
High service, 15th Dec., 1898...	33·04	·031	·009	0	·487	·496	4·0	14·5	6·7	21·2	Clear
Low service, 15th Dec., 1898..	37·32	·032	·010	0	·439	·449	4·2	14·7	7·4	22·1	Clear

The amount of water pumped into Eastbourne from the various sources in 1898 varied from twelve and three-quarter million gallons in the week ending September 11th down to rather over seven million gallons for the week ending Oct. 30th, the average amount being between nine and ten million gallons per week.

The proportions contributed by the various sources were in December, 1898 :—Friston, about $\frac{1\frac{1}{8}}$; Wannock, about $\frac{3}{18}$; Holywell and the Warren, about $\frac{4}{18}$; Bedford Well, none. The water from each source is practically similar, being from the chalk and having less than the usual hardness of such waters; the neighbourhood of each source is satisfactory.

Considering the serious deficiency in rainfall during 1898, it is a matter of satisfaction that the new sources were able to supply such a constant amount.

The water is in the hands of a private Company, who have kindly given me some of the above information.

Drainage.

The new Main Sewer, which became necessary, just as the new Water Supply, owing to the rapid growth of the Borough, has been completed in 1898 and is in work. The sewage passes to the outfall at Langney Point by natural fall at low tide and by ejectors at high tide. There are storm water outfalls elsewhere, but all the sewage goes into the sea, not stored and untreated at Langney Point, far to the east of the Borough and a very long distance from any houses.

House Refuse.

House Refuse is collected by the Corporation, except for a small area in the East Ward, where a private contractor removes the refuse. It is burnt in a "destructor." The supervision of the collection was transferred to the Sanitary Department in

1898, and owing to the increase of population a re-arrangement became necessary. Collection of refuse is now made once weekly in all houses, and should be made twice weekly in summer; this is now done at some of the larger premises.

Population.

At this distance of time from the census year it is difficult to obtain an accurate estimate as to the number of the population. In tabulating returns and calculating rates of mortality, birth rates, &c., it is essential for accuracy that the number of the population should be as exact as possible.

The first and principal method of estimating the number of a population is that of the Registrar-General. This method is based on the assumption that the rate of growth of population is still the same as it was in the previous intercensal period, and though this is liable to inaccuracy through various fallacies, it is the most reliable method as a rule. By this method of calculation the population in the middle of 1898 was 48,910—that is to say, that if the population of Eastbourne increased after 1891 at the same rate as it increased from 1881 to 1891, the population in the middle of 1898 was 48,910. This is the number that the Registrar-General uses in his returns and calculations.

The obvious fallacy in the above method of calculation is that probably Eastbourne has not grown at such a phenomenal rate since 1891 as it did between 1881 and 1891. Certainly the number of houses has not increased as rapidly. Calculating strictly according to the new houses since the Census and the population per house shewn at the census, the population would be about 44,000. After comparing the various methods, I find it probable that the population in 1898 was about 45,500, and it is that number on which the rates in this report are calculated. By taking a lower figure than the Registrar-General's estimate, in the case of the death-rate, for instance, the worst is given and the death-rate not made out any lighter than it really is. In this

estimate of 45,500, visitors are not included, except in so far as they were by the April, 1891, census; in the death-rate, however, their deaths are included unless the contrary is expressly stated, so that here again the worst of the death-rate is given.

Between the census of 1881 and that of 1891 the population increased just twice as much by excess of immigration over emigration as by excess of births over deaths. This latter, known as "natural increase," was 440 in 1898. If the conditions of increase existing from 1881 to 1891 continued therefore the population increased about 1,320 in the year. By these and various other methods of calculation it is found that the number 45,500 may be fairly taken as not overestimating the population number in 1898.

SEX CONSTITUTION OF THE POPULATION.

The sex constitution of the population of Eastbourne for 1898 is calculated on the supposition that the comparative rates of increase of the sexes still continue as in 1881—1891, when the males constituted 35·55 per cent., and the females 64·45 per cent., of the total increase of population in the ten years.

The following table shews the sex constitution of the population calculated in this way. The estimated numbers can only of course be approximate.

Year.	Males, Total.	Per- centage.	Females, Total.	Per- centage.	Total.	Excess of Females.
1881 (census)	10,060	45·7	11,954	54·3	22,014	1,894
1891 (census)	14,665	41·9	20,304	58·1	34,969	5,639
1898 (estimated)	18,404	40·4	27,096	59·6	45,500	8,692

It is improbable that this decrease in percentage of males compared with females has been continually going on at the same rate, but the above fairly represents the proportion of the sexes. If however the proportions of the sexes remain as in 1891

and have not altered as shewn in the above table, the numbers for 1898 would be 19,065 males and 26,435 females, a difference of 7,370.

In Eastbourne as in other similar health resorts there are fewer occupations and means of obtaining livelihood for men than in other places, hence the large disproportion in the numbers of the sexes.

AGE CONSTITUTION OF EASTBOURNE POPULATION.

The following table gives the 1891 and 1898 population of Eastbourne sub-divided according to age groups. The estimates for 1898 are calculated according to the tables given in the 1891 census report of the Registrar-General. The sexes are taken as given in the preceding table, and the age groups in the same proportion as they were at the last census.

Ages.	Census, 1891.			Estimated, 1898.		
	Males.	Females.	Total.	Males.	Females.	Total.
0—1	344	387	731	434	517	951
1—5	1354	1422	2776	1703	1905	3608
Total under 5 ...	1698	1809	3507	2137	2422	4559
5—15	3727	3685	7412	4696	4933	9629
15—25	2848	5161	8009	3559	6871	10430
25—65	5786	8771	14557	7252	11698	18950
65 and upwards...	606	878	1484	760	1172	1932
Totals	14665	20304	34969	18404	27096	45500

The percentage composition of the population of Eastbourne at different groups of ages is as in the following table. The figures for England and Wales are added for comparison, and the figures for 1891 are chosen, since they are exact.

Age Groups.	Eastbourne, per cent.	England and Wales, per cent.
Under 5 years of age	10'02	12'25
5—15	21'19	22'82
15—25	22'90	19'29
25—65	41'63	40'89
65 and upwards	4'24	4'72

The above tables and figures are worked out carefully because the age and sex constitutions of a population have an important bearing on the death and other rates.

The effect of influence of sex on Eastbourne death-rates is caused by the excess of females. In comparing Eastbourne rates with others it should be remembered that the excess of females renders a death-rate slightly smaller than it otherwise would be.

As regards age, Eastbourne is, as can be seen by the above table, on the whole, in very much the same position as England and Wales generally. In the period of very small death-rate—viz., from 5—15—Eastbourne has a smaller percentage of population; this is, however, more than counterbalanced by the smaller percentage of population in the under 5 years of age group, in which, owing chiefly to infantile mortality, the death-rate is a high one.

The distribution of the population according to Wards is shewn in the subjoined table. The 1898 estimate is only approximate and based principally on the increase in the number of dwelling-houses in each locality :—

Wards.	Population in 1891. (Census).	Population in 1898. (Estimate).
East	12113	16760
Central	10501	11208
West	5736	7322
St. Mary's	6619	10210
Total	<u>34969</u>	<u>45500</u>

The increase recently has been principally in the East and St. Mary's Wards and to a less extent in the West, as is shewn by the table below shewing the number of new houses in the respective Wards.

HOUSING OF THE POPULATION.

The following table shews the number of dwelling-houses in Eastbourne and in each Ward at the Census of 1891, and as estimated in 1898. The figures in the second column are only approximate, but may be taken as fairly correct:—

Wards.	Houses inhabited at Census, 1891.	Houses built since Census to end 1898.	Persons per house 1891 Census.	Houses certified in 1898.*
East	1927	711	6·2	226
Central	1528	69	6·8	—
West	716	149	8·0	15
St. Mary's	1019	446	6·5	62
	—	—	—	—
Totals	5190	1375	6·7	303
	—	—	—	—

The population density in the Borough as a whole in 1898 was 8·4 persons per acre; in the part of the Borough built over it was approximately 45·5 persons per acre.

The statement that the density of the population in the Borough is but 8·4 persons per acre must be taken with the supplement just given—viz., that the real density is about 45·5, which is still comparatively small. It is considerably to the advantage of the health of the population to be surrounded and intersected by open spaces as Eastbourne is.

House-building in Eastbourne is still increasing. From the Minutes of the Council during 1898 it may be seen that plans for over 346 dwelling-houses were passed, apart from other buildings.

* From figures kindly supplied by Mr. Field, Building Surveyor.

Building is being carried on mainly in the East and in St. Mary's Wards and to a smaller extent in the West Ward. The sites in the West and St. Mary's Wards being chalk and at a good elevation, are very satisfactory. The sites in the East are not so satisfactory, and much filling in and raising of sites and good concreting, &c., are very essential in that district for the health of the future occupants.

MARRIAGES.

The number of marriages recorded in the Borough during 1898 was 291, equal to a marriage rate of 6·39, or a rate of 12·78 per 1,000 persons living. The number in 1897 was 293 and the rate 6·58; in 1895, 238 and 5·66; and in 1896, 267 and 6·13.

The average annual marriage rate throughout England and Wales for the decennial period 1886 to 1895 was 14·9 per 1,000 persons.



BIRTHS.

The births registered during 1898 numbered 934, and comprised those of 478 males and 456 females.

The births occurred in the succeeding quarters of the year as follows:—251, 229, 231, 223.

The birth-rate for the year was 20·52 per 1,000, the next to the lowest on record, there being a slight break in the otherwise steady decrease of rate from year to year.

The births in Eastbourne and the birth-rates for Eastbourne and for England and Wales for the past 13 years are as follows :

Years.	Number of Births.	Eastbourne Birth-rate per 1,000 living.	England & Wales, Birth-rate per 1,000 living.
1886	889	32·01	32·8
1887	848	29·09	31·9
1888	780	25·49	31·2
1889	790	24·59	31·1
1890	735	21·79	30·2
1891	857	23·18	31·4
1892	921	24·77	30·5
1893	897	22·99	30·8
1894	975	23·8	29·6
1895	917	21·8	30·3
1896	919	21·12	29·7
1897	886	19·91	29·7
1898	934	20·52	29·4

Of the total number of births registered, 44 were illegitimate, being in the proportion of 47 to 1,000 births, as against 48, 48, and 63 in the three previous years respectively.

The average proportion of illegitimate to legitimate births in recent years throughout England and Wales, up to 1894, was about 45 to each 1,000 births.

VACCINATION.

Up to 1897 the percentage of children vaccinated had steadily decreased from eighty to ten. During the year 1898 the Vaccination Act, with its compromise to the "Conscientious Objector," was passed, and will probably not improve the position. In Eastbourne at the close of the year arrangements to work the new Act had not been made, so that the general chaos is here still worse. The number of those who applied to the Magistrates for exemption was comparatively small; and if the Guardians would seriously set to work to administer the new Act and give it a fair trial, it would be found that those who really conscientiously object to vaccination are very few, compared with those who have neglected to have their children vaccinated hitherto because of the trouble and the, to them, apparently infinitesimal risk of small-pox. The number of newly-born (1898) children successfully vaccinated in 1898 was fifty-four.



INFECTIOUS DISEASES.

The Infectious Diseases Prevention Act (1890) and the Infectious Diseases Notification Act (1889) have been adopted in Eastbourne since about the time they were passed, and notification has been in force since 1890.

Although the Notification Act is a most important factor in the prevention of the spread of disease, it does not apply to those three most fatal infectious diseases of children, viz., diarrhœa, measles, and whooping-cough, any one of which is worse, as regards mortality of children in most parts of England, than all the diseases included under the Act combined.

In 1898 measles caused 12,922 deaths in England and Wales, diarrhœa 30,077, and whooping-cough 9,723. In Eastbourne diarrhœa, measles, and whooping-cough caused 68 deaths, the whole of the notifiable diseases 19 deaths.

The difficulties in the way of successful notification of either of these diseases are very many, and the practical use doubtful under present conditions. If proper isolation and skilled nursing could be given on notification, then there would be no question whatever as to the partial use of the same in all three diseases.

It appears to me a serious question whether, in the interests of the community at large, an attempt should not be made to save many of the valuable lives lost through these three diseases, by provision of hospitals for cases of them and by their addition then to the list of notifiable diseases. Until this provision is made we are dependent on other means of prevention of some of these deaths, especially general sanitation, soundness of drains, prevention of over-crowding, &c., which are of very great importance. As regards measles, among the arguments for and against "Notification" are the following:—

- Pro.* 1. The huge total mortality from the disease and the still larger suffering, and the desire to do "something" to prevent it.
2. The possibility that by circulars and otherwise Sanitary Authorities could teach parents that many of the deaths from measles are preventible, and medical men would be oftener called in.

3. The attention of the Sanitary Authority would be drawn to insanitary houses.

Con 1. The cost.

2. The fact that medical men are often not called in and the parents, being lay, could not reasonably be compelled to diagnose cases, or fined if they did not.
3. The unnoticed mild cases which spread infection.
4. The fact that the early symptoms are those of a cold and thus the case is often missed.
5. Opinions are divided as to its having been a success anywhere where it has been tried.

It is my opinion that with the provision of isolation, nursing, &c., the notification of these three diseases would be attended with excellent results, and that, apart from this, notification would be only of little use.

Dealing first with the notifiable infectious diseases, it is gratifying to record that in 1898 there were fewer cases of notifiable disease in Eastbourne than in any previous year since the adoption of the Act, the sickness rate being therefore the smallest on record.

Subjoined is a table showing the total number of cases notified and the sickness rates for each year.

Year.	Total number of cases notified.	Sickness-rate per 1000 of population
1890	569	16.53
1891	243	6.94
1892	179	4.81
1893	335	8.58
1894	143	3.48
1895	156	3.71
1896	223	5.12
1897	213	4.78
1898	142	3.12

A complete table, giving details of the various diseases notified from January, 189~~7~~ to December, 1898, divided and sub-divided according to years and quarters is given in the appendix.

The great decrease compared with 1897, is in diphtheria.

There were no epidemics of notifiable disease in 1898, though some of the cases were arranged in groups. As seen by Table II. in the Appendix, there was a marked absence of infectious disease in June, and for the first time in recent years the Sanatorium was empty, although but for four days, viz. :—June 25th, 26th, 27th, and 28th.

The distribution of the notified cases according to Wards and the sickness rate per 1,000 for each Ward for 1898 is shown in the following table :—

Disease.	Wards.				The Borough.
	East.	Central.	West.	St. Mary's.	
Diphtheria	11	9	1	22	43
Scarlet Fever	27	4	1	22	54
Enteric ,,	10	4	2	9	25
Puerperal ,,	1	—	—	1	2
Erysipelas	8	2	2	6	18
Total	57	19	6	60	142
Sickness-rate	3'4	1'7	0'8	5'9	3'12

It will be noted that St. Mary's, with its smaller population, has a larger number of cases than the East Ward.

The sickness rate per 1,000 for the Wards for the past five years are also tabulated and shown below :—

Sickness-rate per 1,000.	East.	Central.	West.	St. Mary's
1898	3·4	1·7	0·8	5·9
1897	4·0	2·4	2·7	10·1
1896	4·7	2·9	2·9	9·8
1895	3·2	2·1	2·1	7·8
1894	4·1	2·7	1·4	4·9

The presence of the Sanatorium in St. Mary's Ward has been unjustly accused of contributing to the excess year after year, as shown in the above tables, of sickness rate in St. Mary's Ward. From the first of the above two tables it will be seen that the sickness which was in excess in St. Mary's Ward, compared with other Wards, was diphtheria. The absence of connection with the Sanatorium is shown by the fact that out of the 22 cases of diphtheria in St. Mary's Ward seven only occurred in the Old Town proper and none in the cottages nearest the Sanatorium, whereas eleven occurred in the neighbourhood of Enys Road. Not merely a proportionately larger number, but an absolutely larger number occurred in St. Mary's Ward than in the East Ward. This is an additional reason, if one were needed, why the Sanatorium should be retained in St. Mary's Ward, otherwise the cases from that district would have to be carried through the town.

Notifications, 1898.

AGE INCIDENCE.

Disease.	0—1	1—5	5—15	15—25	25—65	65 and upwards
Scarlet Fever.....	—	10	30	6	8	—
Diphtheria	1	11	23	3	5	—
Enteric Fever.....	—	—	8	6	11	—
Erysipelas	2	—	—	—	10	6
Puerperal Fever...	—	—	—	—	2	—
Totals	3	21	61	15	36	6

SEX INCIDENCE.

Disease.	Males.	Females.	Totals.
Scarlet Fever	17	37	54
Diphtheria	21	22	43
Enteric Fever	11	14	25
Erysipelas.....	9	9	18
Puerperal Fever	—	2	2
Totals	58	84	142

In a health resort such as Eastbourne many of the cases of infectious illness are importations or due to imported cases. Each disease is dealt with separately later on in the Report.

HOUSE DISTRIBUTION.

The 142 notified cases of illness occurred in 102 different houses, being an average of 1.39 cases per house.

In 80 houses one case occurred in each ...	80
In 14 houses two cases ,, ...	28
In 4 houses three cases ,, ...	12
In 1 house four cases occurred ...	4
In 2 houses five cases ,, ...	10
In 1 house eight cases ,, ...	8
	142

The following table shews the number of houses affected by cases of notifiable disease, and to some extent their sanitary condition roughly classified :—

Houses affected by	Good.	Fair.	Bad.	Not reported.	Total.
Enteric Fever	7	6	1	5	19
Scarlet Fever	16	13	4	6	39
Diphtheria	11	12	5	4	32
Puerperal Fever	1	—	—	1	2
Erysipelas... ..	10	6	—	1	17
Totals... ..	45	37	10	17	109

The total comes to 109 instead of 102, as before mentioned, because in some instances two diseases occurred in the same house at different times. In the previous year 168 houses were affected. The proportion of houses affected reported as “bad” in the above table is very small, and is accounted for by the fact that the houses in the Borough have now been at some time or other in recent years pretty well thoroughly examined, and the sanitary conditions improved at most of the houses.

The procedure on a notification of infectious illness being received includes an inspection of the sanitary condition of the

house. The table just given is a result of such inspection, and is given as being of interest ; but it must be remembered that when cases are imported, as so many of the few Enteric Fever cases were, and when cases occur by direct infection from person to person, at school or elsewhere, the condition of the house is, of course, a secondary matter.

In the case of houses whose sanitary condition was bad, and which required attention, steps were taken to procure amendment.

No outbreak of infectious illness during 1898 was due to either milk supply or laundry.

When a notification is received enquiries are made, as detailed in my report last year, and the librarian and the masters or mistresses of the schools concerned communicated with. Removal to the Sanatorium is also urged on the patients' friends, with conspicuous success in 1898.

MEANS OF ISOLATION IN THE BOROUGH.

The means of isolation in the Borough are satisfactory in principle. They comprise the following :—

1. A General Infectious Diseases Hospital—viz., the Sanatorium—for Scarlet Fever, Diphtheria, and Enteric Fever.

This is situated on the extreme border of the town ; it is the last house out towards the Downs at the back of the Town. This needs enlargement to meet the growing requirements of the Town.

2. Acacia Villa. A cottage isolated and in its own grounds, used for these two purposes :—

(a) For the lodging of persons whose houses are being disinfected.

(b) For the temporary lodgment of persons who have been exposed to infection.

This was used by 20 persons during 1898.

3. Langney Hospital. For Small-Pox.

This is situated half-a-mile from the nearest house and a mile from the next to that, and over a mile distant from either of the two other Institutions of Isolation.

A description of these three Institutions and their working during 1898 has been given in the Medical Officer's Annual Report on the same.

REMOVALS TO THE SANATORIUM.

In 1898 of the three diseases received at the Sanatorium—viz., Scarlet Fever, Diphtheria, and Enteric Fever—90·1 per cent. of those notified were removed and isolated. That is to say, 110 cases of the 122 notified were placed in such a position that they could not assist in spreading the disease to others, and at the same time were being nursed by nurses skilled in nursing these particular diseases.

The whole of the 54 cases of Scarlet Fever were removed with but one exception—a case which proved rapidly fatal and could not be removed.

With regard to Diphtheria, there was a large increase in the percentage of removals, and the same is true of Enteric Fever.

The percentage of cases of these three diseases removed—namely, 90·1—is the largest on record, and is probably unbeaten by any Infectious Diseases Hospital.

The figures for the past seven years are given below:—

In 1892,	56·9	per cent.	of the cases.
In 1893,	64·5	”	”
In 1894,	72·9	”	”
In 1895,	72·5	”	”
In 1896,	70·0	”	”
In 1897,	83·8	”	”
In 1898,	90·1	”	”

The steady increase in popularity of the Sanatorium is most satisfactory, not only for the patients themselves, but for the town at large. The excellent policy of the Sanitary Committee and the Corporation in maintaining a Hospital fit to receive anyone is rewarded by the appreciation of the inhabitants and the remarkable lessening of the centres of spread of disease.

Visitors to the town greatly appreciate the advantage of the Hospital, and it is an usual occurrence for the Medical Officer to be able to report to inquiring visitors that there is no notifiable infectious illness in the town outside the Borough Hospital.

The percentage of cases removed in 1898, 1897, and 1896 of each disease were as follows :—

Disease.	Number of cases notified.			Number removed.			Percentage of removals.		
	1898	1897	1896	1898	1897	1896	1898	1897	1896
Scarlet Fever.....	54	66	74	53	62	74	98·1	93·9	100·0
Diphtheria.....	43	121	42	38	96	18	88·3	79·3	42·8
Enteric Fever	25	11	84	19	8	48	76·0	72·7	57·1

Apart from the many other advantages to the patient derived from the Hospital, removal from the house in which the patient took the disease is often very important.

For the past year no charge has been made in the case of the poor, and this, perhaps, has added to the Hospital's popularity. Under previous arrangements the improvident could get off altogether, whereas equally poor or even poorer persons who happened to be more grateful and provident, stinted themselves to pay something towards their cost of maintenance.

SMALL-POX.

No case of this disease occurred in Eastbourne during 1898.

SCARLET FEVER.

Fifty-four cases of this disease were notified during 1898; the average for the previous six years had been 90; the number during 1897, 66.

There were two fatal cases; one, the only case which was not removed to the Sanatorium, was of a very virulent type; the other was in a child aged $2\frac{1}{2}$ years, in whom the Scarlet Fever supervened on a bad attack of measles. It is found that a large number of Scarlet Fever cases commence within a few days of a train journey; this occurred in various cases in Eastbourne in 1898. Nine cases were traced as due to importation and others were probably due to the same cause. In one other case the parents begged very hard that their child might be allowed to remain at home, and as there were means of isolation this was at first allowed. In spite of precautions, a second case occurred in the same house, and both cases were then removed to the Sanatorium. The officials in the Sanitary Department had been falsely informed by the parent that there was no other child in the house except the one first taken. There was one "return" case; the previous case in this instance had been some time in the Hospital. The bulk of the cases were in the age group 5-15.

ENTERIC FEVER.

There were 25 cases of Enteric Fever notified, as compared with 11, 84, 18, 15, 16, 16, and 17 respectively in previous years. Two cases at least were imported, and probably others were also. Five of the notifications occurred in one family, and the disease was accompanied by acute general blood-poisoning; two of these five patients died. One of the cases was that of a new nurse at the Sanatorium—an example of direct infection from patient to nurse which is rare in typhoid. One of the great advantages of removing Enteric Fever cases to the Sanatorium is that the infectious matter, dejecta, &c., from such patients is destroyed by fire in a special "destructor." At Willingdon, on the confines of Eastbourne, there was a small epidemic in June, 1898.

ERYSIPELAS.

Eighteen cases of this disease were notified compared with thirteen in the previous year.

The insanitary condition of the house may have a causal connection with the occurrence of Erysipelas, and this is the principal value of the inclusion of this disease in the notifiable list, for such notification leads to house inspection.

PUERPERAL FEVER.

Two cases were notified (the same number as last year), one in the East and one in the Central Ward.

MEMBRANOUS CROUP.

The one notification of this disease which was received has been included with Diphtheria.

DIPHThERIA.

The most serious notifiable disease in Eastbourne year by year is Diphtheria. The numbers for previous years from 1897 backwards are 121, 42, 36, 40, 58, 59, 184, 495: the last number occurred in an epidemic. The number of cases in 1898 was 43, more than half of which occurred in St. Mary's Ward, especially in the eastern portion of the Ward. The type was a very severe one, many of the cases being fatal. There were eleven deaths from Diphtheria in 1898, nine males and two females, this being a fatality of 25.5, as compared with 14.8 and 14.2 in the two previous years. The great majority of the cases occurred, as usual, amongst the poor. There was no necessity to close any particular school for Diphtheria in 1898. Three of the fatal cases occurred in one family. With regard to the causation of Diphtheria, it has been noticed that the smells, which occurred from time to time from the sewer gratings especially in certain parts of the town, have been very much fewer recently; coincidentally there have been many more upcast sewer ventilators erected.

The NON-NOTIFIABLE DISEASES, such as Measles, Whooping Cough, &c., except when fatal, are only known of by the

Sanitary Authority incidentally such as when they are prevailing to a large degree. There was a small Whooping Cough epidemic in Upperton in March and April, and Measles was epidemic in Meads in March and April, 1898, both in private and elementary schools, the type being very mild. Holy Trinity Infants' School was closed for Measles in October from the 10th onwards. Whitley Road Infants' School was closed for Measles from November 7th onwards. All Souls' and Christ Church Infants' Schools were also closed towards the end of the year. These non-notifiable diseases are dealt with later in this report.

DISINFECTION.

In every case of an infected house or room the necessary disinfection has been carried out by the Sanitary Inspectors or their Assistants. Disinfection left to the occupant of the house, unless he by chance happens to be skilled, is a farce, and should not be countenanced by any Sanitary Authority. The directions of the Medical Practitioner attending may be all right, but the methods of carrying them out by amateurs are generally very incomplete.

With 90 per cent. of the patients removed to the Infectious Diseases Hospitals disinfection can be carried out in a very thorough way. Even in the best managed household and with the best assistance, it is a practical impossibility to thoroughly and entirely isolate a case of Scarlet Fever, for instance, for six or seven weeks at home and then to make sure of disinfecting every place where the patient has been and everything he has touched.

Disinfection of rooms has been carried out by re-papering, lime-washing, re-painting, and thoroughly washing with disinfectants. Soap and water are excellent means of disinfection—in fact, for general house work the best.

As an aid to these Perchloride of Mercury is used by means of Defries' Patent "Equifex" Sprayer. In occasional cases sulphur has been burnt or Sulphur Dioxide used. Disinfection by "Formalin" gas has also been used to some extent, especially after diphtheria.

Articles that can be removed and can stand it have been disinfected in the Steam Disinfector. Others have been sponged, rubbed or washed with disinfectant, and, where necessary, burnt.

The sending of clothing, &c., to the Sanatorium for disinfection in the steam apparatus after any infectious disease, even if not notifiable, has been encouraged, when there is no risk of conveying the more serious diseases.

The work done at the Steam Disinfector may be summarised as follows :—

- 119 Loads of Bedding.
- 32 Boxes of Wearing Apparel, etc.
- 104 Sets of Patients' Clothes.
- 2 Loads of Washing from Laundries.



DEATHS.

The deaths recorded during 1898 were 494 in number ; this number exceeds that of 1897 by 95, and is rather above the average of the past five years. This is not due to local causes particularly, but, as will be seen below, corresponds with an increase all over the country.

Appended is a table of the deaths and death-rates of recent years in Eastbourne; the rates for England and Wales for corresponding years are added as a matter of interest. The death-rates of no two districts can, however, be fairly compared until each is properly "corrected."

Years.	Number of Deaths.	Death-rate.	Death-rate, excluding deaths of visitors.	Death-rate of England and Wales.
1888	421	13·75	12·90	18·1
1889	416	12·95	10·92	18·2
1890	485	14·38	12·92	19·5
1891	468	13·21	12·51	20·2
1892	505	13·58	11·67	19·0
1893	576	14·76	12·79	19·2
1894	430	10·49	9·59	16·6
1895	521	12·40	10·71	18·7
1896	454	10·43	9·10	17·1
1897	399	8·96	7·91	17·4
10 years } average }	467	12·49	10·40	18·4
1898	494	10·85	10·20	17·6

The total death-rate for the Borough for 1898, inclusive of every death that took place, was **10·85** per 1000 per annum. Excluding the deaths of non-residents of Eastbourne, which numbered 30, the rate was **10·2** per 1000 per annum.

This total death-rate of 10·85 exceeds that of any one of the three previous years 1894-6-7. As was anticipated in my report last year, the death-rate of Eastbourne for 1897 was found to be the lowest for the 100 largest towns of England and Wales; it will probably be found that in 1898 Eastbourne has again very nearly the lowest death-rate, the death-rate throughout the country in 1898 being somewhat higher than in 1897.

The Borough of Eastbourne includes the Union Workhouse and its Infirmary, used by a large surrounding neighbourhood as well; the only general hospital of the neighbourhood; various smaller hospitals and convalescent homes, and a large number of visitors, some of them invalids. The total death-rate, therefore, is a very inclusive one, extending over the deaths of many people not really belonging to Eastbourne.

There is an excess of females in Eastbourne, which would lead to a slightly diminished death-rate in any case; this would not, however, amount to a difference of 1 per 1000. The populations of the various age-groups show that there is a slight excess of persons of a healthy age in Eastbourne, which would also lead to a natural small diminution of death-rate. The excellent climatic conditions obtaining in Eastbourne, the non-manufacturing character of the Borough, and the very small density of persons per acre also assist in the causation of a low death-rate. These, however, and similar reasons do not account for the general diminution in death-rate of recent years; the conditions alluded to, of course, remain the same as in previous years.

The average death-rate for the past five years, 1894-8 inclusive, has been under 10·63; the average death-rate for the previous quinquennial period—namely, the five years 1889 to 1893 inclusive—was 13·77. This gain of a clear 3 per 1,000 in a population of 45,000 means the saving of 135 lives per annum.

Among the factors leading to this diminution of death-rate is undoubtedly the good work of the Sanitary Authority. The steady refusal to countenance nuisances, overcrowding, adulteration of food, sale of unsound food, use of impure water, &c., &c.,

has had its effect, as has also the provision of excellent isolation accommodation. Eastbourne is beginning to have a name also for its excellent house sanitation, which has its effect on the death-rate.

The deaths during 1898, excluding deaths in institutions, were distributed over the various Wards of the Borough as follows :—

Wards.	Number of Deaths, 1898.	Annual Death-rates per 1,000.			
		1898	1897	1896	1895
East	200	11·9	8·8	12·6	12·24
Central	98	8·7	6·6	6·5	11·26
West... ..	41	5·7	4·1	4·4	6·03
St. Mary's... ..	104	10·1	7·1	9·4	9·95
Principal Institutions	51	—	—	—	—

To make the rates correct the deaths in institutions should have been properly distributed over the various Wards, but this would be a matter of difficulty. Speaking generally, if this had been done the East and St. Mary's Wards' rates would have been higher, the others about the same. Many of the deaths in institutions were those of non-residents.

Fifty-one deaths occurred in the three chief institutions, as follows :—

Principal Institutions.	Ward.	Number of Deaths.
Workhouse	St. Mary's ...	24
Princess Alice Hospital	St. Mary's ...	13
Borough Sanatorium ...	St. Mary's ...	14

The causes of death in comparative excess in the East Ward were : Measles, Diarrhœa, Premature Birth, Convulsions, Bronchitis, and General Debility and Inanition. All these are often coincident to some degree with poverty, especially when fatal. Those causes in comparative excess in St. Mary's Ward were : Diphtheria, Phthisis, Heart Disease, and Bronchitis.

In referring to the table of causes of death in the Appendix it should be remembered that St. Mary's Ward contains the Sanatorium, Union Infirmary, &c., so that an undue number of deaths is ascribed to that Ward.

The deaths recorded during 1898 were distributed amongst the various classes of disease as follows:—Deaths during 1896 and 1897 are similarly classified for comparison.

Class.	Disease.	No. of Deaths.	Percentage of Total Deaths.		
		1898	1898	1897	1896
Class I.....	Zymotic Diseases	94	19·0	13·8	15·0
„ II. ...	Parasitic Diseases	—	0·0	0·0	0·0
„ III ...	Dietic Diseases	3	0·6	0·5	0·2
„ IV. ...	Constitutional Diseases	94	19·0	21·0	25·8
„ V. ...	Developmental Diseases	40	8·1	7·8	8·6
„ VI. ...	Local Diseases	240	48·6	49·4	42·5
„ VII.	Deaths from violence ...	11	2·2	3·5	3·5
„ VIII.	Deaths from ill-defined and not specified causes	12	2·5	4·0	4·4
Total ...		494	100·0	100·0	100·0

The 494 deaths include those of 230 males and 264 females. The death-rate for males was 12·4, for females 9·8 per 1,000 per annum. This is approximate and based on the calculations as to the proportions of sex given earlier in the report. Males

especially exceeded females in deaths from Diphtheria, Phthisis, and Convulsions; females especially exceeded males in deaths from Cancer, Premature Births, Apoplexy, Heart Disease, and Diseases of the Digestive System. This comparative arrangement is practically similar to that of the deaths in other years.

Ages at Death.

The death-rates at different ages and of different sexes are in some respects more important for instituting comparisons than the total death-rate, since in them there are no sex and age fallacies. Hence the following table is subjoined.

Ages.	Males.			Females.			Both Sexes
	No. living.	Deaths.	Death-rate per 1,000 living at each age group.	No. living.	Deaths.	Death-rate per 1,000 living at each age group.	Death-rate per 1,000 living at each age group.
Under 1	434	64	147·4	517	66	125·7	135·6
1—5	1703	22	12·9	1905	27	14·1	13·5
Total under 5 ...	2137	86	40·2	2422	92	37·9	39·0
5—15	4696	14	2·9	4933	4	0·8	1·8
15—25	3559	11	3·0	6871	8	1·1	1·8
25—65	7252	68	9·3	11698	96	8·2	8·7
65 and over ...	760	51	67·1	1172	63	53·7	59·0

Infantile Mortality.

The total number of deaths of infants, that is of children of ages under one year, was 130; males 64; females 66. Infantile mortality is calculated on the number of births registered, and for 1898 was at the rate of 139 per 1,000 births.

This is a high rate of infantile mortality for Eastbourne, far above the average. There was a general increase in nearly all the causes, diarrhoea especially.

Year,	Deaths under 1 year.	Mortality per 1000 births.
1898	130	139
1897	98	110
1896	105	115
1895	122	133
1894	95	97
1893	130	144
Average of ten years up to 1893	106.6	125

The infantile mortality for England and Wales for 1898 was 161 to every 1,000 registered births, or 12 above the average for 1888-1897.

The subjoined tables shew the principal causes of the deaths of infants in recent years.

Deaths.	1894	1895	1896	1897	1898
From Zymotic Diseases ...	9	38	26	26	45
Constitutional Diseases...	14	13	9	8	11
Developmental Diseases..	22	26	23	21	22
Local Diseases	38	34	24	28	41
Deaths from violence ...	—	2	7	4	2
Deaths from ill-defined & not specified causes ...	12	9	16	11	9

Death of Infants (under 1 year).

Disease.	1894	1895	1896	1897	1898
Measles	—	2	6	—	4
Whooping Cough	1	5	—	2	1
Diarrhœa	7	30	20	20	38
Other Zymotic Diseases ...	1	1	—	4	2

Two of the 38 infants who died from Diarrhœa were illegitimate, 15 at least were insured, and all 38 were bottle-fed or fed with patent foods. In seven of the cases the mother had to go to work. Summer high temperature, especially of the ground, illegitimacy, insurance, bottle-feeding, biscuit and similar feeding, the going to work of the mother and insanitary homes are important factors in illness and deaths from Infantile Diarrhœa.

The insurance of infants should be restricted in amount to the actual expenses that might be caused by the child's death. It is not of course at all likely that the 15 insured children were allowed to die simply because they were insured, but at the same time it would remove any suspicion if the insurance of infants simply meant that an insurance company would pay all expenses connected with the death of the child, no ready money whatever being handed over to the guardians of the child; neither of the two illegitimate children were insured.

The 38 fatal cases of Infantile Diarrhœa occurred—22 in the East, 9 in St. Mary's, 4 in the Central, and 3 in the West Ward.

The 130 deaths of infants occurred—70 in the East, 22 in the Central, 5 in the West, and 33 in St. Mary's Ward.

Senile Mortality.

Of the 494 deaths which occurred in 1898, there were 114 of persons over 65 years of age.

Between 65 and 75 years of age	57	Males	26	Females	31
Between 75 and 85 years of age	46	„	20	„	26
Over 85 years of age	11	„	5	„	6

Seasonal Mortality.

The deaths during 1898 occurred in months as follows :—

First Quarter	129	{	January	47
			February	43
			March	39
Second Quarter	104	{	April	35
			May	37
			June	32
Third Quarter	130	{	July	24
			August	43
			September	63
Fourth Quarter	131	{	October	39
			November	41
			December	51

Comparative Quarterly Mortality.

The following table shows how the death-rate of Eastbourne compares quarter by quarter with that of England and Wales :—

1898 Districts.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Year.
Eastbourne	11·34	9·14	11·43	11·52	10·85
England & Wales { Town Districts }	19·8	16·6	19·3	17·5	18·3
{ Country Districts }	18·9	15·4	14·9	15·0	16·0

Deaths from Zymotic Diseases.

This class of disease includes most of the diseases which are called "preventable," but it must not be understood that the whole of the preventable diseases are included under this heading. The duties of the Sanitary Authority extend to the prevention of all classes of disease. This classification is incomplete also in that it does not include diseases such as Phthisis.

The Zymotic class of diseases includes the "seven principal Zymotic diseases"—viz., Small-Pox, Measles, Whooping Cough, Scarlet Fever, Diphtheria, "Fever" (including Typhoid) and Diarrhœa, and all Miasmatic, Septic, Venereal or Zoogenous Diseases.

In 1898 in Eastbourne from Zymotic Diseases there were 94 deaths. From the "seven principal Zymotic diseases" there were 84 deaths, inclusive of 46 from Diarrhœa. These are set out at length in the Appendix and classified and compared with deaths from the same diseases in other years in the Borough.

There is an increase in 1898 over 1897 of 39 deaths from Zymotic diseases, 23 of the increase being due to Diarrhœa. The very hot summer, which is a predisposing cause of Diarrhœa, accounts for this increase.

Of the total number of deaths from Diarrhœa 38 occurred in the months of August and September.

There were also 20 deaths from Measles in 1898, as compared with none in 1897.

The Zymotic death-rate for 1898, that is, the death-rate from the "seven principal Zymotic diseases," was 1·84 per 1,000 (England and Wales for 1898, 2·22 per 1,000), the total Zymotic death-rate being 2·06 per 1,000 per annum.

This is an increase in rate, the rate in 1898 being nearly twice that of 1897. The rate for England generally also slightly increased in the year 1898.

The highest recorded Zymotic rate for Eastbourne was in 1893, when it was 3·71, the lowest being in 1894, when it was 0·80 per 1,000 per annum.

The Zymotic deaths were distributed as follows:—

Ward.	Number of Deaths.	Zymotic Death-rate.
East	51	3'04
Central	17	1'51
West	6	0'81
St. Mary's	20	1'95

For the purposes of this table, the Zymotic deaths in institutions have been distributed among the Wards to which they belong, otherwise the deaths in St. Mary's Ward and the Zymotic death-rate there would be unduly high owing to the presence in the Ward of the Infectious Diseases Hospital. Of the 14 deaths which occurred in the Sanatorium, seven patients came from St. Mary's Ward, five from the East Ward, and two from the Central Ward.

The 94 Zymotic deaths resulted from the following diseases :—

Disease.	Total.	Males.	Females.
Influenza	6	2	4
Scarlet Fever	1	1	—
Whooping Cough... ..	2	2	—
Diphtheria	11	9	2
Enteric Fever	4	2	2
Diarrhoea	46	24	22
Syphilis	1	—	1
Puerperal Fever	1	—	1
Measles	20	9	11
Erysipelas	2	1	1
Totals... ..	94	50	44

INFLUENZA.

This disease occurred, as usual, in the early part of the year. In 1895 thirty-three deaths occurred, and since then the deaths per year respectively have been four, seven, and six.

SCARLET FEVER.

The one death from this disease occurred in an adult, a very severe case. There was also a patient suffering from Scarlet Fever who died from Measles; the Scarlet Fever had supervened on the Measles before the patient was removed into the Sanatorium.

WHOOPING COUGH.

There was a very slight epidemic of this disease in 1898, the deaths being only two; the average number of deaths for the past four years being 5.2.

DIPHTHERIA.

There was in 1898 a noteworthy decrease in the number of cases of Diphtheria and a decrease in the total number of deaths; the type, however, was a bad one as a rule. Eleven deaths occurred, the average for the past four years being about ten.

ENTERIC FEVER.

There were four deaths from this disease in 1898, as compared with none in 1897. Two of the fatal cases occurred in one family, in which there was acute general blood poisoning as well, the whole family having been attacked. The diagnosis was doubtful for some time owing to the complications.

There were 25 cases notified, the mortality therefore being 16 per cent.

DIARRHŒA.

Deaths from this disease have already been commented on under the heading of Infantile Mortality. One only of the 46 fatal cases was in an adult.

MEASLES.

There were 20 deaths from Measles in 1898. The average for the previous five years was 15. There were no deaths from this disease in 1894 and 1897.

Dietetic Diseases.

In this class of disease there were three deaths—viz, two from Alcoholism and one from Delirium Tremens.

As a rule, when deaths occur from alcoholism they are described as having occurred from any other malady which may have existed with the alcoholism.

Constitutional Diseases.

The deaths from these diseases, as in the case of the others, are detailed in the appendix.

RHEUMATISM.

One death only was registered from Rheumatic diseases, the average for the past four years being just under three, showing that the district is free from diseases of this nature. No death was recorded from Gout. No death was recorded from Rickets, which is satisfactory in a town having nearly 1,000 births per annum.

CANCER.

The deaths from Cancer numbered 23, seven of males and 16 of females. The average for the previous six years had been 29.5.

Under this term all malignant growths, Sarcomata and Carcinomata, are included. These are "cancer" in the popular use of the word.

PHTHISIS.

During 1898 the number of deaths registered from this disease was 42, including 27 males and 15 females; males being as usual in excess.

The average for the past three years in Eastbourne has been 42.

The death-rate for the year from this disease was 0·92 per 1,000, and as females are in excess in Eastbourne the female rate is much lower than the male rate in addition to the total number being less. The average rate per year for England and Wales for five years up to 1895 was 1·4, that for 1898 has not yet been published.

The age period 35-45 suffered most with 14 deaths, but deaths occurred in all the age periods up to 75.

In 1898 a crusade has been commenced against the unnecessary spread of the various forms of Tuberculosis, including particularly consumption of the lungs. A National Association for the Prevention of Consumption and other forms of Tuberculosis has been started, and various bodies have drawn up reports and suggestions on the same subject. With the sanction of the Sanitary Authority a leaflet will be issued in Eastbourne with instructions on the means of prevention of Tuberculosis. One of the best of the reports has been issued by the British Medical Association. Briefly the principal recommendations are:—

- (1) That general sanitation must be enforced, and particularly good light and ventilation in dwelling-houses, workshops, and places of public meeting. That houses should be built on dry sites and with sufficient air space around. General sanitation includes also the prevention of over-crowding and other nuisances, and the remedying of house defects.
- (2) That notification and disinfection should be carried out as in the case of other infectious diseases.
- (3) That meat supply should be properly superintended. There should be properly-qualified men appointed as meat inspectors, and slaughter-houses should be well looked after and public slaughter-houses provided, to minimise the chance of tuberculous food being eaten.

- (4) Milk is a common form in which children take tuberculosis, and therefore cowsheds and cows should be regularly inspected as well as the milk itself. Both meat and milk should be thoroughly cooked to destroy infection.
- (5) That the Local Authority should make arrangements for the bacterial diagnosis of tuberculosis at their own expense.
- (6) That Guardians and Sanitary Authorities should provide special accommodation for the treatment of consumptive patients.
- (7) That regulations should be made with regard to persons already infected and their actions, such as expectoration, sleeping with others, &c.

Compared with previous years the deaths from Phthisis and other tubercular diseases have been as follows :—

Diseases.	Number of Deaths.				
	1894	1895	1896	1897	1898
Phthisis	40	51	46	37	42
Other Tubercular Diseases..	19	14	19	11	21

Developmental Diseases.

There were 21 deaths from premature birth in 1898, as compared with 21, 21, 20, 18, and 15 in the five previous years. Eight males and thirteen females.

The association of poverty with premature birth is shewn in the fact that the majority of the deaths from this cause were in the East Ward among the poorer Classes.

There were eighteen deaths ascribed to old age.

Local Diseases.

Diseases of the nervous system caused 68 deaths, principally from Apoplexy (34), Convulsions (11), and Inflammation of the Brain and Membranes (14). As usual the greater number of the children who died from convulsions were males.

The average number of deaths from diseases of the nervous system in the previous five years was 44.2.

Diseases of the circulatory system caused 62 deaths in 1898, the average number of deaths from these causes for the past five years being 36.8.

Of the 62 deaths from diseases of the circulatory system, heart disease, almost entirely valvular, caused 59.

Diseases of the respiratory system were responsible for 61 deaths, 57 of which were from Bronchitis or Pneumonia; of these 57, 18 occurred in children under five and 17 in persons over 65.

Bronchitis is to some extent one of the diseases which is more or less preventable, being often caused by cold, dampness, and exposure.

Very few deaths, only six, occurred from these diseases in the third quarter of the year, the deaths being about equally distributed over the other quarters.

Diseases of the Digestive System caused 31 deaths, 20 of females and 11 of males.

Diseases of the Urinary and Reproductive System caused nine deaths of females and seven of males, the principal cause being "Bright's disease."

Deaths from Violence.

There were 11 deaths from violence, the average number in the five preceding years having been just over 13. The ages ranged from under 1 to over 65.

There was one suicide only, which is the lowest number recorded.

The deaths from violence were in the proportion of 0·24 per 1,000 of the population, as compared with 0·61 per 1,000 of the population for England and Wales generally.

Deaths from ill-defined and not specified Causes.

There were eight deaths of infants registered from Debility, Inanition and Marasmus during 1898.

Inquests.

Twenty-two inquests were held, that is on 4·4 per cent. of the deaths.

The rate for England and Wales for 1898 was 6·2 per cent.

The verdicts were as follows:—Natural causes, 12; accidental death, 6; manslaughter, 1; found dead, 1; murder, 1; suicide (cutting throat) 1.

The inquests were on the bodies of 11 men, five women and six children.

Uncertified Deaths.

This unsatisfactory class of death, which really should not exist at all, included one case.

There can be in the present day no adequate reason why a medical man or a coroner should not certify the cause, as far as it can be known, of every death that occurs. While uncertified deaths can be passed over as they were in 1898, to the extent of 10,334 in one year throughout England and Wales, there are many opportunities for hidden crime.

SANITARY WORK, 1898.

It is difficult in a report such as this to give an accurate idea of the various works carried out in the Sanitary Department during 1898. Tables and summaries are given classifying the work somewhat. The Staff, including three Inspectors and two Clerks, has been busy throughout, such work as general inspection, for instance, being never finished.

HOUSE SANITATION.

This, which is one of the most important parts, if not the most important part of the duties of the Sanitary Inspectors, has received the constant attention of the Department during the year.

713 entries were made in the Inspectors' Permanent Journal as to objectionable conditions found in certain premises; 370 notices were issued, as shown in the tables appended, and 879 letters and reports written. In addition to the 370 notices, 197 letters were written requesting amendments to be made, with a view to getting the work done without legal formalities.

The D trap and the pan w.c. are rapidly becoming extinct in Eastbourne, as also is the long hopper with the side flush. The principal items found requiring structural amendment were unsound and too small soil and ventilating pipes, absence of intercepting traps, conjunction of the water supplies for domestic use and of closets, unsound drains, and unsatisfactory forms of dustbins. The general nuisances were mainly dirty conditions of various parts and fittings of premises. The notices summarised set these forth in more detail. House sanitation is as far as possible brought up to the standard shown below as being that in force in Eastbourne for certification.

SANITARY CERTIFICATES.

During 1898, 45 Sanitary Certificates were issued; this is a less number than in previous years, the average for the previous three years having been 80. The causes of the diminution are

two—one, that there are fewer houses now requiring Certificates, the total number already issued in previous years having amounted to 742 ; and, secondly, that the specification has been altered in 1898 and the requirements are now somewhat more comprehensive. Many Certificates have been brought in for endorsement, the premises having been re-examined and re-tested. As in recent years, scarcely any friction has arisen with regard to the issue of these Certificates. The Certificate bears on its face an abstract of the requirements, so that it can be seen at once to what the Authority certifies ; moreover, the Authority simply certifies that such-and-such a condition existed on a certain date ; if alterations are made the Certificate is *ipso-facto* void. As the specification has been somewhat altered during 1898, I append herewith a list of the works required :—

1. Drains : to be of glazed stoneware or cast iron pipes with protective composition, having an internal diameter of not less than 4 inches : to be laid in straight lines with regular and equal fall of not less than $1\frac{1}{2}$ inches in 10 feet and to be embedded in concrete : to be provided with intercepting syphon, manhole and through ventilation, and to be outside the buildings if possible, if not, to be of iron and bedded in concrete. All joints to be proved sound by the " water test."

" **Drains** " applies to the whole drain from house to sewer. (If, however, the intercepting Syphon is at the boundary of the premises and sufficiently far from the house, and if in such a case the drain beyond the Intercepting Syphon is found to be of good fall and working well, the part beyond the Intercepting Syphon need not be relaid).

" **Drains** " also applies to drains of stables or other drains in the same curtilage.

Drains of stables or other buildings are to be effectively cut off from the dwelling-house drainage system.

Inspection manholes, built with and rendered out with cement and sand, or of glazed brick work and cement, to be provided at each change in direction of the drains and also at the Intercepting Syphon. The frame and cover to be of iron and the cover to be sealed down after final examination.

The Intercepting Syphon to be as far from the dwelling-house as possible ; the cap of the clearing eye to be securely fixed and air tight in socket.

Rain water drains to be proved sound by water test unless proved to be in good working order and quite cut off from any other part of the drainage system.

- 2. Soil Pipes :** to be outside : to have an internal diameter of not less than $3\frac{1}{2}$ inches. (N B.—Bye-laws for new houses, 4 inches) : to be carried up full size to just above the level of ridge of roof and to have the fewest possible bends and angles : closet connections are to be drawn lead T-pieces.

No seamed pipe permitted.

Soil and ventilating pipes, if lead, to be at least 8lbs. to linear foot for 4in. pipe ; if iron, to be at least 54 to 6ft. length with wide sockets : above the topmost closet connection the weight may be medium, the diameter remaining the same. In each case to end in a vertical position.

Joints : whenever a stoneware trap or pipe is connected with a lead soil pipe, between the two must be inserted a brass socket or other similar appliance : the stoneware end is to be inserted into the socket and the joint made with Portland cement : the socket is then to be connected with the lead pipe by means of a wiped joint : where iron to lead, sockets are to be used.

Where a stoneware pipe or trap is connected with an iron soil pipe or drain, the stoneware trap is to be inserted with a socket on the iron pipe and the joint made with Portland cement.

Joints of iron pipes to be of caulked lead or other as satisfactory jointing material ; red lead not sufficient.

Stoneware traps inside a house will not be allowed unless of particularly satisfactory form.

All solder joints to be "wiped plumbing" joints.

In case of iron pipes, inside to be coated with protective material.

The joints of soil and ventilating pipes to be proved sound by the smoke machine.

- 3. Ventilation of Drains :** drain ventilation to consist of inlet and outlets, with outlets at the heads of the system to just above the level of ridge of roof : the soil pipes to be additional to these outlets unless the former are at the heads of the drain system. Ventilation pipes to have a minimum internal diameter as in soil pipes above.

- 4. Water Closets :** closet seats to be hung : lead safe, with outgo into open air having hinged flap at its end, to be laid over the whole of the floor space under the closet casing, unless the floor is of impervious material : walls under closet seats to be properly plastered. Traps and W.C.'s to be of approved self-cleansing form.

The closet chamber to have proper means of ventilation.

zin. anti-syphonage pipes to be provided to each closet trap if the closets are in tiers. Such pipes to be carried out at once and to terminate in soil pipe at least 1ft. above the topmost closet connection.

5. Housemaid's Slop Sinks: where they exist, to be constructed in every respect as water closets.

6. Closet Flushing Services: cistern to be absolutely distinct from domestic service. $1\frac{1}{4}$ inch pipe and valve to be fixed if the hydrostatic head be under 10 feet: 1 inch pipe and valve may be used for heads of 10 feet and upwards.

Flushing cisterns to be of 3 gallons capacity and syphonic.

7. Domestic Water Supply: a tap from the main to be over a sink and marked.

Cistern, of proper size, to be provided complete with overflow and cover, in a suitable position, free from liability to fouling and effluvia.

8. Waste Pipes: To be trapped immediately beneath the fittings and to discharge over, or into gully-traps in the open air.

The waste pipes to be taken at once into the open air and with the traps to be not less than $1\frac{1}{2}$ inches diameter for baths, $1\frac{1}{4}$ inches for wash basins, $1\frac{1}{2}$ inches for scullery and $1\frac{1}{2}$ inches for pantry sinks.

9. Rain Water Pipes: to discharge over or into gully-traps unless carried to a rain-water tank, the overflow from which is to be into the open air in a suitable position.

10. Gully-Traps: to be of round way form; no such traps to be inside the house or any building connected with the house.

11. Dustbins: to be either brick built rendered inside, provided with doors and coverings and floor to be above ground level, or galvanised iron receptacles with covers; to be in a suitable position.

12. Baths: when enclosed to have lead safe under the fittings.

13. Plan: a plan of the drainage system 1-8th scale to be deposited at the Sanitary Department.

CONDITIONS OF ISSUE.

The Certificate to be void and to be returned to the Medical Officer of Health—

- (1) If any alteration be made in the drainage or sanitary arrangements without the approval of the Corporation.
- (2) If any defect be found in the drains or fittings subsequent to the issue of the Certificate.

(3) In any case not later than three years from the date of issue.

The premises should be thoroughly re-examined at intervals of not more than three years, and the re-issue of the Certificate will depend on the drains and fittings being again proved sound and in good working order.

The issue of the Certificate is to be an implied acceptance of these conditions.

Notices Issued in 1898.

WEST WARD.

Section of Act.	No. Issued.	No. complied with.	No. lapsed.	No. outstanding.
<i>a</i> Sec. 91 Public Health Act	14	14	—	—
<i>b</i> Sec. 36 „ „	2	1	—	1
Totals	16	15	—	1

ST. MARY'S WARD.

Section of Act.	No. Issued.	No. Complied with.	No. lapsed.	No. outstanding.
<i>a</i> Sec. 91 Public Health Act	86	40	10	36
<i>b</i> Sec. 36 „ „	34	15	5	14
<i>c</i> Sec. 41 (and 19 of 1890 Act)	4	4	—	—
<i>f</i> Sec. 46 Public Health Act	6	6	—	—
<i>e</i> Sec. 106 Eastbourne Improvement Act	30	9	3	18
<i>i</i> Sec. 33 Eastbourne Improvement Act	12	12	—	—
Totals	172	86	18	68

CENTRAL WARD.

Section of Act.	No. issued.	No. complied with.	No. lapsed.	No. outstanding.
<i>a</i> Sec. 91 Public Health Act	34	22	—	12
<i>b</i> Sec. 36 „ „	3	2	—	1
<i>c</i> Sec. 41 (and 19 of 1890 Act)	17	9	—	8
<i>f</i> Sec. 46 Public Health Act	3	3	—	—
<i>e</i> Sec. 106 Eastbourne Improvement Act	6	1	—	5
<i>g</i> Sec. 34 Factory and Workshops Act, 1878	2	2	—	—
Totals	65	39	—	26

EAST WARD.

Section of Act.	No. Issued.	No. complied with.	No. lapsed.	No. outstanding
<i>a</i> Sec. 91 Public Health Act	67	53	—	14
<i>b</i> Sec. 36 „ „	29	23	1	5
<i>c</i> Sec. 41 (and 19 of 1890 Act)	2	2	—	—
<i>f</i> Sec. 46 Public Health Act	9	9	—	—
<i>e</i> Sec. 106 Eastbourne Improvement Act	10	6	—	4
Totals	117	93	1	23
Grand Totals... ..	370	233	19	118

a To abate nuisances of various sorts.

b To provide proper closets, dust bins, etc.

c To relay and repair defective drains.

d To remove offensive accumulations.

e To separate the water systems of closets from those for domestic use.

f To cleanse, disinfect, etc., houses.

g To limewash, etc., bakehouses.

h To make houses fit for human habitation.

i To provide proper sinks.

In addition to these Statutory Notices, 197 letters requesting amendments of premises were issued (86 of which were complied with), which otherwise would have necessitated the issuing of two, and in some instances three, notices in each case.

REFUSE REMOVAL.

Twenty-seven complaints as to non-removal of refuse were received during 1898 ; this is not a large number considering the size of the Borough. At many premises dust-holes have been replaced by iron dust-bins, and the work is still going on ; where it is advisable that iron dust-bins should not be supplied, the floor of the dust-hole is raised to the level of the surrounding ground and made, like the walls, impervious, covers also being provided. At the close of the year the management of the refuse removal was transferred to this department from the Borough Engineer's and the districts re-arranged, the town being divided into eight districts for the purpose. To each of seven of these districts there are three men, two drivers and one shoveller, with an additional cart and man when necessary. The eighth district (a portion of Norway) is cleared by a private contractor ; when the new arrangement is got well into working order it is advisable that all the refuse should be collected by the Corporation and burnt, and none of it left to a private contractor.

At the close of the year, coincident with the re-arrangement of the districts, a weekly collection even in small property has become general. Formerly some of the smaller houses were only collected once in two weeks or twice in three weeks. In summer in a health resort such as Eastbourne there should be a still more frequent collection ; at present only in some of the larger houses is the refuse collected twice a week.

SLAUGHTER-HOUSES AND MEAT INSPECTION.

The remarks made in my last report apply now, there having been no change for the year. The slaughter-houses of the Borough, six in number, are all private ones. With the

exception of the Chapel Drove Slaughter-house they are fit for their purpose. Chapel Drove Slaughter-house is not licensed and is unfit for a license; it is fortunately probable that this slaughter-house will be demolished shortly. The other slaughter-houses are Upwick and Ocklynge Slaughter-houses, in St. Mary's Ward; The Crumbles, Latimer Road, and Bourne Street Slaughter-houses, in the East Ward.

With the slaughter-houses scattered in various parts of the Borough and the Sanitary Inspectors full of work in other directions, meat inspection can be only partially carried out. No unsound meat has been seized in the slaughter-houses.

UN SOUND FOOD.

The tables appended show some of the work done in this direction; in addition, however, a large number of warnings were given that are not recorded, for food exposed for sale that was just on the border-line between fair and bad.

Fortunately for Eastbourne, the Magistrates have looked upon the exposure for sale of unsound food as a grave offence, as it undoubtedly is, and the three heavy fines recorded below have had a good effect.

Where no legal proceedings were taken in the list below we had the co-operation of the owner in the destruction of the unsound food.

UN SOUND MEAT, &c., DESTROYED, BUT NO LEGAL PROCEEDINGS TAKEN.

480 Danish Eggs.

31 Bags of Potatoes.

5 Hams, 2 pieces of Bacon, 1 Loin of Mutton.

6 Bags of Potatoes.

250 Kippers, 50 Mackerel, and 50 Herrings.

6 Boxes of Kippers and 4 Boxes of Bloaters.

10 Boxes of Pears.

UNSOUND MEAT, &c.,
LEGAL PROCEEDINGS.

Description and Quantity of Article.	Where exposed for Sale.	Result of Legal Proceedings.
Pork, 17½lbs., Bacon and Corned Beef, 2lbs. ...	} No. 25, Beltring Road {	Owner fined £10, and 12s. costs
Vegetables, 2 galls., Oranges 12, Lemons 8		Manager fined £3, and 12s. costs
Beef 35½lbs., Pork 7½lbs.	No. 60, Seaside	Fined £10, & 12s. costs
Beef, 14lbs	No. 60, Seaside	Fined £10, & 18s. costs

ANALYSES.

Appended is a table of the work done under the Food and Drugs Act during 1898; 98 samples were analysed by the Borough Analyst during 1898. Five of them were adulterated—one of gin, one of whiskey, and three of milk. The spirit adulteration was but small.

Of the three adulterated samples of milk one was informally taken and no farther steps taken. In the case of the other two prosecutions and conviction followed.

In the case of the two spirit adulterations prosecution and conviction followed in both cases.

RETURN OF WORK UNDER THE FOOD AND DRUGS
ACT IN 1898.

Foodstuffs, &c.	Samples taken.	Returned as		Proceedings, &c.
		Genuine.	Adulterat'd	
Ale	2	2	...	
Brandy	4	4	...	
Bread	2	2	...	
Butter	17	17	...	
Cream	5	5	...	
Cheese... ..	1	1	...	
Gin	3	2	1	Legal proceedings to be taken
*Hokey Pokey ...	1	1	...	
Porter	2	2	...	
Rum	5	5	...	
Whiskey	8	7	1	Prosecution & Conviction
Milk	48	45	3	One was informally taken, 2 prosecutions, and 2 convictions
Total.. ...	98	93	5	

*Bacteriological examination.—Bacteria not abnormally large in number.

CELLAR DWELLINGS.

It was necessary during 1898 to obtain the closure of one cellar dwelling ; this was done without legal proceedings.

OVERCROWDING.

Although rents remain high in Eastbourne, there are now many empty houses among the small property, and overcrowding is therefore not so difficult to deal with ; warnings or notices have been sufficient without prosecutions.

INFECTIOUS DISEASE.

The important work of the department in this respect has been dealt with earlier in this report.

	West Ward.	S. Mary's Ward.	Central Ward.	East Ward.	Total.
Number of cases notified ...	6	60	19	57	142
Number removed to Sanatorium	1	49	18	41	109
Number of houses disinfected	4	52	18	45	119

COW-SHEDS, DAIRIES, AND MILK-SHOPS.

I submit below a table showing the work done as regards these. They are under constant inspection :—

DAIRIES, COWSHEDS, AND MILKSHOPS ORDERS OF 1885-6.

	West Ward.	S. Mary's Ward.	Central Ward.	East Ward.	Totals.
No. of Dairies on Register..	3	4	8	5	20
„ Cowsheds „	1	3	—	2	6
„ Milkshops	6	2	6	21	35
Infectious disease among employés	—	—	—	—	—
Infectious illness on premises	—	—	—	—	—
Notice to abate nuisance ...	—	—	—	—	—
No. registered in 1898 ...	—	1	2	6	9
No. removed from register in 1898	—	1	—	3	4

BAKEHOUSES.

The 38 bakehouses in the Borough have been examined constantly, and are lime-washed twice a year under the supervision of the Inspectors. Structural alterations have had to be carried out in some of them.

COMMON LODGING-HOUSES.

The erection of a Municipal Lodging-house is no farther advanced; the Council having at various times passed the principle, did not accept either of the tenders submitted in 1898 for building the proposed Lodging-house. An amended and less expensive scheme is still before the Authority.

There is at present only one registered house, and it does not accommodate one-fourth of the tramps in winter nor one-tenth of them in summer, the effect being that many houses are used as common lodging-houses which, contrary to law, are not registered.

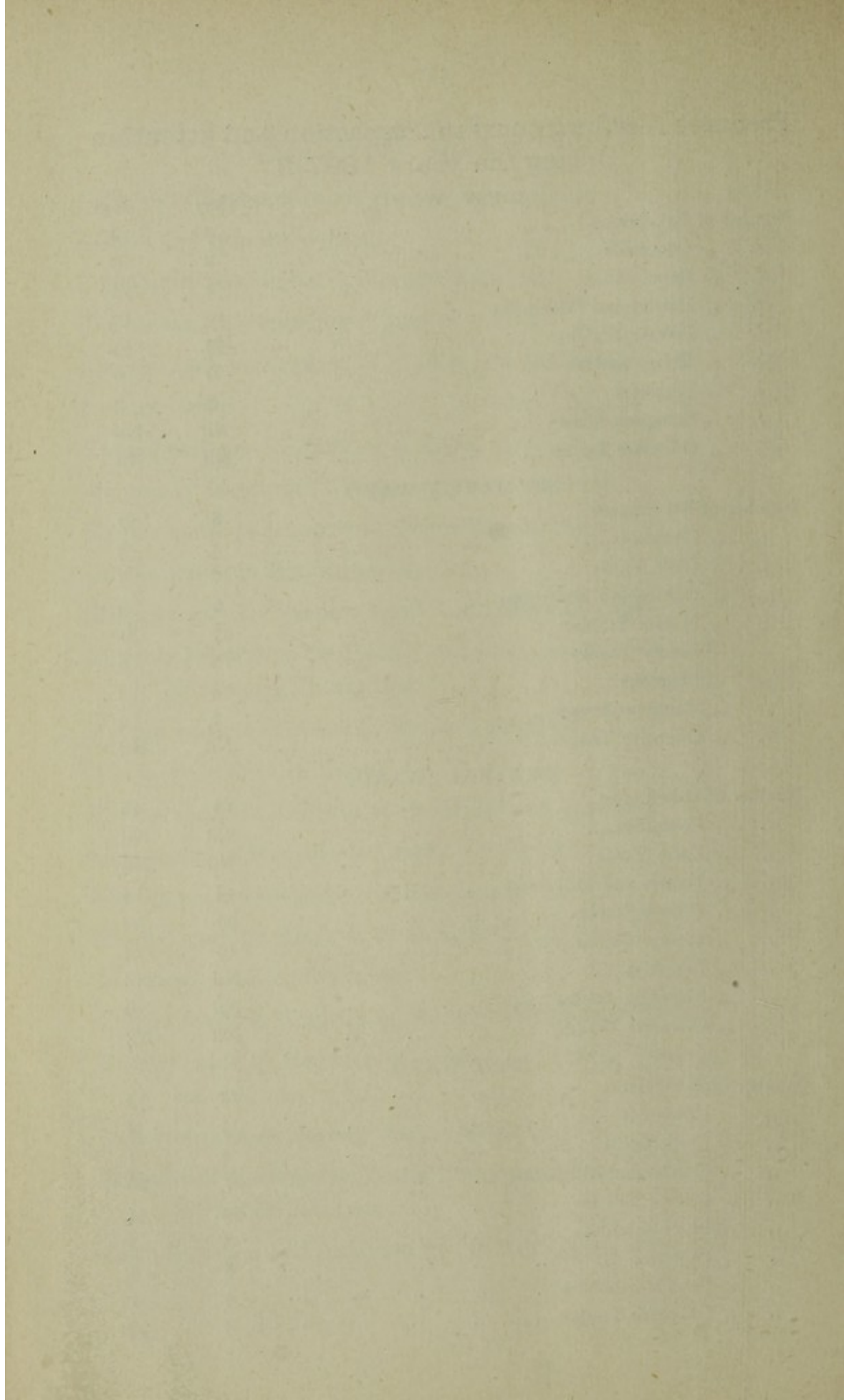
LEGAL PROCEEDINGS, 1898.

Unfortunately, the work of the Department cannot be carried out entirely without having recourse to legal proceedings. It will be noticed from the table below that of the eight occasions when it was necessary seven were for adulterations or unsound food:—

No.	Nature of Offence.	Date of Hearing.	Result.
1	Costs incurred in removal of manure, sec. 49 Public Health Act	Jan. 31st	Order made for payment of £3 2s.
2	Unsound meat intended for the food of man	Mar. 18th	Fined £10 and 12s. costs
3	Unsound meat intended for the food of man	„ „	Fined £3 and 12s. costs
4	Unsound meat intended for the food of man	April 1st	Fined £10 and 12s. costs
5	Selling adulterated milk	May 13th	Fined £1 and £1 os. 6d. costs
6	Unsound meat exposed for sale	June 24th	Fined £10 and 18s. costs
7	Selling adulterated milk	Nov. 28th	Fined £1 and 13s. 6d. costs
8	Selling adulterated whiskey	Dec. 23rd	Fined £1 and 18s. 6d. costs

Office Work during 1898.

Calls and Communications received and entered ...	...	2,358
Letters and Reports written ... ..	...	879
Complaints received of non-removal of Dust ...	...	27
Entries made in Inspectors' Journal ... ..	...	713
Entries made in Register of Defects and Nuisances	...	262
Notices Issued ... ..	...	370
Entries made in Register of Samples taken ...	...	97
Returns of Inspectors' Work made to Committee	...	21
Entries made in Inspectors' Special Report Book	...	6
Entries made in Notification Register ... ..	...	142
Entries made in " Report Book " on Infectious Cases	...	142
Monthly Returns on the Health of Eastbourne to Members of Sanitary Committee ... ..	...	156
Entries made in Voluntary Sanitary Register ...	...	45
Sanitary Certificates Issued ... ..	...	45
Entries made in Register of Cowsheds and Dairies	...	8
Certificates of Registration issued for the same	...	8
Entries made in Register of Bakehouses ... ..	...	72
Entries made in Register of Slaughterhouses ...	...	5
Licenses issued for the same ... ..	...	5
Entries made in Register of Seizures of Unsouud Meat	...	11
Entries made in Register of Letters requesting Amend- ments ... ..	...	197
Letter written requesting Amendments to be made	...	197
Samples of Eastbourne Water Supply taken for Analysis by Public Analysts ... ..	...	18
Samples taken and Analysed by Medical Officer of Health	...	162



Appendix.



TABLE I.

Table shewing the Births and Marriages and Deaths, at certain age periods in Eastbourne for 1898, and for the 10 preceding years.

Year.	Population estimated at middle of Year.	Births registered.	Marriages.	Deaths registered.			
				At all ages.	Under 1 year.	Under 5 years.	In Public Institutions.
1898	45,500	934	291	494	129	178	51
1888	30,600	780	206	421	89	137	46
1889	32,124	790	216	416	98	147	72
1890	33,724	735	199	485	81	161	111
1891	35,405	857	250	468	103	158	74
1892	37,168	921	236	505	153	181	73
1893	39,020	897	249	576	130	231	91
1894	40,964	975	256	430	95	119	63
1895	42,000	917	238	521	122	171	80
1896	43,500	919	267	454	105	151	62
1897	44,500	886	293	399	98	126	82
Avrge. of 10 years.	37,900	868	241	467	107	158	75

TABLE II.

Weekly Notifications of Infectious Disease, 1898.

Week.		Diphtheria.	Erysipelas.	Scarlet Fever.	Typhoid Fever.	Puerperal Fever.	Totals.
No.	Date of Ending.						
1	January 8	1	1	...	...	...	2
2	" 15	1	1	3	...	...	5
3	" 22	2	1	...	4	...	7
4	" 29	2	...	...	1	...	3
5	February 5	4	...	...	...	...	4*
6	" 12	3	...	...	1	1	5
7	" 19	...	...	1	...	...	1
8	" 26	2	...	...	2	...	4
9	March 5	...	1	1	...	...	2
10	" 12	1	2	...	1	...	4
11	" 19	2	...	1	...	...	3
12	" 26	2	...	1	...	1	4
13	April 2	...	...	...	...	...	...
14	" 9	3	...	1	...	...	4
15	" 16	1	3	...	...	...	4
16	" 23	...	...	...	...	...	...
17	" 30	2	1	2	...	...	5
18	May 7	...	...	2	...	...	2
19	" 14	1	...	1	...	...	2
20	" 21	...	...	...	...	...	...
21	" 28	1	...	...	...	...	1
22	June 4	...	1	...	...	...	1
23	" 11	1	...	...	...	...	1
24	" 18	...	...	...	...	...	...
25	" 25	...	...	...	...	...	...
26	July 2	...	...	2	...	...	2
27	" 9	...	1	1	...	...	2
28	" 16	...	1	...	...	...	1
29	" 23	1	...	...	...	...	1
30	" 30	...	...	1	...	...	1
31	August 6	...	...	3	...	...	3
32	" 13	...	...	...	...	...	...
33	" 20	...	...	5	1	...	6
34	" 27	...	...	2	1	...	3
35	September 3	...	...	...	1	...	1
36	" 10	...	...	3	1	...	4
37	" 17	1	...	...	...	...	1
38	" 24	...	...	1	1	...	2
39	October 1	1	...	2	2	...	5
40	" 8	...	...	...	2	...	2
41	" 15	...	...	1	4	...	5
42	" 22	1	...	7	1	...	9
43	" 29	2	1	1	1	...	5
44	November 5	...	...	...	...	...	...
45	" 12	...	...	2	...	...	2
46	" 19	...	1	2	...	...	3
47	" 26	...	1	1	...	...	2
48	December 3	...	...	...	...	...	...
49	" 10	1	...	2	1	...	4
50	" 17	1	2	...	...	...	3
51	" 24	5	...	5	...	...	10
52	" 31	1	...	...	...	...	1
Totals		43	18	54	25	2	142

* Including one from Membranous Croup.

TABLE IV.
NOTIFICATIONS OF INFECTIOUS DISEASE. RETURNS FOR 1894-1898.

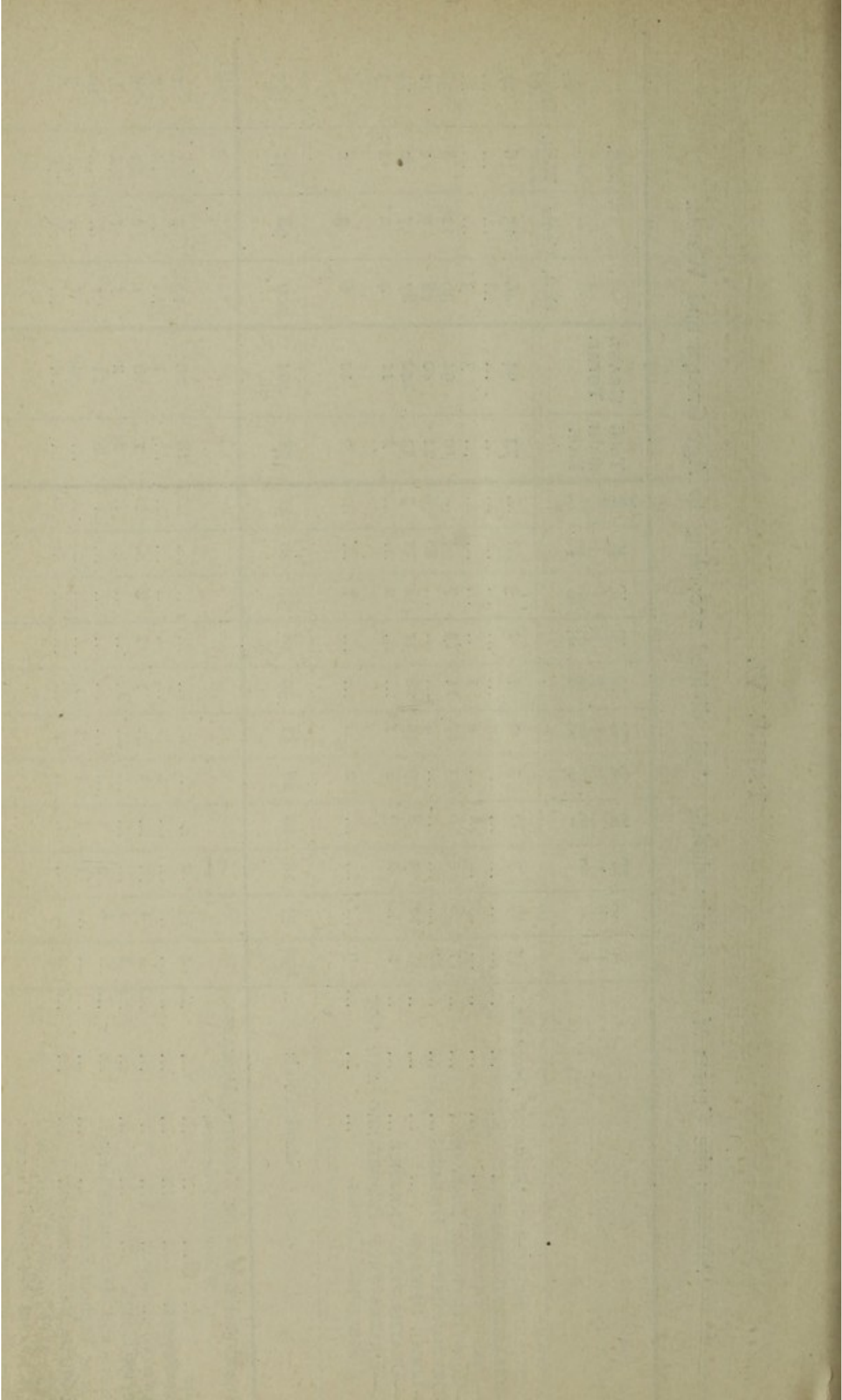
YEAR.	1894					1895					1896.					1897.					1898.											
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	Year.	
Diphtheria	15	5	6	14	40	9	6	15	6	36	7	6	9	20	42	36	37	24	20	177	19	9	3	11	42	44	20	31	47	142		
Scarlet Fever	31	21	6	9	67	28	4	8	19	59	28	14	13	19	74	18	13	13	22	66	7	6	20	21	54	7	6	20	21	54		
Enteric Fever	2	8	2	3	15	4	1	9	4	18	2	2	47	33	84	3	...	5	3	11	9	...	6	10	25	2	...	...	2	2	
Puerperal Fever ...	1	...	...	...	1	...	1	1	1	3	6	...	...	...	6	1	1	...	...	2	2	...	...	...	...	...	...	...	...	2	2
Erysipelas	8	3	5	4	20	6	4	5	6	21	2	3	5	7	17	4	2	4	3	13	6	5	2	5	18	6	5	2	5	18	18	
Relapsing Fever
Membranous Croup ...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	2	2	...	...	4	1	...	...	...	...	...	...	...	...	1	1
Small-pox	13	5	18
Total	57	37	19	30	143	48	16	51	41	156	45	25	74	79	223	64	55	46	48	213	44	20	31	47	142	44	20	31	47	142	142	

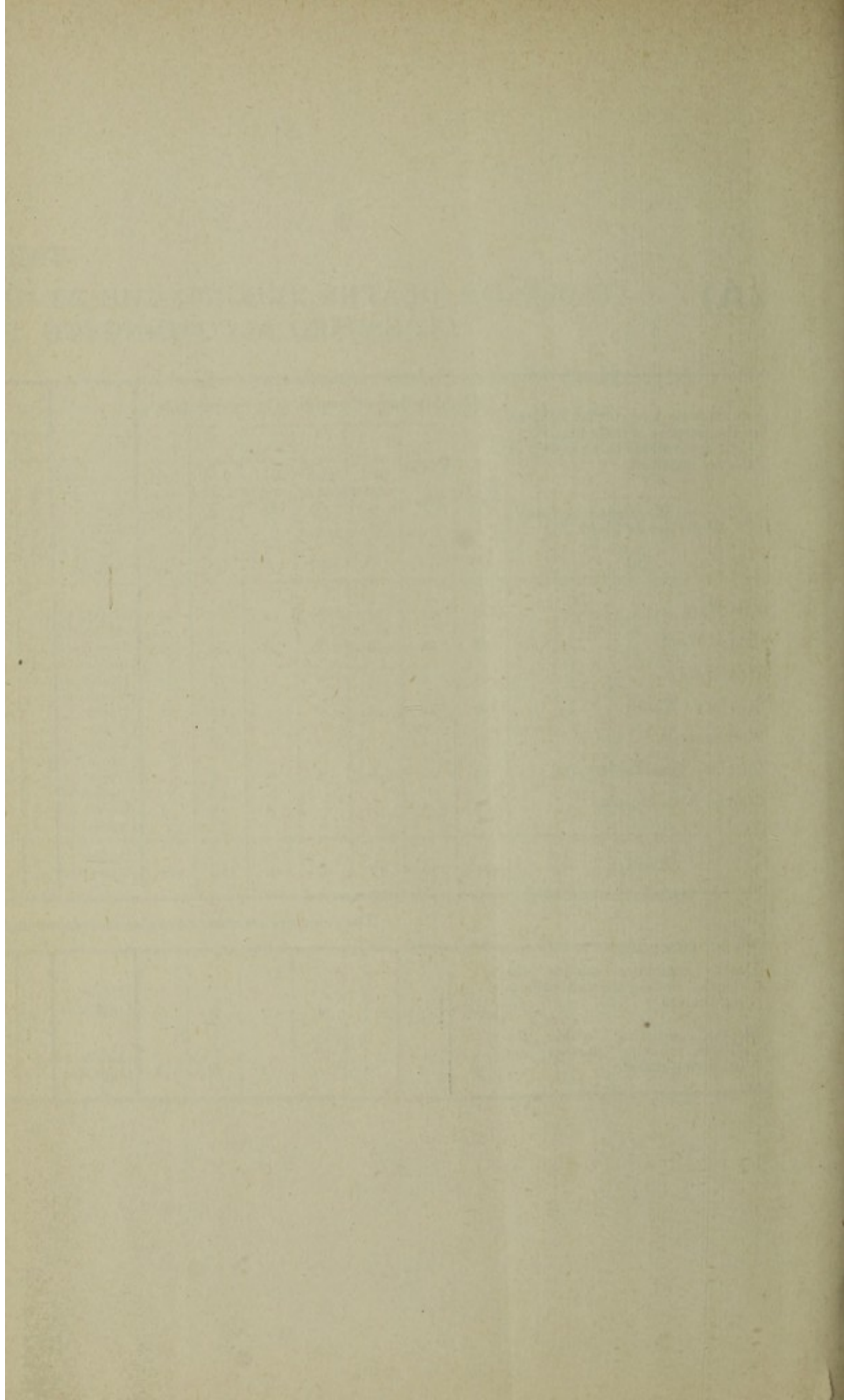
Sickness-rate for 1891 (estimated population, 35,405)—6'89.
 " " 1892 " " 37,168)—4'81.
 " " 1893 " " 39,020)—8'58.
 " " 1894 " " 40,964)—3'48.
 Sickness-rate for 1895 (estimated population, 42,000)—3'71.
 " " 1896 " " 43,500)—5'12.
 " " 1897 " " 44,500)—4'78.
 " " 1898 " " 45,500)—3'14.

TABLE V.

Estimated Population, 45,500.

1898.		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Year.	
BIRTHS.	Males	128	125	121	104	478	
	Females	123	104	110	119	456	
	Total	251	229	231	223	934	
	Equivalent annual rate per 1,000 persons	20·07	20·13	20·31	19·70	20·52	
NOTIFICATIONS.	Diphtheria (including Memb. Croup)	20	9	3	11	43	
	Erysipelas	6	5	2	5	18	
	Smallpox ... ..	...	...	...	...	...
	Cholera ... ..	...	...	...	...	...
	Scarlet Fever	7	6	20	22	54	
	Enteric „	9	...	6	10	25	
	Puerperal „	2	...	...	...	2
	Typhus „ ... ..	...	...	...	...	...
	Total	44	20	31	47	142	
Sickness-rate per 1,000 ...	3·87	1·76	2·72	4·13	3·12		
DEATHS.	Males	60	50	70	50	230	
	Females	69	54	60	81	264	
	Total	129	104	130	131	494	
	Non-Residents	11	7	8	4	30	
	Corrected Total	118	97	122	127	464	
	Both Sexes {	Under 1 year	22	21	49	38	130
		1-5 years	7	7	10	25	49
		5-15 years	6	2	2	8	18
		15-65 years	47	48	46	42	183
		Over 65 years... ..	47	26	23	18	114
	Equivalent annual rate per 1,000 persons(corrected)...	11·34	9·14	11·42	11·52	10·85	
	Deaths under 1 year per 1,000 births	88	92	212	170	139	
Death-rate (excluding visi- tors) per 1,000	10·37	8·52	10·72	11·17	10·20		
METEOROLOGY.	Atmospheric Pressure, inches (corrected) {	Mean	30·067	29·920	30·060	29·909	29·989
		Highest	30·750	30·321	30·394	30·530	30·750
		Lowest	29·164	29·230	29·654	29·102	29·102
	Temperature {	Mean	43·0	51·2	61·6	50·8	51·6
		Highest	53·6	73·0	79·0	66·8	79·0
		Lowest	28·2	36·0	42·0	29·6	28·2
	Total rainfall (inches) ...	3·86	7·43	2·81	9·54	23·64	
	Bright sunshine, hours re- corded	258·0	575·8	744·4	213·7	1791·9	
	Wind {	Prevailing direction	S.W.	W.	W.	W.	W.
		Mean hourly velo- city (miles)	10·8	11·9	10·1	14·3	11·8

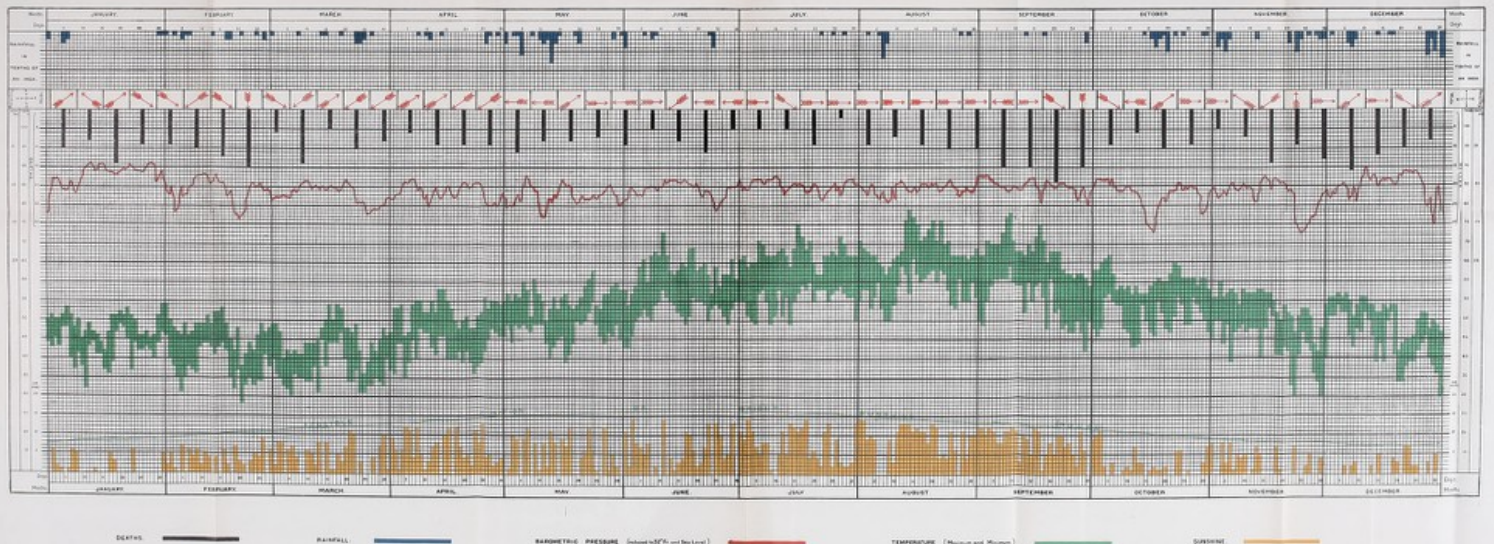






Borough of Eastbourne.

Chart showing the principal Meteorological Conditions during each day of the year 1898.
(from monthly returns)



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