

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

Contributors

Hastings (England). County Borough Council.

Publication/Creation

1898

Persistent URL

<https://wellcomecollection.org/works/mzcux4mx>

License and attribution

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

THE
ANNUAL REPORT
ON
THE HEALTH,
SANITARY CONDITION,
ETC., ETC., OF THE
Borough of Hastings,
FOR THE YEAR
1898.

BY

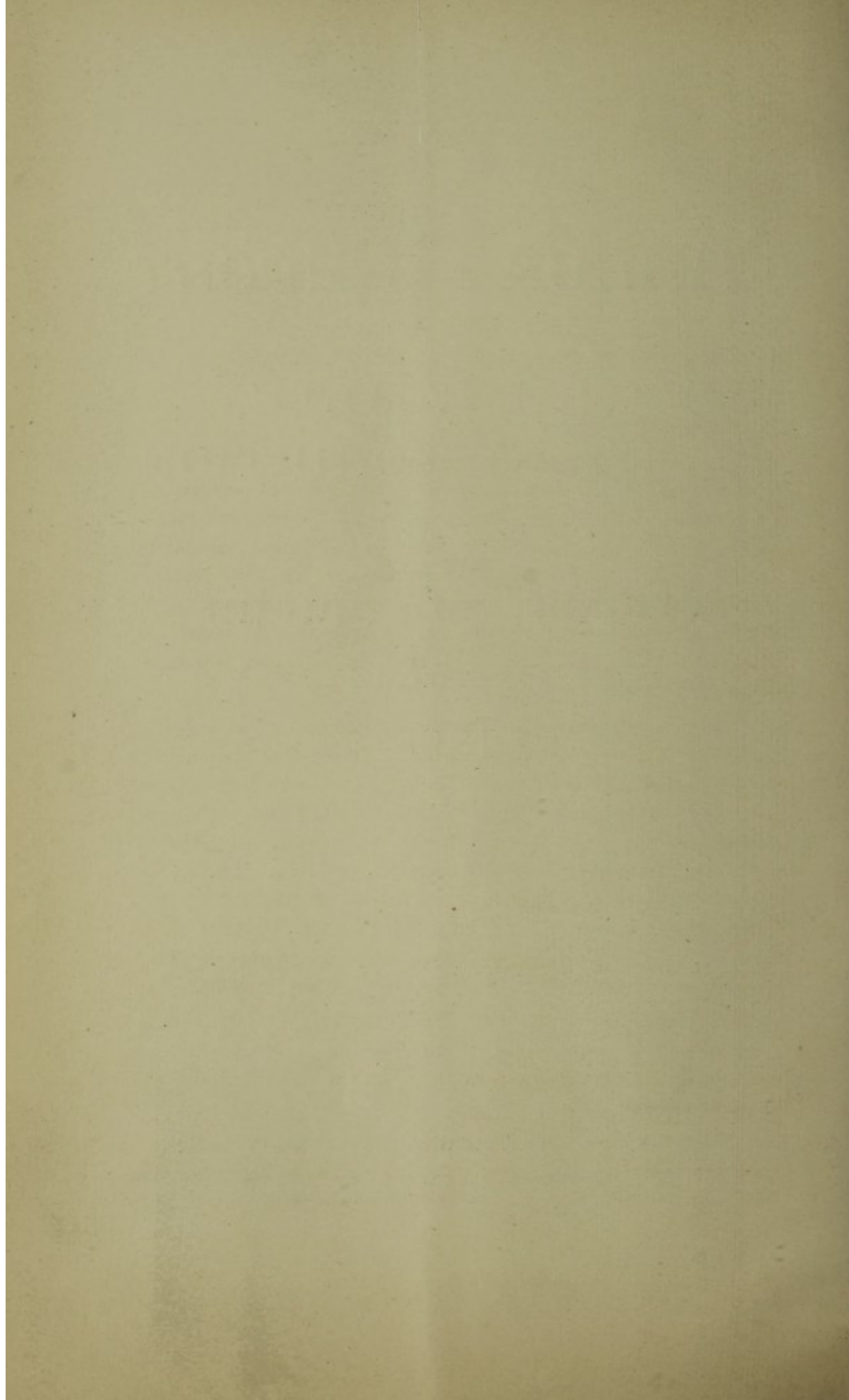
A. SCARLYN WILSON, M.A., M.B.,
D.P.H. Cantab., M.R.C.S., Eng.,

MEDICAL OFFICER OF HEALTH; FELLOW OF THE INCORPORATED
SOCIETY OF MEDICAL OFFICERS OF HEALTH.

ST. LEONARDS :

PRINTED BY DANIEL AND CO., KING'S ROAD LIBRARY.

MDCCCXCIX.



TO THE
MAYOR, ALDERMEN, AND BURGESSES
OF THE
COUNTY BOROUGH OF HASTINGS.

GENTLEMEN,

The area covered by the extended Borough of Hastings contained, at the time of the census in 1891, an enumerated population of 63,072 persons. The population at the middle of 1898 I estimate at 73,000, which is the number I have used in the various calculations in this report. The Old Borough contained at the 1891 census a population of 52,223 persons, which number had increased in the middle of 1898 to about 59,000. In the same way the added area at the census had a population of 10,849, since increased to probably about 14,000 persons in the middle of the past year.

The effect of the extension of the Borough was to add slightly to the area of the old parishes of All Saints and St. Leonards; the old parish of Blacklands, combining with a large area taken from the rural district of Ore, forms the new Urban Parish of St. Helens; while two entirely new parishes are taken from rural districts and added to the Borough and are known as the Urban Parishes of St. Matthew and Hollington St. John. The exact populations of these enlarged and newly formed parishes cannot be accurately given. The old Urban Parishes of St. Mary Magdalen, Holy Trinity, St. Andrew, St. Mary-in-the-Castle, St. Michael, St. Mary Bulverhythe, and St. Clement are unaffected by the extension of the Borough.

The area of the Municipal Borough has been increased from 2,194 acres (including 373 acres of foreshore) to 4,769 acres (including 373 acres of foreshore).

Births and Birth-rate.—The births which in the Old Borough in 1897 numbered only 1,009, were 1,338 in the extended Borough during 1898, and the birth-rate rose to 18·33 compared with only 17·16 in

1897. As I indicated in my last annual report, the extension of the Borough was likely to cause some increase in the birth-rate ; the population of the added area differing in some respects from the class largely composing the more purely watering place population of the Old Borough. The birth-rate in Hastings is still abnormally low compared with the country at large, where it was 29·4 in 1898 and 29·7 in 1897. High birth-rates are to be found chiefly in large industrial centres, where there is abundance of work for an active and vigorous male population, and where the sexes are numerically equal ; in such districts a rise or fall in the birth-rate is considered to be to some extent an indication of commercial prosperity or depression. But this rule does not apply in the same degree to residential neighbourhoods, and still less to health resorts and watering places, where a low birth-rate often indicates only the extent to which what may be called the normal population of a district is outweighed by the presence of more or less delicate visitors and attendants in the numerous hotels and lodging-houses which largely go to compose such places. In towns of this character there is no great demand for male labour, and there is commonly found, as in Hastings, along with a low birth-rate a great preponderance of the female sex.

This is well shown in the accompanying table :—

TABLE I.

Town.	Population (1891 Census).			Birth-rate in 1898.
	Males.	Females.	Persons.	
Bath	21,125	30,719	51,844	19·07
Cheltenham	17,594	25,320	42,914	22·2
Eastbourne	14,665	20,304	34,969	20·52
Hastings ...	20,945	31,278	52,223	18·33
Southport ..	19,830	28,615	48,445	19·71
Torquay ...	10,393	15,141	25,534	17·6

These low birth-rates are especially noticeable in recent years ; thus, in Southport in 1877 the birth-rate was 33·87, from which point it has steadily declined to 19·71 ; in Eastbourne in 1886 the birth-rate was 32·01, so that in 13 years it has diminished by 12 per thousand of population ; the birth-rate of England and Wales in the same period of 13 years having declined from 32·8 to 29·4 or about $3\frac{1}{2}$ per thousand, as in Hastings during the same time.

Nearly 5 per cent. of the total births registered in Hastings during 1898 were illegitimate ; the proportion of illegitimate births being, highest in the Ore Registration Sub-district, where in the last three quarters of the year it was more than 10 per cent. It must be remembered, however, that the Ore district contains the Union Workhouse, wherein many illegitimate births belonging to the whole union occur.

Natural Increase of the Population.—The births registered in the district exceeded the deaths by 255, although in the first quarter of the year there was an excess of deaths over births of 32.

TABLE II.

	Births.	Deaths.	Natural Increase
First Quarter	313	345	-32
Second „	325	243	82
Third „	365	260	105
Fourth „	335	235	100
Whole Year	1338	1083	255

Deaths and Death-rate.—The total number of deaths registered in the Borough during the year was 1,083. Included in this total were 148 deaths of visitors, equal to 13·7 per cent. of the whole number recorded. Of the deaths of non-parishioners or visitors 42 occurred in the public institutions of the Borough, and these may reasonably be deducted from the total in estimating the death-rate, which would

otherwise be unfairly augmented by the inclusion of deaths of persons brought in from the surrounding rural districts in search of that medical treatment and relief which their own districts are unable to offer. The death-rate for the year, subject to this correction, was 14·26 per thousand, very slightly above the average of the preceding ten years.

The death-rate was highest, 18·5 in the first quarter ; lowest, 12·4 in the last ; while it was 13·0 and 13·2 in the second and third quarters respectively.

Of the 1,083 deaths registered 552 were of males, 531 of females. If the proportion of males to females remains as it was at the last census the death-rate of males was 18·1 per thousand of males at all ages ; the death-rate of females being 12·1 per thousand of females.

Of the deaths of non-residents in the Public Institutions of the Borough 19 occurred in the Eversfield Hospital, 12 in the East Sussex Hospital, 5 in the Workhouse, 3 in the Railway Men's Convalescent Home, and one each in the Borough Sanatorium, the Convalescent Home for Poor Children, and the Buchanan Hospital.

The deaths of 186 infants, under one year of age, were registered during the year, equal to 139 per thousand of births. The infantile mortality was highest in the third quarter, when it reached 175 per thousand of registered births ; it was lowest, 117 per thousand, in the second quarter, and was 134 and 125 per thousand in the first and last quarters respectively. (The infant mortality in England and Wales was 161 in the year 1898). The deaths of infants under one year of age were 171 per thousand of total deaths at all ages.

Inclusive of the above there were 269 deaths of children under 5 years of age, being 248 per thousand of the total number registered at all ages.

Among persons of 60 years and upwards there were 411 deaths, equivalent to 394 per thousand of total deaths, excluding those of non-residents in our public institutions.

The following table shows for each parish the number of deaths in each quarter and in the whole year :—

TABLE III.

Parish.	Deaths.				
	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Whole Year.
St. Mary B'lverh'the	2	—	—	3	5
St. Leonard	35	27	17	26	105
St. Matthew	29	23	23	20	95
St. Mary Magdalen	61	44	38	39	182
St. Michael	3	1	2	—	6
Holy Trinity	28	17	22	18	85
St. Andrew	8	8	4	9	29
St. Mary-in-the-Castle	67	44	49	42	192
St. Clement	24	19	22	21	86
All Saints	43	25	37	17	122
St. Helens	28	26	22	21	97
Hollington St. John	5	3	7	11	26
Total	333	237	243	227	1040

In the above table the deaths of parishioners occurring in public institutions are referred to the parishes to which the deceased persons belonged.

Zymotic Diseases.—The deaths for the seven principal Zymotic Diseases, viz : Measles, scarlatina, small-pox, diphtheria, whooping-cough, fever (typhus, typhoid, and continued), and diarrhœa numbered

93, excluding imported cases in our public institutions, with a zymotic death-rate of 1·27 per thousand, the average of the previous ten years 1888-1897 being '98 per thousand.

The following table shows the number of deaths in the extended Borough during 1898, and in each of the ten preceding years in the Old Borough.

TABLE IV.

Disease.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	Annual Average 1888- 1897.	1898.
Smallpox	—	—	—	—	—	—	3	—	—	—	0·3	—
Measles	—	6	18	—	25	8	5	17	27	3	10·9	6
Scarlet Fever ...	3	—	2	—	—	12	3	1	—	2	2·3	7
Diphtheria... ..	4	6	6	23	32	32	12	3	12	6	13·6	18
Whooping Cough	5	5	14	26	5	6	20	10	10	16	11·7	9
Fever. {												
Typhus	—	—	—	—	—	—	—	—	—	—	—	—
Typhoid	2	3	4	4	4	4	3	1	3	2	3·0	6
Continued ...	—	—	—	—	—	—	—	—	—	—	—	—
Diarrhœa	11	16	7	7	15	11	6	20	12	16	12·1	47
Totals	25	36	51	60	81	73	52	52	64	45	53·9	93
Zymotic Death- rate	0·50	0·71	0·99	1·14	1·51	1·33	0·93	0·91	1·09	0·76	0·98	1·27

Measles.—There was a slight local prevalence of measles early in the year in the rural parts of the district, causing six deaths, of which five were registered in the Parish of St. Matthew, and one in St. Helens.

Whooping-cough.—Cases occurred throughout the year, but the deaths from this cause were below the average. The nine deaths reg-

istered were distributed among 8 of the 12 parishes which constitute the enlarged Borough.

Small-pox.—No case was notified throughout the year.

I am glad to be able to append the return of vaccination for the year 1897, kindly supplied me by the courtesy of the vaccination officer, Mr. S. Bumstead, from which it appears that only 29 persons were found to avail themselves of the Conscience Clause of the new Act, and that three out of four infants born in the Union are satisfactorily accounted for.

As one of the results of vaccination dreaded by the objector is erysipelas, it may, perhaps, be encouraging to some persons to learn that in 1898—as in most previous years—no case of erysipelas occurred in the Borough under 5 years of age. One notification was received of a child of 7 years of age, the other cases were all adults ; so that among the hundreds of babies vaccinated during the year none suffered from erysipelas as a consequence.

Summary of Vaccination Returns for 1897 :—

1.—Number of Births	1377
2.—Successfully Vaccinated	909
3.—Insusceptible of Vaccination	3
4.—Dead, Unvaccinated	108
5.—Number in respect of whom Certificates of Conscientious Objection have been received	29
6.—Postponed by Medical Certificate... ..	1
7.—Removed to Districts, the Vaccination Officer of which has been duly apprised	10
8.—Removed to places unknown or which can- not be reached, and cases not having been found	116
9.—Number Unaccounted for	201

Diphtheria.—The notifications numbered 66 with 18 deaths against 24 notifications and 6 deaths in the previous year. Owing to the great length of time during which the germ may cling to the throat of a person who has suffered from diphtheria, still retaining its vitality,

and being capable of causing the disease amongst those who are susceptible, it is a matter of very great difficulty to root out the infection of diphtheria from a family—and still more from a school—which has been invaded, and the only safe rule is to keep in isolation every case of diphtheria until bacteriological examination shows that the germ is no longer present. This is done in all cases of diphtheria admitted to the Sanatorium.

As I pointed out in my last report, there is the further difficulty that those who have been exposed to the infection may possibly—though showing no symptoms of illness—be capable of harbouring the germ in their own throat, and of acting as conveyors of infection to others, especially to those whose throats are weakened by residence amidst insanitary surroundings. During the early part and middle of last year the disease recurred again and again at variable intervals amongst the children attending certain elementary schools in the Borough, never causing anything like an outbreak of sufficient extent to call for specially stringent action, and yet never absent altogether for more than a few weeks at a time. During the last quarter of the year the cases were few and mild, causing no death in the district.

Typhoid Fever.—The number of cases notified during the year was 30 against only 11 in the Old Borough during 1897. There were 9 deaths. A large proportion of the total number of cases were imported or due to infection brought from without the district. The attack-rate per thousand of the population, though small (being only 0·4) was yet considerably above the average in Hastings, and I, therefore, give some details of each case notified :—

Case 1. Fatal, died in East Sussex Hospital; removed from Hollington, the house in bad sanitary condition, and water supply a polluted private well. Case 2. Doubtful, mild case, in Silverhill, house in bad sanitary condition. Case 3. Doubtful case, a soldier just returned from India, where he had suffered from fever. Case 4. A nurse, removed to Buchanan Hospital from Hastings, cause unknown. Case 5. Had been in attendance on a woman suffering from intestinal (probably typhoid) ulceration, from London, fatal. Case 6. A young woman who came from London in the third week of the disease, died

in Buchanan Hospital. Case 7. A plumber, phthisical, had been employed in drainage work. Case 8. A child brought home ill from the country. Case 9. A young woman, fever contracted in Kent. Case 10. A young woman, fever contracted in Switzerland, where two others of the party were attacked and one died. Case 11. A young woman, infection imported from the country. Case 12. A fatal case in Workhouse ; came to Hastings ill with the disease from Crowhurst. Case 13. Fishmonger, not traced, possibly oysters. Cases 14, 15, 17. Mother and two children taken ill on return from hop-picking in Kent, where they had to drink water from a ditch, and the sanitary arrangements were "anyhow." Case 16. Imported from Shoreham, ill on arrival here. Case 18. Mild case of uncertain nature, sanitary conditions indifferent. Case 19. Contracted from case 16 (an imported case). Case 20. Fatal case in Silverhill, sanitary surroundings excellent, long ailing, had a few raw oysters just before illness became acute, only possible cause discovered. Case 21. Mild case, probably imported. Case 22. A child, sanitary conditions bad, had been watching drainage works being executed next door, where ground was open. Case 23. Contracted in Ore, where drainage and water from private well were unsatisfactory ; two further cases subsequently occurred in this house at Ore, treated in Sanatorium. Cases 24 (fatal), and 25 imported from Crowhurst, to East Sussex Hospital. Case 26. Imported from country to East Sussex Hospital. Case 27. Mild case in same house as case 18. Case 28. Imported from country to East Sussex Hospital. Case 29. Fatal, drain connected with drain of next house, in which a young woman lay ill with ulceration of intestine ; she having come to Hastings infected from Kent (her mother and sister developed enteric fever early in the present year). Case 30. In a house with defective drain, and redrainage of 12 houses going on close by in Silverhill.

Thus of the 30 cases notified no less than 15 were imported, while 3 others were contracted direct from imported cases, leaving only 12 to be accounted for locally, in a population of 73,000. None of the cases could be attributed to infected milk or to the public water supply.

Scarlatina.—The notifications numbered 400, and there were 9 deaths, a case-mortality of only 2·25 per cent. Two hundred and

twenty-seven cases were removed for treatment to the Sanatorium, with 5 deaths, a case-mortality of 2·2 per cent. against 2·3 per cent. amongst those who were treated at their own homes. The type of disease was exceedingly mild as a general rule, with a few malignant cases. In many instances no medical opinion was sought until desquamation was advanced, hence arose the chief difficulty in arresting the spread of the disease; the children attending school, or playing with and visiting amongst their friends during the period of greatest infection without any precaution. On several occasions I discovered children in an infectious condition on my visits to the elementary schools; and I advised the closure of the St. Paul's Schools for one week in order to carry out thorough disinfection of the premises (wherein I had found several children profusely desquamating), which was done with apparent good effect. The disease was almost confined to children belonging to the poorer classes, but in the end of March and beginning of April a series of cases—17 in all—occurred amongst persons occupying a superior position. I found all these to be receiving milk from a particular dairy, and I subsequently discovered that one of the men employed in delivering the milk was desquamating freely. He had had a severe sore throat a fortnight earlier which had kept him at home for a week, but had noticed no rash. I had him immediately isolated and the outbreak promptly subsided. None of these milk cases proved fatal.

Diarrhœa.—The summer of 1898 was marked by a diarrhœa mortality far above the average; the deaths from this class of disease were especially numerous during the month of September. The fatal cases occurred—as is usual—almost exclusively amongst bottle-fed babies in the poorer districts of the Borough.

Greater cleanliness is to be desired not only in the houses of the poor, but in their surroundings as well; more attention should be paid to the condition of yards and passages, which are too often ill-paved and neglected. They should be paved with impervious material, and kept clean, that the soil be not sodden and polluted with organic refuse, wherein the specific organism of the disease thrives. Rising thence during the hot weather in the late summer the germ finds a suitable

habitat in milk and other food stuffs, and thus obtains entrance into the bodies of those partaking of the infected food.

Bottles for infants should be without tubes, and should be kept scrupulously clean and sweet, and the milk—at all events during the hot season of the year—should be boiled, thus destroying the vitality of the bacteria.

The deaths from diarrhoea numbered 47 during the year—all but 4 being deaths of infants. The diarrhoeal death-rate was 0·64 per thousand of the population, or more than that caused by all the other chief zymotic diseases put together.

Table showing notifications of Infectious Diseases received during the four quarters of 1898 and during the whole year ; also the attack-rate per 1,000 of the population :

TABLE V.

NOTIFICATION OF INFECTIOUS DISEASES.

Disease.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Whole Year.	Attack-rate.
Smallpox	—	—	—	—	—	—
Scarlatina	106	126	79	89	400	5·5
Diphtheria... ..	28	11	17	8	64	0·9
Membranous Croup...	1	1	—	—	2	0·027
Erysipelas	10	6	8	16	40	0·55
Typhoid Fever ...	2	1	15	12	30	0·4
Puerperal Fever	1	—	2	1	4	0·055
Total ...	148	145	121	126	540	7·4

Table of deaths from the seven chief Zymotic Diseases during each of the four quarters of the year 1898, and during the whole year, with death-rates per thousand of the population.

TABLE VI.
DEATHS FROM ZYMOTIC DISEASES.

Disease.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Whole Year.	Death-rates per 1000.
Smallpox	—	—	—	—	—	—
Measles	6	—	—	—	6	0·08
Scarlatina	1	4	4	—	9	0·12
Whooping Cough	2	1	4	2	9	0·12
Diphtheria.....	7	4	7	—	18	0·24
Typhoid.....	2	—	3	4	9	0·12
Diarrhœa	3	3	37	4	47	0·64
Total	21	12	55	10	98	1·34

N.B.—The above table includes imported cases which proved fatal in the Public Institutions of the Borough, of which three were imported cases of typhoid fever, and two of Scarlatina.

Deaths from other zymotic diseases were 28 from influenza, of which 24 were in the first quarter of the year, three from syphilis, 2 from pyæmia, 1 from erysipelas, and 3 from puerperal fever.

There were 139 deaths from phthisis (including 46 deaths of visitors), and 32 from other forms of tubercular disease; there were 69 deaths from cancer or malignant disease, viz., 27 males and 42 females; 6 deaths from diabetes; 3 from Addison's disease; 4 from pernicious anæmia; 2 from hæmophilia; 5 from acute rheumatism; 1 from purpura.

Developmental diseases caused 89 deaths, viz., 62 from old age; 22 from premature birth; and 5 from congenital malformation.

Nine deaths were attributed to alcoholism, chronic or acute, viz., 5 males and 4 females.

Of local diseases pneumonia, pleurisy, and bronchitis caused 155 deaths; diseases of the nervous system, chiefly apoplexy, 99 deaths; diseases of the heart and blood vessels, 111 deaths; diseases of the urinary system, 34 deaths; of the reproductive system, 4 deaths; 5 women died in childbirth; 28 infants died under one year of age from atrophy, debility, or marasmus.

Tuberculosis.—One hundred and seventy-one deaths were attributed to tuberculous diseases in Hastings during 1898, equivalent to 15·7 per cent. or more than one seventh of the total number of deaths registered. At the present time, owing to recent discoveries as to its definitely infective character, tuberculosis is claiming a special share of attention, and all sorts of suggestions are being put forward for its prevention. It must not, however, be supposed that sanitarians in the past have been slow in recommending the adoption of general measures to deal with this wide-spread malady. On the contrary, a great work has been effected by sanitary authorities as regards removing the predisposing causes of tuberculosis by drainage and drying of the soil, by prevention of over-crowding in dwellings, by enforcing of measures tending to secure dry, airy, and well-lighted houses for the people, and by ameliorating the conditions under which certain trade processes are carried on. But these objects have been accomplished with a view to the improvement of the public health generally, and were not directed solely against tuberculosis. Recent research shows that phthisis and other tuberculous affections result from one cause only, namely, from infection with the tubercle bacillus, and that every case of tuberculosis we meet with depends for its causation on some pre-existing case of the same disease.

The specific germ is present in immense numbers in the matter expectorated or coughed up by consumptive persons, and in the milk and flesh of tuberculous animals. These facts being known it is now possible, therefore, to strike at the very root of this vast evil which decimates the population of this country, and it is the duty of all sanitary authorities to take simultaneous and immediate action in

combating the disease. The first and most important point is the education of the public in the knowledge of the means by which the disease is spread. With this object in view I propose to issue a leaflet which may be distributed to members of the medical profession for circulation—as may seem to them to be necessary—amongst their phthisical patients, advising the adoption of certain precautionary measures in the disposal of the chief source of danger—the sputum or or expectoration. In all cases of death from phthisis I shall recommend by a leaflet the cleansing and disinfection of infected rooms, and I should welcome a system of voluntary notification of tuberculosis in all instances where the action of the sanitary authority might appear desirable to improve hygienic conditions, and to secure cleanliness and disinfection of rooms or lodgings vacated by phthisical persons. I should be glad to see powers obtained—if so it can be—to minimize the nuisance caused by the offensive practice of indiscriminate spitting in public buildings, conveyances, or places whereby our parades and pavements are rendered unsightly and unclean. I would suggest that some arrangement be made for the gratuitous bacterioscopic examination of the sputum of suspected tuberculous cases amongst the poor with a view to the early recognition of the disease.

There is no doubt that much of the tubercular and scrofulous disease so prevalent amongst children is the result of infection derived from the milk of cows affected with tuberculosis, and for the protection of our milk-supply special powers are required for the examination of all milk brought into the Borough, and for the skilled inspection and testing with tuberculin test of cows whose milk is consumed in the district wherever they may be located. Public institutions supplied by contract, and even private consumers may wisely make stringent stipulations to be supplied only with milk from cows shown by reliable test to be healthy. It is well however to remember that infected milk can be rendered harmless by boiling or sterilisation and that its nutrient properties are little if at all interfered with in the process. Butter and cheese cannot however be thus dealt with; and the true object we should hold in view is to obtain a milk-supply free from all disease germs by securing healthy conditions for the cows and by preventing the use of milk from diseased animals.

Greatly less is the risk of infection from consuming tuberculous meat, and the remedy is to be found in the diligent inspection of meat, which can only be carried out effectually and thoroughly in public abattoirs. Considering the enormous loss of life and of health annually caused by tuberculosis no effort can be regarded as excessive which tends to eradicate the disease from our midst.

INQUESTS.

Inquests were held on the bodies of 61 persons, of whom 14 came by their deaths by suicide, and one died from syncope while attempting to hang himself.

UNCERTIFIED DEATHS.

The deaths not certified by medical attendant or by coroner after inquest numbered 19, equal to 1·7 per cent. of the gross number registered.

BOROUGH SANATORIUM.

The new Sanatorium is now complete and commissioned throughout. The Ward Pavilions were occupied by patients at the end of March; at which time the Isolation Blocks were temporarily fitted up for the reception of the Matron and the nursing and domestic staff, pending the alterations necessary to transform the old Hospital into the new Administrative Block. The whole was finished before the end of the year, and the town now possesses a very perfect hospital for the isolation of infectious diseases. The nursing, laundry and domestic staff has been most efficiently organised by the new Matron—Miss Ainsworth—who had previously held a similar appointment at Cardiff Isolation Hospital. Accommodation for patients is provided in four blocks. Two of these are ward-pavilions, containing two wards each in order to secure separation of the sexes. The two other blocks contain each four small wards suitable for private and paying patients, or for other cases requiring special treatment or accommodation. All the wards are well ventilated, heated by open grates and by hot water radiators, and lighted by gas fitted with incandescent burners. Provision is made for 46 beds allowing each patient a cubic air space of 2,200 cubic feet. The steam laundry is fitted with machinery by Thomas Bradford & Co.; there is also a steam (Reck's) disinfectant in

addition to Washington Lyon's apparatus at the town disinfecting station).

There is also a properly constructed Discharge Block for the final bathing and disinfection of patients prior to their leaving the hospital; a mortuary, an ambulance station and stable, and a small destructor for the house and other refuse of the institution. In order to provide for the future extension of the Hospital as necessity may arise for the building of additional blocks an adjoining plot of land has been acquired and the administrative block with the accommodation for nurses, etc., has been provided far in excess of existing needs.

The number of cases treated in the Sanatorium during the year was 232, viz., 230 removed from the Borough, and 2 from the Rural District. The cases from the Borough were 227 of Scarlatina, 2 of diphtheria, and one of typhoid fever.

There were six deaths, five from scarlatina, and one from tuberculosis in a child who had had scarlatina.

Here follow the reports of the Public Analyst and of the Borough Meteorologist; and a summary of works carried out by the Sanitary Inspectors in the year 1898.

11 Chapel Park Road,
St. Leonards-on-Sea,
January 21st, 1899.

TO HIS WORSHIPFUL THE MAYOR AND CORPORATION OF HASTINGS.
GENTLEMEN,

I have the honour of submitting my annual summary and report as Public Analyst for 1898. Last year I had to report a considerable increase in the number of samples submitted to me, it having risen from a maximum in previous years of 45 to 108. This year it has reached 160, being 41 from the Eastern districts, 43 from the Central, 46 from the Western, and 28 from the New Northern district, besides 2 samples obtained by my own agent for special purposes.

There have been several successful prosecutions with resulting fines ranging from 1s. to 20s. and costs, including one under the Margarine Act, but mostly being for various forms of milk adulteration. One

sample was separated milk with 30 per cent. of added water, and artificially coloured to represent a fine rich quality ; it was sold to the Inspector as skim milk, but I should certainly judge that it was intended to be sold to ordinary customers as new milk.

We have had one case of refusal to sell, the resulting prosecution was, however, dismissed by the Magistrates on the ground of triviality. Our Inspectors are already beset with many (protective) difficulties, and I cannot help thinking that their privilege of demanding a sample should be jealously guarded.

The samples were made up as follows :—

	March Quarter.	June Quarter.	September Quarter.	December Quarter.	TOTAL.
New Milk	13	24	19	17	73
Skim Milk	4	—	2	1	7
Condensed Milk	—	—	2	—	2
Butter	4	4	7	9	24
Spirits	1	10	4	4	19
Lard	2	3	3	2	10
Sugar	4	2	1	2	9
Coffee	—	—	—	5	5
Jam	4	—	—	—	4
Vinegar	—	—	—	3	3
Mustard	—	—	2	—	2
Tea	—	—	—	2	2
Totals	32	43	40	45	160

During the first quarter 3 samples were returned as adulterated and 4 suspicious ; second quarter, 4 adulterated and 2 suspicious ; third quarter, 5 adulterated and 2 suspicious ; fourth quarter, 3 suspicious ; making a total of 12 adulterated and 11 suspicious. The proportion compares very favourably with such other towns as where the purity of the food supply is properly looked after.

Our societies are still endeavouring to get the Adulteration Acts remedied, especially in regard to the board of reference and the question of standards, and they seem to be a little nearer success than they were.

I have also made 38 water analyses for the Council.

I remain, Gentlemen,

Your obedient servant,

HORACE F. CHESHIRE.

BOROUGH METEOROLOGIST'S REPORT.

The *Mean Temperature* of the past year (1898) was 51·4, and was as much as 1·8 above the average obtained from the 21 years' observations, 1875—1895. The daily maximum temperatures were 2·1 above, and the minimum night temperatures were 1·6 above the same 21 years' average. The coldest month was March with a mean of 40·3, and the warmest month was August with a mean of 63·5, the former being 1·9 below and the latter 2·0 above the average. The mean temperature of September was also high ; it was quite a summer month throughout, its mean of 61·8 was as much as 3·6 above the average, and the clearness of the sky and dryness of the ground produced some remarkably high shade readings. On the 8th the thermometer in the closed screen rose to 79·6 at the Gensing Gardens, and to 77·4 at the West Marina Gardens, the close proximity of the sea at the latter station acting as a moderator to the extremes of temperature both day and night.

The *Rainfall* was 6.51 inches below the average (1866—1895) and was the smallest fall since the year 1874, when 21.88 inches were registered. The amounts for March, May, June, and November were somewhat above their respective averages, all the other months fell short, some to the extent of nearly a half. Rain fell on 151 days (*i.e.*, moisture to the amount of .005 inch), being 29 days less than the average.

The *Bright Sunshine* total was less than the average by 29.7 hours. May and June were cloudy months; August, and especially September, were bright.

The *Temperature of the Earth* at a depth of 4 feet was, like the air, above the average. The temperature of 56 was reached on June 21st at 9 p.m., attained its maximum of 61.8 on August 27th at 9 p.m., and remained at that point till the early morning of the 29th. It then fell slowly, reaching 56 again by 9 a.m. on November 7th, being ten days later than in the previous year, owing to the unusual warmth of the autumn months, thirteen days later than in 1897, and twenty days later than in 1896. The lowest reading of 43.0 was attained on March 9th, and the temperature remained stationary at that point for five days, commencing to rise slowly again on March 15th.

The *Beckley Anemometer*, which was erected on the Sunshine Recorder Tower late in November, 1897, worked satisfactorily during the year 1898, and the following figures are interesting and instructive, forming as they do the first completed year's results. The *mean daily rate* was found to be 269 miles. March gave the highest mean with a daily run of 327 miles, and September the lowest with 203 miles. On March 26th, during a severe gale with snow, the anemometer registered 830 miles, and on November 22nd, when the air was calm almost throughout, only 36 miles were registered in 24 hours. These two records were the extremes during the year. Useful, however, as the Robinson or cup form of anemometer is, that known as *Dine's pressure tube* is infinitely more scientific and accurate. This instrument registers automatically and continuously the wind's force, and its acquirement would add greatly to the value of our meteorological equipment.

SUMMARY OF METEOROLOGICAL OBSERVATIONS

Taken at St. Leonards, Sussex, during the year 1898.

TEMPERATURE.

	Mean Max.	Mean Min.	Absolute Max.	Absolute Min.
January	47·8	41·0	53·6	31·6
February	47·0	36·3	54·8	28·4
March	45·6	35·0	56·8	27·6
April	52·8	41·1	57·5	34·1
May	57·1	46·1	70·3	34·9
June	62·5	50·6	70·3	38·1
July	67·3	53·7	74·3	45·4
August	70·5	56·4	83·3	48·3
September	69·0	54·5	79·6	42·1
October	60·0	50·7	65·9	42·9
November	53·0	43·3	59·5	31·0
December	50·5	42·1	55·1	28·8
Means.....	56·9	45·9	83·3	27·6
			August 15th	March 24th

RAINFALL.

	Inches.	Greatest amount on one day.	Date.	No. of days of '005 or more.
January	0·80	0·30	5th	11
February	1·26	0·22	5th	17
March	2·38	1·05	25th	13
April	0·97	0·22	26th	10
May	4·12	0·81	13th	18
June	2·05	0·45	1st	12
July	0·47	0·23	22nd	4
August	1·57	0·64	7th	11
September	0·71	0·35	18th	5
October	2·52	0·80	29th	14
November	3·76	0·81	28th	20
December	2·42	0·54	31st	16
Total	23·03	1·05	25th March	151

BRIGHT SUNSHINE.

	Hours.	Greatest amount on one day.	Date.	No. of days on which no sunshine was registered.
January	46·8	6·3	8th	17
February	91·2	9·0	26th	5
March	126·0	10·6	30th	7
April	189·9	12·8	17th	0
May	158·3	12·8	7th	4
June	184·4	14·0	3rd	3
July	214·5	13·9	14th	1
August	254·9	13·4	1st	2
September	237·7	11·8	4th	1
October	92·0	10·3	3rd	7
November	85·0	8·4	1st	10
December	50·3	6·7	23rd	12
	1731·4	14·0	3rd June	69

H. COLBORNE, Borough Meteorologist.

INSPECTOR OF NUISANCES REPORT, 1898.

	Eastern District.	Central District.	Western District.	Northern District.	Total.
Total number of inspections of premises	1229	1107	1125	1524	4985
Number of complaints investigated ...	33	69	114	87	303
Number of notices issued for the abatement or abolition of nuisances ...	201	183	245	355	984
Reports laid before the Sanitary Committee	40	11	49	89	189
Houses and premises inspected	453	792	487	472	2204
Drains tested	219	185	293	377	1074
Houses and premises provided with new water-tight drains, properly intercepted and ventilated, under informal notices from the Inspector of Nuisances	80	84	69	126	359
Houses and premises provided with new water-tight drains, &c., under section 41, P.H.A., 1875	16	15	52	19	102
Watertight cesspools constructed	—	—	—	4	4
Drains cleared and amended	27	22	24	17	90
New iron and lead soil and ventilating pipes fixed	83	84	78	149	394
New closets fixed	103	156	157	159	475
Number of new flushing boxes provided, necessary storage cisterns being fixed where needed	83	152	78	79	392
Flushing boxes repaired	20	9	13	57	99
Houses and premises provided with a proper supply of water	14	3	3	71	91
New urinals provided	2	2	2	1	7
Yards repaved	17	30	32	58	137
Sanitary dustbins provided	63	56	93	115	327
Accumulations of manure and other refuse removed	33	73	13	32	151
Rooms and premises cleansed and white-washed	82	39	15	37	173
Nuisances from animals improperly kept, abated	8	14	4	22	48

INSPECTOR OF NUISANCES REPORT.

	Eastern District.	Central District.	Western District.	Northern District.	Total.
Nuisances from chimneys sending forth black smoke, abated	1	—	—	—	1
Samples of water taken from private wells and submitted for analysis ...	2	3	5	22	32
Wells closed, the water being found unfit for dietetic purposes	—	—	1	7	8
Cases of infectious disease removed to the Sanatorium	70	59	60	33	222
Nuisances from overcrowding abated ...	3	3	2	5	13
Houses closed as unfit for human habitation, under the Housing of the Working Classes Act, 1890... ..	—	—	—	14	14
Samples taken under the Sale of Food and Drugs Act	41	42	47	28	158
Cesspools emptied and cleansed... ..	—	—	—	8	8
Manure pits constructed	1	—	2	2	5

Disinfection.—Rooms fumigated after infectious disease, 486. 608 sets of bedding and 570 sets of clothing disinfected in apparatus.

Unsound Food Destroyed :

Western District : 58 lbs. of pork.

Northern District : 2 boxes of codfish.

Central District : 10 baskets of greengages.

Eastern District : 1 case of oranges.

3 barrels of salt fish.

1 barrel of crabs.

3 barrels of herrings.

10 kits of herrings.

1 box of herrings.

1 box of mackerel.

1 bag of periwinkles.

9 boxes of kippered herrings.

47 boxes of dried haddocks.

Common Lodging Houses :

159 inspections (representing upwards of 1,600 rooms).

14 inspections of unregistered houses.

1 new house has been registered, giving accommodation for 15 persons.

The total accommodation is for 114 persons.

3 unregistered houses—registration not being effected—are now not used as Common Lodging Houses. Legal proceedings were threatened in one case, but the keeper then closed his house.

The houses are regularly inspected and maintained in a sanitary condition ; the rooms and bedding are kept clean, the latter being renewed at frequent intervals.

The extension of the Borough has brought into the District a considerable amount of property which was in a neglected condition ; fourteen houses in the added area I was compelled to condemn, they being found unfit for habitation. One of these has since been demolished, seven are closed altogether, and the others are used only for storage of goods and furniture, but are not inhabited. Seven were closed voluntarily, without resorting to legal proceedings, the other seven were closed on an order of the magistrates, after proceedings in Court.

Considerable improvement has already been effected in the sanitary condition of this area, especially in the matter of water supply and of house drainage. Complaints are received from time to time of nuisance caused by clearing of cesspools in the added area, for which regulations are needed ; this difficulty did not rise in the Old Borough in recent years, cesspools being practically unknown, as almost the whole district was sewered. Reports have been already submitted to you on improvements necessary in the sewerage system of the western part of the Borough, which will, I hope, be taken in hand during the current year.

Other matters requiring attention are the provision of public urinals in certain localities or the enforcing of such accommodation by private expenditure in the case of some public-houses, which do not at the present time afford the accommodation they may be called upon to provide under the Local Act ; also the unsatisfactory condition of some cowsheds in the district which calls for improvement.

Comparing the mortality returns of Hastings with those of the Country at large, there is as usual a considerable balance in favour of Hastings.

The age and sex-distribution of the population tells, of course, in favour of Hastings, but against this advantage we must set the large number of invalid visitors with a high rate of mortality, whose presence in the town must go far to counteract the advantage so accruing to us.

		Hastings.	England & Wales.
General Death-rate, 1898	... ..	14·2	17·2
Zymotic	„ „	1·26	2·22
Infantile Mortality	„ „	139	161

In conclusion, I have only to thank those gentlemen who have contributed material for the drawing up of this Report.

I am, Gentlemen,

Yours faithfully,

A. SCARLYN WILSON, D.P.H., CANTAB.,
Medical Officer of Health.

St. Leonards-on Sea,
March, 1899.

APPENDIX.

TABLE OF DEATHS during the year 1898, in the Hastings Urban Sanitary District.

NAMES OF LOCALITIES adopted for the purpose of these Statistics; Public Institutions being shown as separate localities.	MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES.							MORTALITY FROM SPECIFIC CAUSES.						
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	
										1	2	3	4	
PARISHES.														
St. Mary Bulverhythe ...	5	3	1	...	...	1	...	{	Under 5	...	...	1	...
St. Leonard ...	95	11	8	1	3	38	34	{	5 upwds.	...	...	...	...
St. Matthew ...	84	22	12	1	1	23	25	{	Under 5	...	...	...	...
St. Mary Magdalen ...	170	15	6	2	4	72	71	{	5 upwds.	...	...	...	...
St. Michael ...	6	2	...	...	...	2	2	{	Under 5	...	...	...	...
Holy Trinity ...	83	6	1	3	4	35	34	{	5 upwds.	...	...	...	...
St. Andrew ...	25	5	4	1	...	11	4	{	Under 5	...	...	...	...
St. Mary - in - the - Castle	191	44	18	7	5	65	52	{	5 upwds.	...	1	6	...	
St. Clement ...	70	22	7	2	1	22	16	{	Under 5	...	...	3	...
All Saints ...	110	19	10	2	6	40	33	{	5 upwds.	...	...	1	...
St. Helens ...	85	26	7	6	4	19	23	{	Under 5	...	...	1	...
Hollington St. John ...	24	10	...	...	2	9	3	{	5 upwds.	...	...	...	1
PUBLIC INSTITUTIONS.														
East Sussex Hospital ...	43	...	3	3	7	26	4	{	Under 5	...	...	1	...
Eversfield Hospital ...	21	...	...	...	3	16	2	{	5 upwds.	...	...	...	...
Buchanan Hospital ...	8	...	...	3	...	4	1	{	Under 5	...	...	...	...
Railway Men's Convalescent Home	3	...	...	...	1	2	...	{	5 upwds.	...	...	...	...
Convalescent Home for Poor Children	1	...	...	1	...	...	...	{	Under 5	...	...	...	...
Hastings Union Workhouse	53	1	2	...	1	28	21	{	5 upwds.	...	1	...	...
Hastings Borough Sanatorium	6	...	4	2	...	...	...	{	Under 5	...	3	...	...
TOTALS ...	1083	186	83	34	42	413	325	{	Under 5	...	4	13	...	
									5 upwds.	...	5	4	1	
The subjoined numbers have also to be taken into														
Deaths occurring outside the district among persons belonging thereto .....	...	...	...	...	...	...	...		Under 5	...	...	...	...
									5 upwds.	...	...	...	...
Deaths occurring within the district among persons not belonging thereto.....	148	10	2	4	14	90	28		Under 5	...	...	...	...
									5 upwds.	...	3	...	...

TABLE OF POPULATION, BIRTHS, and of NEW CASES OF INFECTIOUS SICKNESS, coming in the Hastings Urban Sanitary District, Classified

NAMES of LOCALITIES adopted for the purpose of these Statistics ; Pub- lic Institutions being shewn as separate local- ities.	POPULATION AT ALL AGES.		Estimated to middle of 1898.	Registered Births.	Aged under 5 or over 5.	NEW CASES OF SICKNESS IN EACH THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.									
	Last Census.							Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	FEVERS.			
												Typhus.	Enteric or Typhoid.	Continued.	Relapsing.
(a)	(b)	(c)	(d)	(e)	1	2	3	4	5	6	7	8			
PARISHES															
St. Mary Bulverhythe		...	14	Under 5 5 upwards.	...	...	1	...	...	...	...	...
St. Leonard	121	Under 5 5 upwards.	...	5 22	3 2	...	...	1	...	...	
St. Matthew	148	Under 5 5 upwards.	...	6 8	...	...	...	3	...	...	
St. Mary Magdalen	184	Under 5 5 upwards.	...	18 63	...	...	...	2	...	...	
St. Michael	12	Under 5 5 upwards.	...	2 6	...	...	...	...	...	...
Holy Trinity	50	Under 5 5 upwards.	...	2 14	1 2	...	...	2	...	...	
St. Andrew	41	Under 5 5 upwards.	...	3 3	...	...	...	...	...	...
St. Mary-in-the-Castle	244	Under 5 5 upwards.	...	28 79	11 17	...	...	3	...	...	
St. Clement	107	Under 5 5 upwards.	...	4 22	2 3	1	...	1	...	...	
All Saints	176	Under 5 5 upwards.	...	13 47	1 7	...	...	3	...	...	
St. Helens	193	Under 5 5 upwards.	...	13 37	1 3	...	...	1 2	...	...	
Hollington St. John	48	Under 5 5 upwards.	...	...	...	1	...	1	...	...	
PUBLIC INSTITUTIONS.															
East Sussex Hospital	Under 5 5 upwards.	...	...	...	1	...	5	...	...	
Buchanan Hospital	Under 5 5 upwards.	...	...	1	...	...	2	...	...	
Convalescent Home for Children	Under 5 5 upwards.	...	...	4	...	...	...	...	...
Workhouse	Under 5 5 upwards.	...	...	...	...	...	1 3	...	...	
TOTALS	63,072	73,000	1,338	Under 5 5 upwards.	...	94 306	20 44	1 1	..	2 28	...	...	

N.B.—The Notification Infectious Diseases Act has

to the knowledge of the Medical Officer of Health, during the year 1898,
according to DISEASES, AGES, and LOCALITIES

LOCALITY, COMING TO ICAL OFFICER					NUMBER OF SUCH CASES REMOVED FROM THEIR HOMES IN THE SEVERAL LOCALITIES FOR TREATMENT IN ISOLATION HOSPITAL.													
Puerperal.	Cholera.	Erysipelas.	12	13	Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	FEVERS.					Puerperal.	Cholera.	Erysipelas.	12	13
									Typhus.	Enteric or Typhoid	Continued.	Relapsing.						
9	10	11			1	2	3	4	5	6	7	8	9	10	11			
...	
...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	5	...	...	...	...	...	...	...	...	...	...	...
1	..	3	...	...	...	14	...	...	...	...	...	...	...	...	...	...	...
...	4	...	...	...	...	...	...	...	...	...	...	...
1	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	8	...	...	...	...	...	...	...	...	...	...	...
...	...	10	...	...	...	33	1	...	...	...	...	...	...	...	...	...	...
...	3	...	...	...	...	...	...	...	...	...	...	...
...	2	...	...	...	...	...	...	...	...	...	...	...
...	...	2	...	...	...	5	...	...	...	1	...	...	...	...	...	...	...
...	2	...	...	...	...	...	...	...	...	...	...	...
...	2	...	...	...	...	...	...	...	...	...	...	...
...	15	...	...	...	...	...	...	...	...	...	...	...
...	...	5	...	...	...	51	...	...	...	...	...	...	...	...	...	...	...
...	1	...	...	...	...	...	...	...	...	...	...	...
...	...	3	...	...	...	8	1	...	...	...	...	...	...	...	...	...	...
...	6	...	...	...	...	...	...	...	...	...	...	...
...	...	3	...	...	...	33	...	...	...	...	...	...	...	...	...	...	...
...	9	...	...	...	...	...	...	...	...	...	...	...
2	...	3	...	...	...	24	...	...	...	...	...	...	...	...	...	...	...
...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	
...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	1	...	...	...	...	...	...	...	...	...	...	...
...	1	...	...	...	...	...	...	...	...	...	...	...
...	
...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	...	40	...	...	...	52	...	...	...	...	...	...	...	...	...	...	...
...	175	2	...	...	1	...	...	...	...	...	...	...

been in force since July 7th, 1891.

TABLE C.

Years.	Births.	Birth-rate per 1000 of the inhabitants.	Deaths from all causes.	Death-rate per 1000 inhabitants.	Death-rate from the 7 chief Infectious Diseases per 1000 inhabitants.	Death-rate under 1 year of age per 1000 births.
1888	1077	21·85	726	14·73	0·50	101
1889	1117	22·19	711	14·12	0·71	114
1890	1003	19·53	743	14·45	0·99	104
1891	1089	20·74	892	*16·99	1·14	115
1892	1070	19·95	937	*17·47	1·51	145
1893	1059	19·33	783	14·29	1·33	110
1894	1060	18·94	769	13·74	0·93	118
1895	1007	17·62	827	14·47	0·91	117
1896	1052	18·00	784	13·43	1·09	116
1897	1009	17·16	742	12·62	0·76	121
1898	1338	18·33	1041	14·26	1·27	139

*Effect of Influenza Epidemics.