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Contributors

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ANNUAL REPORT

ON THE

HEALTH AND SANITARY CONDITIONS

OF THE

BOROUGH OF WEYMOUTH & MELCOMBE REGIS

FOR THE YEAR 1906.

BY

W. B. BARCLAY, D.P.H., Etc.,

MEDICAL OFFICER OF HEALTH.

WEYMOUTH:
SHERREN AND SON,
PRINTERS.

**To His Worship the Mayor,
and to the Aldermen and Councillors of the
Borough of Weymouth and Melcombe Regis.**

GENTLEMEN,

In accordance with Section XIV. of the Local Government Order as to the Duties of the Medical Officer of Health, I have the honour of submitting herewith my Second Annual Report on the health of Weymouth, together with its Vital Statistics, and a general résumé of the Sanitary work, etc., done during the year. I have submitted no details as to my work as Medical Officer to the Education Authority, having already made a Report to that Authority, but such work is so intermingled with every branch of my duties as Medical Officer of Health that it is difficult to separate them.

In carrying out my duties, I have been continually indebted to the Medical profession for assistance and co-operation.

My sincere thanks are due to the Members of the Council in general and the Sanitary Committee in particular for their kindness and support throughout the year.

I am, Gentlemen,

Your obedient Servant,

W. B. BARCLAY.

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SUMMARY OF STATISTICS.

Area of the Borough in Statute Acres	1,616 $\frac{5}{8}$
Population, Census 1901	19,843
„ estimated, middle of June	...	...	...	23,300
Number of inhabited houses, Census 1901	...	...	...	3,881
„ „ „ „ 1906	...	...	...	4,669
Average number of persons per house	...	...	...	5.1
Density of Population, persons per acre	...	...	...	14.4
Uncorrected Death Rate	...	...	...	12.5

	Borough.	England and Wales, 1906.	76 Large Towns.	142 Smaller Towns.	England and Wales, less the 218 Towns.
Birth Rate	21.9	27.0	27.9	26.5	26.3
Corrected Death Rate	12.	15.4	16.0	14.4	15.
Infantile Mortality	103.7	133	146	138	115
Zymotic Death Rate	0.34	1.73	2.24	1.70	1.18
Phthisis Death Rate	0.9	...	...	...	...

THE BOROUGH.

The Borough is formed from the union of the two ancient and separate boroughs of Weymouth and Melcombe Regis, separated by the Harbour and its prolongation—West and North—the Backwater.

Melcombe Regis lies to the East of the Backwater and North of the Harbour, it is the more level of the two, the maximum height above sea level being 108 feet. It is divided into two Wards, North and South. The Geological formation of the greater portion of Melcombe Regis is Oxford Clay, but that portion facing the Bay has an overlying strata of shingle and sand to a depth of 8 or 10 feet.

Weymouth lying to the West and South of the Harbour and Backwater, is the more hilly portion, the gradients being steeper, the maximum height being 175 feet. The Geological formation is Clay and Coral Rag.

The Area of the Borough was considerably enlarged in 1895 by including a portion of the Radipole Parish in Melcombe Regis and of Wyke Regis in Weymouth.

The Area as given me by the Borough Engineer is—

				ACRES.
Old Borough	{	Land ...	...	452 $\frac{1}{4}$
		Tidal Waters ...	...	311
				<hr/>
				763 $\frac{1}{4}$
Extension	{	Radipole ...	...	437
		Wyke Regis ...	...	416 $\frac{3}{8}$
				<hr/>
				853 $\frac{3}{8}$
				<hr/>
		Total	...	1616 $\frac{5}{8}$

METEOROLOGY.

Full details of the Meteorology of the Borough will be found in the Appended Report of the Honorary Borough Meteorologist, Mr. I. J. Brown, F.R.Met.Soc., but the following summary of his report may be of interest :—

Highest Maximum Temperature	...	...	76·8	on September 4th
Lowest Minimum	„	...	25·8	on January 24th
Mean Maximum	„	...	57·5	
Mean Minimum	„	...	45·1	
Mean of Maximum and Minimum	...	...	51·3	
Difference from Average	...	...	+0·7	
Number of days on which rain fell	...	...	152	
Total fall in inches	...	...	28·31	
Mean Relative Humidity	...	...	78	
Number of hours of bright sunshine	...	...	1908·2	

CLIMATE.

From the point of view of health, Climate must be judged by its equability. In this respect Weymouth is highly favoured. Extremes of heat and cold are practically unknown. When practically all England was suffering from the effects of an unusually severe blizzard, Weymouth had bright, clear, bracing weather, and brilliant sunshine. As far as one could judge from newspaper reports, it seemed the only place in England that had no snow. The Easterly aspect of the Bay tempers the heat of Midsummer and early Autumn, preventing the distressing lassitude, which is so common in many of the Watering Places in the South of England. The Mean Maximum Temperature is about, if not, the lowest, on the South Coast. The double advantages of an Easterly outlook, and mild breezes from the West, where the waters of the English Channel are mingled with the warmer waters of the Gulf Stream, preserve an equability, which is unique. The prevailing Westerly winds and the sheltered position of the town, give to the Winter a mildness and salubrity which it is to be regretted are not more widely known.

The Winter temperature of Weymouth is only slightly lower than that of the Channel Islands, and is higher than any other of the South Coast. The Winter days are few when there is not at least some degree of sunshine, and fewer still when it is not possible for even invalids to sit out of doors. This fact should be borne in mind by those in search of open-air treatment.

The Rainfall is one of the very lowest in Great Britain. In the number of rainy days the record is the lowest.

The Relative Humidity is a stable one, and is low. The Record of Bright Sunshine is high and not surpassed by any place. Some towns may shew a higher record, but the recording instrument used is only too frequently one not accepted by the Meteorological Society.

Richly endowed with natural beauties, and with a climate which for salubrity is unsurpassed, Weymouth could, if she will, take her place in the first ranks of English Health Resorts.

POPULATION.

As in all years, except the Census year, this has to be estimated, and in this Borough owing to the extension of its boundaries, and the lack of statistics concerning the added portion ; it is a matter of difficulty to calculate this by means of the usual method, that is, that the rate of increase from decennial period to decennial period, is a normal one.

Last year, not being familiar with the district, I adopted this method ; but am positive, from further information, that the population was much underestimated. Even the natural increase from the difference between the birth rate

and death rate, gives a higher population than was estimated, without any allowance for migration. Migration may be either from or into a district, and there is not a shadow of doubt, that as regards this Borough, it is immigration, and that to a considerable extent.

Taking 1906 only, there has been a considerable number—a very large number—of new houses erected and occupied ; but apart from these, the returns of empty and unoccupied houses have considerably decreased. From a careful return made by the different Rate Collectors, it is found that, since the Census in 1901 there is an increase of 688 inhabited houses, excluding lock-up shops, stables, warehouses, etc. ; and basing my calculation on this, I estimate the population at this, the mid-census period, at 23,300, of which 11,800 is apportioned to Weymouth, and 11,500 to Melcombe Regis. If this estimate be too high, of course all statistics will show a low rate, but it has been accepted as a reasonable one by the Sanitary Committee.

BIRTHS.

During 1906, 511 births were registered, distributed as under :—

	Males.	Females.	Total.
Weymouth	174	154	328
Melcombe Regis ...	88	95	183
Total	262	249	511

There were 22 illegitimate births, being equal to 4·3 per cent of the whole. This rate is exactly the same as 1905, and is a considerable increase on the two previous years—2·09 per cent. and 3·74 per cent. The morality of the population, judging by this standard, is certainly on the decrease.

The total number of births is a decrease from last year—which was the highest recorded—but is well above the average for the previous ten years.

RATE.—The rate, however, is one of the lowest recorded. This may be due either to the population being over-estimated or the previous years being under-estimated, which latter is the more likely.

The rate for the whole Borough is equal to 21·9 per 1000 ; for Weymouth it is 27·7 per 1000 and for Melcombe Regis 15·9. The great discrepancy between the two different parts of the Borough is worthy of notice.

The Birth Rate for the Borough as a whole is much under that for England and Wales, which for 1906 is 27·0.

DEATHS.

The total number of deaths registered in the Borough was 292. This is a great decrease on the previous year, and on the years 1903 and 1904, but is slightly over the average for the ten previous years. It is equal to a rate of 12·5 per 1000, which is one of the lowest recorded.

This rate, however, represents the total number of deaths recorded in the Borough, but as we have within the Borough three Hospitals and the Workhouse, within which inmates die who are only resident in the Borough for treatment, it does not represent the true or corrected death rate, which is arrived at by deducting the deaths of all non-residents who have died in Public Institutions, and adding the deaths of all residents of the Borough who may have died in Public Institutions outside the Borough and of which we may receive notice. This does not include deaths of visitors to the town, who may die in lodgings or with friends, and this invariably tends to unnaturally increase the death rate of towns like this, to which visitors naturally flock to regain impaired health. The number of deaths of these is fairly large, and if deducted would bring the death rate to one of the lowest in the country.

In 1906 we have to deduct the deaths of 23 people who died in Public Institutions, who were not residents of the Borough. Of these 23—14 died in the Workhouse, 8 in the Princess Christian Hospital, and 1 in the Royal Hospital, and of the number of 23—3 were natives or residents of Bridport, 6 of Portland, 7 of the Rural District, 1 of East Lulworth, 1 of St. Pancras, London, 1 of Hull, 1 of Yeovil Rural, 1 of Poole, 1 of Frome Rural, and 1 of a village in Somerset.

To this number we have to add 5 deaths occurring in the Borough Isolation Hospital, which is situated in the Rural District, and 5 deaths in the County Asylum of "residents" of Weymouth.

The corrected number of deaths is, therefore, 279, and is equal to a rate of 12 per 1000 for the Borough, and a rate for Weymouth of 12·7 per 1000 and Melcombe Regis of 11·2 per 1000.

The following Table gives the age periods for the two Districts :—

	All Ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and up-wards.	Deaths in Public Institutions in the District.
Weymouth	150	31	10	4	6	49	50	30
Melcombe Regis	129	22	2	..	10	43	52	15
Totals	279	53	12	4	16	92	102	45

It may be of interest, as shewing the longevity of the inhabitants, to give the age periods of the deaths over 65.

	65 and under 70.	70 and under 75.	75 and under 80.	80 and under 85.	85 and under 90.	90 and under 95.	95 and under 100.	Total.
Males	13	10	8	5	4	1	0	41
Females... ..	11	8	14	13	10	4	1	61
Totals	24	18	22	18	14	5	1	102

There were 11 deaths certified by the Coroner, 10 inquests being held.

Two deaths were uncertified by either Coroner or Doctor, one an infant 15 hours old and one 20 months old, a most unsatisfactory procedure in every way as regards young children.

The average age at death is 44·7 years.

INFANTILE DEATHS.

There were 53 deaths of infants under 1 year of age, equal to a rate of 103·7 per 1000 births. This is a higher rate than 1905, but is still considerably below the average for the previous ten years.

In analysing the deaths (as may be seen under Table V. in the Appendix) it will be noticed that 22 occurred during the first four weeks of life, and that of this number 7 were due to premature birth while, of the remainder, 2 causes alone may, practically speaking, cover all. 6 from convulsions and 8 from marasmus, or wasting, debility, atrophy.

Of the remaining 31 : this latter cause again (marasmus) has the larger number of deaths, 9, making a total of 16, and it is a matter for enquiry, what is the cause of this? Are the children artificially fed? Is the marasmus due to want of ingestion of cows milk? Is this due to want of knowledge on the Mother's part? The same remarks will hold good as to the deaths from diarrhoeal diseases. In the annexed report, which was made to the Sanitary Committee in December, I express my opinion that these queries must be answered in the affirmative.

It may also be considered whether some of the deaths from convulsions may not be caused from improper feeding, and be added to the long list of really preventible deaths. The deaths from tuberculosis are not numerous, and in the absence of full information I can make no remarks thereon. I cannot rid myself of the idea (I trust it may not be considered an obsession) that the infantile death rate would be much reduced were our cowsheds and dairies carried on in anything like an ideal manner, and Mothers educated in the rearing and feeding of infants and domestic hygiene.

For state of Cowsheds see Report thereon, which is a studiously moderate one, then "he who runs may read."

The following Report on Infantile Mortality has been made to the Sanitary Committee but has not yet been discussed by them.

Health Department,
Municipal Offices, Weymouth,
November, 1906.

Gentlemen,

INFANTILE MORTALITY.

The subject of Infantile Mortality—its causes and possible remedies—is year by year attracting more attention, and rightly so, amongst those who feel there is a great waste of life amongst infants, which, humanly speaking, is preventible. There is, if one may use the term, a yearly slaughter of the innocents, due to ignorance and neglect.

The subject is one which may be considered from a moral, social, and economic point of view, and, if in the course of my remarks I seem to make the latter more prominent, it is not that the former does not weigh as heavily with me. It is universally recognised that a decrease in the birth rate is a sign of deterioration in the country, and though one cannot say that during the last decade there is in this Borough any appreciable decrease, there is at any rate not to be found any noticeable increase, we seem in fact to be stagnant, and thus one of the country's principal assets is, with us, not appreciating itself. We as a Sanitary Committee cannot do anything to improve this state of affairs, but the power is with us to prevent this asset, once given, from running undue risks.

In looking into the cause of death amongst infants under one year of age, we find that 50 per cent. of the deaths registered come under the headings of diarrhoeal diseases and wasting diseases. It is unfortunate that no detailed account in age periods of months is available, excepting for this year and last, but taking this short period we find that 75 per cent. of the deaths from diarrhoeal diseases occur from the second to the fourth month of life and 15 per cent. during the first month, while of wasting diseases 50 per cent. are during the second to the fourth month and 50 per cent. during the first month. Taking these statistics as a basis we may infer that of the wasting diseases (debility, inanition, marasmus) those that occur during the first weeks of life may be due to ante natal causes (into which I do not care to enter here, as the subject has been dealt with in the Report on Physical Deterioration) but the enormous percentage of deaths during the second, third and fourth months of life from under both headings inevitably points to some outside cause.

Of these numbers more than double occur in Weymouth than in Melcombe Regis, and the great preponderance of cases are in the more congested portions of

both. Into the social position of the parents I have been unable to enter, but judging from the position of their residences, the poorer classes are in the majority. With these points before us, what can we do to make the conditions of life more favourable for infants?

Our natural conditions being as favourable as any in the country we must attempt to bring our artificial ones into line with them.

The housing question is a difficulty, many of the older portions of the Borough are unduly congested, yard space is wanting, streets are narrow, sanitary conditions are not in all respects as they should be, and there is an insufficiency of water for sanitary requirements, this latter due to the price charged by the Water Company. The fresh air and health-giving breezes are excluded, and the air is comparatively speaking stagnant.

Many of the houses are overcrowded to some extent, rents are high, wages are not on a parity with the rentals and consequently two or more families join at one house. The milk supply for hand-fed children is not provided under conditions most likely to ensure its freedom from deleterious germs. The Mothers in the great majority of cases are ignorant of the most elementary principles of the hygiene of children.

The remedy therefore, apart from what the Sanitary Committee are steadily and persistently remedying, consists in arousing the conscience, the moral sense of the Mother to the fact that the natural food of the child is the Mother's breast, and that it is a crime to rob it of this food except for the strongest Medical or Surgical reasons. The Mothers must be instructed in the care of children, they must be shewn how to feed them, how to keep the food in the manner least likely, under adverse circumstances, to cause contamination, and how to keep their houses clean. To carry out this work effectually each Mother must be personally waited upon after the birth of a child and general hygienic instruction given, and when necessary visited at intervals thereafter. This is work essentially for a trained female. Very many towns have appointed such. Health Visitors they are generally termed, and they act in conjunction with, and under the direction of, the Medical Officer of Health. An essential part of any such scheme consists in having a full return of all births at as early a period as possible. Under the present Registration Act six weeks is allowed in which to register a birth, and in many cases seven weeks or more may elapse before the registered returns would reach the Medical Officer.

Some towns have made an arrangement whereby a fee of 1/- is paid for every birth notified to the Medical Officer within 48 hours, whether by the parent, doctor or midwife, the first notification received being the only one paid for, if more than one notify the same birth. This would require an outlay of £25 per annum. In other towns all Midwives have been requested to send a copy of all

entries in their registers within 24 hours, stamped postcards being provided for the purpose. This scheme has worked efficiently in Bath, 50 per cent. of the births being thus notified, and the Midwives have raised no objection.

On receipt of this notification the Health Visitor calls at the house, makes enquiries, gives advice, leaves a printed copy containing advice to Mothers, and reports to the Medical Officer anything that may require the aid or intervention of the Health Department. I have mentioned the Health Visitor as an official, it is due to say that many towns rely upon voluntary aid in this work, but I need not point out that voluntary assistance can not be relied upon so thoroughly as a permanent and paid official, neither as a rule have they the necessary training.

In this town I should certainly strongly advise a properly trained lady assistant, who along with her duties as Health Visitor would also act as an Assistant Sanitary Inspector. The Staff in the Sanitary Department is much too meagre for the work. The duties of the Health Department have increased and multiplied exceedingly in recent years, and are continually on the increase, but the staff has remained the same, and much of the work has been allowed to get into arrear, and there seems little hope of working these arrears off with the present staff. Compared with other Health Resorts we are much understaffed, as is shewn by the accompanying list, where Weymouth occupies the lowest place.

Assistance is much required, and I strongly advocate, apart from any scheme dealing specially with infantile mortality, that a qualified assistant be provided, but if any scheme for dealing with the reduction of infantile deaths is considered, then I would advise a female assistant who could undertake these duties and such others as deal more especially with females, such as inspection of such workshops as employ female labour, female outworkers, and general sanitary work.

It would be possible, I think, to secure someone trained to such work for about £70 to £75 per annum, and this is a small sum to pay should it result in even the saving of a few of the nation's assets per annum, and in reducing to some extent that delicacy of constitution that is so often the result of defective nourishment and unsanitary surroundings in infancy.

Yours faithfully,

W. B. BARCLAY.

INFECTIOUS DISEASES (NOTIFIABLE).

The year has been a most unfavourable one. 90 cases have been reported. Nearly treble the number occurring in 1905.

Of this number, 65 are returned as occurring in Weymouth and 25 in Melcombe Regis.

As this year, for the first time, phthisis is included as a notifiable disease, it has made a slight addition to the number.

This is equal to a rate of 3·8 per 1000 of the estimated population, or excluding the phthisis cases 3·7. This, although a high rate, just equals the average for the previous ten years, which rates are here given for the purposes of comparison.

1896	...	2·2 per 1000	1901	...	14·0 per 1000
1897	...	1·7 „	1902	...	8·8 „
1898	...	0·8 „	1903	...	1·3 „
1899	...	1·1 „	1904	...	0·3 „
1900	...	5·9 „	1905	...	1·4 „

When the two Districts of the Borough are compared, there is a marked difference in the incidence of infectious disease, the Weymouth portion being at the rate of 5·5 per 1000 and Melcombe Regis 2·2.

Of the total number of cases reported, 69 were removed from their homes and treated in hospital, the removals being 53 from Weymouth and 16 from Melcombe Regis.

Of the total number of cases reported, as also those removed, a considerable reduction has to be made for cases in which the diagnosis has proved to be erroneous, these will be entered into, under their individual headings, as will also remarks upon the causation of the outbreaks and the greater prevalence of disease in the Weymouth portion.

The zymotic death rate for all infectious diseases (excluding phthisis) is equal to 0·34 per 1000.

SMALL-POX (VAROLA).

No cases were reported, though twice during the year I was called in to consult over suspicious cases. One a child, the other an adult woman. Both, however, after consultation were decided to be abnormal cases of varicella.

CHOLERA.

No cases were reported in the Town.

DIPHThERIA.

42 cases were notified, 29 in Weymouth and 13 in Melcombe Regis, being equal to an attack rate respectively of 2·4 and 1·1, or for the whole District 1·8 per 1000.

Of this number 9 proved negative on repeated bacteriological examination and ought to be excluded from the number, but having been officially notified, and the Medical Men resting their diagnoses on the clinical aspects, I feel bound to include them.

Many more cases were tentatively notified until bacteriological examination could be made, but on a negative report were withdrawn.

There has been an increased tendency amongst Medical Men to take advantage of the Bacteriological Laboratory, and submit swabs before notifying, which has been welcomed by me, and might still be increased.

During the first six months of the year a few isolated cases were reported, nearly entirely from Weymouth and limited entirely to one District, the children all attending Holy Trinity School, but the cases occurring at long intervals no direct school influence could be judged as the cause.

In May—4 cases of a virulent type were reported within 14 days. 2 of the later cases being evidently of some standing. The only common cause to 3 of the 4 was the milk supply, and investigation was made of this source. The dairy and cowshed are in the Rural District, though the occupier of both is registered as a dairyman and purveyor of milk within the Borough. Every obstruction was placed in the way of an investigation, and only the threat through the Town Clerk of an application to the Magistrates for an order brought the Dairyman to his senses. The state of the so-called cowshed—which during the interval of seeking powers of entry had evidently been hurriedly brought into some sort of order—was insanitary to an extreme degree, and a dairy was entirely absent. The cattle, however, were healthy and, at my visit, clean, and apart from the insanitary state of the place, the close proximity of piggeries and rotting manure heaps, nothing could be found pointing to any direct infection from this source, and the slight outbreak subsided, one child dying shortly after admission to the hospital.

In July cases continued to be tentatively notified at intervals, but as very many of them were found negative on bacteriological examination were not considered as such; these were principally from the Weymouth District.

One case from off Chickerell Road in August was in such an advanced stage of the disease that it died within 60 hours of admission to hospital. During the end of August and beginning of September many cases of suspicious sore throat were brought to my notice, and I was asked to consult in the majority of them as to the disease. These, with about one or two exceptions, were confined to the residential portion of Melcombe Regis and were scattered. Though repeated bacteriological examinations were made by myself and another the true Klebs-Löffler Bacillus could not be detected at first. Suspicion pointed to one dairy,

where practically all affected received their milk supply. This was in the Rural District, and with the Rural Medical Officer I visited and inspected it. The place was very far from being cleanly kept, walls were dirty and splashed with excrement, the water supply was open to serious risk of contamination. Every assistance was rendered by the occupier of the place, and a thorough renovation was promised.

I left for my annual holiday, and on my return found that the outbreak had continued and was on the increase, and still confined to the customers of the same dairy. Another visit was paid and the state of affairs was found not to have been remedied. At my request the cattle were in evidence, and on examination I found five cows with what has been termed an "infectious ulcerative" condition of the teats. Several others had evidences of recently healed ulcers. Sixty cows were examined. The five with ulcers on the teats were ordered not to be milked for human consumption, and were put by themselves. The Dairyman immediately started cleansing and putting the place in order, and had the water supply made secure from pollution, and altogether acted now in a manner that could not be found fault with. No further cases occurred that could be traced to this source.

In November and December cases continued to be notified, from the Weymouth District principally, all of a most malignant type, but any common source of origin could not be traced. Of these four died, three within 24 hours of notifying, and the fourth from paralysis of the diaphragm. Investigation of a dairy—again in the Rural District—was made, from some four successive cases having their milk supply therefrom, but nothing definite—except insanitary surroundings—could be found.

The deaths, six in number, are equal to a rate of 0.25 per 1000 of the population, or at the rate of 14.3 per cent. of the number attacked. In all cases where death resulted investigation proved that the child attacked had been suffering from the disease for some time previous, and there is little doubt in my mind that the lack of early medical advice and treatment materially assisted the fatal result.

ERYSIPELAS.

Six cases were notified, four in Weymouth, two in Melcombe Regis. One death is registered from this disease, equal to a rate of 0.04 per 1000. It is invariably found that sanitary defects exist where this disease is.

SCARLET FEVER.

35 cases were notified during the year, equal to an attack rate of 1.5 per 1000 of the population. Late in April some cases occurred in Weymouth, three cases being found simultaneously in one house and six in another. In both houses the Mother of the family seemed to have been the first attacked, the other inmates

following within a few days, and only the occurrence of the disease in the younger members brought it into notice. These were followed within the months of May and June by several other cases amongst adults, all resident in Weymouth. All the cases, without exception, were limited to houses occupied by employees at Whitehead's Torpedo Works. This being extra urban, enquiry was made and it was found that some cases were known to be in the neighbourhood of the works, and I have no doubt the source of infection was in those works. All the cases occurring at that time were moved to and treated in hospital, with one exception, a child resident in a large house, where the infection was traced to the same source through the laundry woman.

Towards the end of the year some cases were reported from Westham District, one or two for several successive weeks. All the children attended the Infant School at Cromwell Road, and an individual examination was made of every child there, and also of the children in the other departments, but no suspicious case could be found. Cases continuing, investigation narrowed the common cause down to the Grocer and the school, but nothing definite was found. In desperation the Infant Schools were closed, measles also being present, followed by the Sunday Schools, and the outbreak ceased.

During the year eight cases were notified as scarlet and admitted to hospital as such, and to all early appearances were scarlet, but which, after continued observation, I decided to be fourth disease; some other cases seen by me in consultation were isolated in their own homes on suspicion, and were ultimately decided also to be fourth disease. The initial symptoms and the rash are precisely alike, but in the cases in question it was found the rash appeared in 12 to 20 hours after the first symptom. The temperature in nearly all cases reached 102°, but fell within 48 hours from the first rise, and all symptoms passed away rapidly. No albumen was found in any case, and no disquamation. In some of the cases a dryness or harshness of the skin was seen, but this may have been due to the hardness of the water used for baths.

The symptoms are such that the diagnosis between this and scarlet fever is nearly impossible, and removal to hospital for observation seems the only safe course.

No deaths are recorded from scarlet fever.

ENTERIC FEVER.

Four cases were notified during the year, equal to an attack rate of 0·17 per 1000. No deaths occurred. Of the four cases three were removed and treated in the Borough Isolation Hospital, the fourth being a Marine in the Royal Navy, who was removed to and treated in the Admiralty Hospital.

First case notified in March. A child of five years of age. The only probable source of infection in this case was watercress bought from a hawker at the door.

The Father of the child being a Fish Merchant it seemed at first as if oysters might have been the cause, but a careful investigation conclusively proved that none had been taken for at least six weeks prior to the first symptom of the complaint. A second case, a Marine in the Navy, the disease was attributed to eating cockles, these having been purchased from an unknown hawker, the source of supply could not be traced.

Third case, in the Autumn, was an Assistant Master in St. Mary's Schools. Investigation clearly pointed to infection during the school vacation, part of which was spent at Basingstoke, where enteric had been rife for some time previously.

Fourth case, also in the Autumn, an Officer of the Channel Fleet, this was attributed to the eating of oysters at a dinner party outside the Borough. The evidence, however, is very inconclusive, and no other case amongst the guests was known.

Of the four cases two were without doubt contracted without the Borough and the other two in all probability through means not under the control of the Borough Sanitary Authorities.

TUBERCULAR DISEASES.

28 deaths were attributed to various forms of tubercular diseases, equal to a death rate of 1·2 per 1000. Of this number 21 were due to phthisis pulmonalis, equal to a death rate of 0·9 per 1000. This is still rather a heavy rate, but a considerable decrease on last year, but an investigation of the cases has shewn that only a few can be stated to have originated in the Borough amongst residents. Phthisis has been a voluntary notifiable disease throughout the whole year, but the notification has not been up to the present very successful.

Only three cases have been notified and all of these were in an advanced state of the disease, so that only precautionary methods against infection could be taken.

Disinfection of rooms, clothing and bedding is carried out in all cases—where permission is granted—after the death of a patient.

The age distribution for phthisis is as under :—

	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and over.	Total.
Weymouth ... ..	...	..	...	4	8	...	12
Melcombe Regis ...	1	...	...	3	5	...	9
Totals	1	...	...	7	13	...	21

One death from phthisis took place in the County Asylum.

NON-NOTIFIABLE INFECTIOUS DISEASES.

MEASLES.

Measles were entirely absent from the Borough until November, when, following an epidemic in the immediate neighbourhood, some cases were found in Chickereil Road and Franklin Road simultaneously. Every endeavour was made, with the enthusiastic co-operation of the Teachers at the Schools and the School Attendance Officer, to limit the outbreak. The closing of the schools in that portion of the Rural District where the epidemic was severe rendered all efforts nugatory, as the intermingling of the children became more marked, and the disease spread. It was entirely limited to the Westham District and children attending Cromwell Road Infant School. The attendance at the latter became so attenuated that I decided to close it, for this and other reasons, a week prior to the Christmas vacation. No deaths were reported as due to measles.

WHOOPING COUGH (PERTUSSIS).

Some cases of this disease were known throughout the year, but in a very mild form, and it has never assumed an epidemic character. One death is recorded, equal to a rate of 0.04 per 1000.

CHICKEN-POX (VARICELLA).

Isolated cases were notified me as occurring throughout the year in different parts of the Town, but it has not interfered to any extent with school attendance.

DIARRHŒA AND ENTERITIS.

Infantile diarrhœa was practically absent until September when some cases were known, and nine deaths of children were recorded and five of aged people over 65, equal to a death rate of 0.6 per 1000. This is a decrease upon the previous year, which was at the rate of 0.8 per 1000. Fuller remarks on the subject of infantile diarrhœa will be found under infantile deaths, and the connection of this disease and impure milk supplies is also noted under the Cowsheds Act.

SORE THROATS.

It has been brought prominently before my notice, through the daily examination of school children, that more or less throughout the year there are a considerable number of children suffer from what I term septic throat. It so closely simulates diphtheria that bacteriological examinations have to be made in all cases for a satisfactory diagnosis. There is a marked prevalence of the complaint in certain well defined districts, but as investigation is still proceeding it is premature to theorise.

CANCER.

21 deaths were registered from cancer, equal to a death rate of 0·9 per 1000.

The corresponding rates in former years are :—

1900	...	0·5	1902	...	0·59	1904	..	0·97
1901	...	1·05	1903	...	0·63	1905	...	0·71

The deaths from this disease do not decrease but show a decided tendency towards an increase. So far all research has failed to provide any certain remedy.

ISOLATION HOSPITAL.

The Borough Isolation Hospital is outside the Borough boundary, near Chickerell, in the Weymouth Rural District. It is situated in an enclosed piece of ground $5\frac{1}{2}$ acres in extent. It is built of galvanized iron, wood lined, and heated by slow combustion stoves.

It consists of a central administration block and two detached ward blocks, connected by a covered passage-way with the central block, a laundry block and other outbuildings. Accommodation is provided for twenty patients in each block, and two rooms have recently been converted in the administration block into a ward for two beds, which may be used either for enteric cases or for observation purposes in doubtful cases.

During 1906, 71 cases have been admitted into the hospital, and these may be classified as under :—

Diphtheria	...	...	...	...	...	...	33
Scarlet fever	..	...	...	...	...	...	23
Enteric fever	...	...	...	...	...	...	3
Suspected diphtheria	...	...	...	...	...	...	2
„ scarlet fever	...	...	...	...	...	...	9
Mother with suckling infant suffering from diphtheria							1

In addition one child admitted suffering from scarlet fever developed measles four days after admission, and though isolated on the first suspicion one other inmate of the ward also developed this disease.

In the diphtheria block, two children notified as suffering from diphtheria, and bacteriologically proved so, were also on admittance suffering from measles and had to have a separate ward.

During the month of December the strain on the limited staff, from the above complications and the virulent type of diphtheria present, was great, and it speaks highly for the care exercised by the Nursing Staff that, with the exception

of the case of measles in the scarlet ward, no further outbreak of measles or development of other disease resulted.

The permanent staff consists of the Matron, one probationer Nurse, Porter, and wife who acts as cook. A Laundress is temporarily provided. Assistance in nursing is rendered, when required, from the Trained Nurses' Institute. During ten months of the year such assistance has been more or less required.

Five deaths occurred in the hospital during the year, all from diphtheria.

The expenses of the hospital for 1906 were, for all purposes, £435 9s. 0d.

The cost of maintenance alone of patients and staff is at the rate of 9½d. and a fraction per head per day. A most moderate sum indeed, and speaks highly for the house-keeping abilities of the Matron.

During the year £10 13s. 6d. has been received in payment from patients at the hospital.

The Small-pox Hospital adjoins the Fever Hospital, and contains eight beds, with outbuildings. It is kept ready for patients, but has not been yet required.

The disinfection of clothing is carried out by super-heated steam in a Washington Lyons (modified) Disinfector. A new building has recently been erected for housing the disinfector and the ambulance, and is a great improvement on the former station. During the year 4273 articles of clothing have passed through the disinfector. Three complaints, all about the same date—and evidently inspired—were received of damage being done to articles in the disinfector. None of them bore investigation and were not proceeded with.

The disinfection of houses is carried out by means of formalin, discharged from a pneumatic sprayer. It has acted well, being much more expeditious and economical, as well as more efficient, than the former method of vaporising formalin by lamps.

87 houses, 1 factory, 1 bakehouse, and 3 schools were disinfected by this means during the year.

An ambulance on the most approved and recent principles has been in use since the beginning of the year, and has proved a boon to all concerned.

WATER SUPPLY.

The Borough is supplied throughout by a private Company, which also supplies various villages in the adjacent Rural District.

The water springs from the upper green sand, below the chalk at the foot of a hill beyond the village of Sutton Poyntz, $3\frac{1}{2}$ miles from the town.

A large number of springs issue from the side of the hill and run directly into a small reservoir or collecting pond, partly concrete and partly soil. It is not stored here but flows at once through a strainer to the pumping station.

The whole source is surrounded for about four acres by an unclimbable iron fence, and is uninhabited. The height of the reservoirs and springs is about 80 feet above sea level. The water flows by gravitation to the pumping station 40 feet below, where partly by turbine engines and partly by steam it is pumped to the reservoirs at Preston 160 feet higher, and at Wyke 185 feet higher. From the Preston reservoir it flows by gravitation to a reservoir at Rodwell at 142 feet, and these—Rodwell and Wyke—supply the town of Weymouth, the latter supplying the higher parts of the town. The supply is on the constant system, and the quantity is sufficient, averaging 27 gallons per head per day. It is of excellent quality, though rather hard. The accompanying analysis has been given me by the Company as having been made by their Analyst:—

(COPY).

Western Counties Laboratory,
Bristol,

August 15th, 1905.

To the Board of Directors of Weymouth Water Co.

Gentlemen,

I beg to hand you herewith the results of analysis of a sample of Weymouth water received from your Manager on the 29th ult., as follows:—

					<i>Grains per gallon.</i>
Saline Ammonia	...	...	...	...	·0008
Albuminoid Ammonia	...	...	...	...	·0012
Nitrogen as Nitrate	...	...	...	...	·29
Nitrates	...	...	...	...	absent
Cholorine as Chloride	...	...	...	...	1·90
Oxygen absorbed in four hours at 80° F.	...	...	...	...	·003
Total dissolved solids	...	...	...	...	20·0
Permanent hardness	...	...	...	...	3·5
Total	„	...	...	...	14·5
Poisonous metals	...	...	...	...	absent
Colonies on Gelatine Plate	...	...	...	...	132 per c.c.
Bacillus Coli and B. Sporogenes Enteritidis	...	...	...	...	absent

These results are perfectly satisfactory.

I am, Gentlemen,

Your obedient Servant,

(Signed) F. WALLIS STODDART.

COWSHEDS, DAIRIES, AND WORKSHOPS.

There are eight Cowsheds on the Register, the same number as the previous year, though there are some alterations as to the cowsheds and the occupiers.

Three applications have been made to be added to the register. One has been sanctioned. Two others are awaiting the completion of structural alterations before sanction is given.

Of the three, one is a case of change of occupier, the second was found to be occupied without being on the register, the third is a new application.

One cowshed, the occupier of which had twice been convicted and fined for persistent breach of bye-laws, was again reported to the Sanitary Committee, as his premises had become a distinct nuisance to the neighbourhood; notice was given under the Public Health Act, 1875, to abate, and on failure to do so proceedings were taken to have the place closed. The landlord gave the man notice to leave, and the place has been discontinued.

Towards the close of the year summary proceedings were taken against three Cowkeepers for breach of bye-laws relating to cleanliness, etc. An undertaking was given in Court—on condition of the proceedings being adjourned for a month—that the places would in the meantime be brought to the satisfaction of the Sanitary Authority.

Though much improvement has taken place generally in the state of the cowsheds, due to persistent supervision and practical instruction of the Cowmen, much remains yet to be done before these places and their method of construction can be considered to even approach the ideal. One difficulty is the ancient ruins that are in general use as cowsheds. They are not really ancient as a matter of history, but unless one makes particular enquiry into the matter it might be supposed that some of them had been erected by our prehistoric ancestors. Another great difficulty is the conservatism of the Cowman and his rooted objection to water in any shape or form in connection with his cowsheds. He will not wash his floor, and having gained him over to the use of water he conscientiously restricts its use to the passage. He objects to washing his hands before milking, and considers that ablution performed between the milking of each cow will probably result in his early demise, so strong are his prejudices against it. Cleaning the teats of the cow—the udders are never touched—is performed by placing the milking can in position for receiving the milk and giving the teats a rub with the hand, whereby all adhering impurities are deposited in the milk can, then he proceeds to milk. One Cowman in my presence every few minutes—whilst milking—rubbed his hands on the filthy sides of the animal, seemingly to dry them slightly. It was done so unconsciously on his part as to shew habit. Another similar case is reported to me by

the Sanitary Inspector. Another Cowman proceeded to take what looked like a piece of rope, but was so coated over as to be difficult to recognise, and tie the legs of the cow—needless to say these had not been groomed and were thickly coated with filth—then, without the slightest cleansing of his hands, proceeded to milk the animal. After he had strained the milk from this animal I called his attention to rather over a dessertspoonful of filth on the strainer. How much was in solution? His only remark was, “You must expect some dirt.”

These cases could be multiplied, but I have given sufficient to shew the state of affairs as they exist in our cowsheds. I do not say the local cowsheds or Cowkeepers are any worse than the majority in the country, for my experience in different parts has shewn me that this is only too common, and it is time that the public should be given definite statements, and strengthen the hands of the authorities by refusing to be supplied from farms that are not absolutely beyond reproach. At present the public are only too willing to accept the biassed statement of the Dairyman, and generally the most blatant of these has the most success, irrespective of merits.

I give here a short summary of the state of each individual cowshed in the Borough:—

No. 1.—Buildings of wood and corrugated iron roof. Some stone floors, others cobble stones, with many subsidences, a stick can in places be pushed down between stones into a soft sodden earth; liquid filth, etc., lies between the stones and in hollows; floors brushed but not washed; houses too narrow, in consequence wooden walls at rear of cows always filthy; no windows; ventilation deficient. Cleaning of udders and teats not carried out nor washing of hands between milking of cows. Milk not cooled. No dairy.

No. 2.—Floors very defective and broken; drains or channels of proper construction outside the sheds but above the level of the floors, hence liquid filth not carried off. Light and ventilation defective. Udders and teats not cleansed, nor hands. Manure kept in yard; milk cans formerly stored in manure yard. (This place has recently changed hands, and at the date of writing new floors were being constructed and alterations carried out to the satisfaction of the Sanitary Committee, the process of milking is also much improved). Milk not cooled.

No. 3.—Wood and iron building; floors of stone sets, some of which have subsided; drained into recently constructed cesspit; floors of passage brushed but not washed. Water conveyed in a cart, hence cleansing is deficient. Inside of stalls not cleansed and floor is sodden with filth. Light deficient. Piggeries—which are not drained and all filth soaks into the earth from them—are within five feet of the cowsheds, and are a distinct nuisance. Milk cans are kept in the cowshed, there being no dairy. Cleansing of udders, teats, and hands not

carried out. Milk not cooled. Alterations are promised and are slowly being carried out in this case.

No. 4.—Unregistered cowshed. Stone building; floors of large flag stones, some being sunk, and liquid filth in the hollows and under loose flags; floors, walls, and yards filthy in the extreme. Open cesspit inside the cowhouse with overflow to large cesspit in the yard, within six feet of the cowshed, and which is uncovered. Piggeries in closest proximity to the shed; one pigstye drains through the cowhouse, others have defective floors. This place is kept in the most slovenly manner. No cleansing of udders or teats and hands. No dairy. Notice served in May to discontinue until place was rendered sanitary; at the end of the year nothing had been done and occupier was prosecuted. Milk not cooled.

No. 5.—Wood building in good condition; floors concrete, well cleansed with water; drainage recently carried out to my satisfaction. Animals groomed, udders and teats cleansed; hands washed between each milking. Cows stated to be tested for tuberculosis. Small and inefficient dairy. One portion of the cowshed is used for poultry houses, another as a store for lumber, to both of which objection has been made. Occupier of this place now takes an intelligent interest in his work and is attempting to work it in an ideal manner.

No. 6.—Brick built of recent construction; well lighted and ventilated; floors concrete, open gully trap in centre (now, at date of report, removed); floors washed, but very inefficiently (the letter but not the spirit of the law); yard in a filthy condition. No precautions taken as to cleansing of udders, teats, or hands before or during milking. No dairy. Cans kept in the open air.

No. 7.—Place discontinued as a cowshed since September 29th, after repeated prosecutions for breach of bye-laws.

No. 8.—Corrugated iron building in dilapidated state; floor originally of concrete but full of depressions, allowing liquid filth to soak into earth; inside the stalls is soft and sodden with filth. Floors not cleansed at all seemingly. Drains to cesspit immediately outside the shed, liquid from this overflowing regularly. All around the cowhouse is filthy; walls splashed and caked thickly with manure. No dairy. No precautions taken as to cleanliness of animals or milker. Milk not cooled. Occupier prosecuted; place to be closed.

No. 9.—Stone built; one house thatch roof; floors concrete, washed as to passage but not in the stalls which, however, are fairly clean. One house defective in light and ventilation. Yard of cobble stones, which cannot be efficiently cleaned; walls splashed with filth in places. A dairy is provided, which is also the kitchen scullery, and contains many heterogeneous articles. No precautions taken as to cleanliness of animals or milker. Milk not cooled.

I consider it of vital importance to the health and prosperity of the Borough that the condition of the cowsheds and the administration of the Dairies and Cowsheds Order in the Rural District should be known to the Borough officials. I may be pardoned therefore for reporting on a matter which legally is the duty of my *confrere* of the Rural District, but which morally I feel to be mine.

As two-thirds of the milk supply of the Borough is produced in the Rural District of Weymouth, and the majority of the Cowkeepers are registered within the Borough as Dairymen and Purveyors of Milk, and their whole supply is practically speaking consumed in the town, I sought from them permission to visit their cowsheds, which in nearly every case was courteously acceded to. In the Spring of the year, having mentioned the matter to the Medical Officer of Health for the Rural District, I sent a verbal message to the Sanitary Inspector for that district suggesting that it might be for the benefit of all concerned if we could co-operate and inspect these cowsheds in company. My request was laid before the Rural District Council, but was not acquiesced in and joint action fell through. I still consider that the public "snub" I received for a suggestion that was made with the best possible intentions was undeserved, and that greater co-operation between the two Authorities, whose interests are so common, would be for the greater benefit of the greater number. I have, however, visited the majority of the extra rural cowsheds and give here the result of my inspections.

No. I.—Cowsheds, stone built, forming three sides of a yard, house and dairy the fourth. (Shed. A.) four stalls; floor of boulders and large setts, very irregular and several deep depressions; thickly coated with layer upon layer of filth, not seemingly brushed or cleaned for a lengthened period; walls dirty and splashed with filth. (Shed B.) eight cows, ditto. (Shed C.) six cows, ditto; deep depressions in floor filled with evil-smelling liquid. (Shed D.) passage has had concrete floor but this is badly broken and liquid filth collected in holes. (Shed E.) stated not to be used, floors concrete; part used as piggeries; in a dirty state. The ventilation of A., B., and D. is satisfactory, C. very imperfect. None of the floors are capable of being properly cleansed. The yard, where not covered with manure heaps, is paved with large boulders and setts, and is full of depressions filled with liquid filth. Dairy in proximity and joined to the house, floor is broken. Water supply good. All drainage from sheds is into the yard.

No. II.—Stone built, concrete floor in good condition; walls fairly clean. Ventilation good. Limewashing not done. Seven cows. This is of modern construction and is very well kept.

No. III.—Stone built; floors of stalls formed of old railway sleepers placed on top of rough boulders; floors coated with layer upon layer of filth. Smell in this house is indescribable. Ventilation very imperfect. Water supply good.

No. IV.—Floors of cobble stones ; drains run to Mason's trap in centre, thence into the yard. One small shed has concrete floor. None of the floors clean. Water supply fair. Ventilation and light moderate.

No. V.—(Shed A.) six cows ; wood built, floor of ordinary brick, sunk in places and irregular in surface ; walls thickly coated with filth, as also are the floors ; no limewash used. (Shed B.) eight cows ; wood built ; floor partly earth, partly paving, partly boulders, very irregular ; not properly cleansed ; walls badly splashed with filth. Drains are conveyed outside the shed and liquid runs into earth. Piggeries in close proximity. Large rotting manure heap close to sheds. Ventilation imperfect. Water supply scanty.

No. VI.—Building of wood, front to yard being half height, ventilation and light being thus secured ; floor paved but very irregular, brushed but not washed leaving a coating of filth. Manure close up to front of building. Walls badly splashed with filth. Channel for liquid filth outside building, but no proper falls, and liquid lies in pools. A second shed, on opposite side of the yard, has had an asphalt floor, but this is broken in several places and earth is sodden with liquid filth ; hen roost at one end. 21 cows in all. Churns washed with water from well and from a stream and kept in yard. Water supply not to be commended.

No. VII.—Partly wood, partly stone ; floors, concrete in good condition, but not kept clean, coated thickly with filth. Drains from one portion of shed—the original shed—end in a cesspit in the added portion, the overflow from this runs directly into the drains connected with a graveyard, no disconnection could be seen. A manure heap of extensive proportions, surrounded by a pool of liquid filth, in a very "high" condition, is within three feet of the doorway. Piggeries are against the cowshed, and drain on to the earth outside. Water supply good. This place is indescribably filthy, and has been seen by me at various dates with no improvement from the above.

No. VIII.—Wooden erection ; floors concrete, but badly broken and in a filthy state. Manure pit close to the door. No drainage to shed, all liquid filth finding its way into the earth outside. Yard, or borton, in a filthy state with manure. No entrance can be made to this shed without wading through a mixture of mud and filth. Piggeries very close to shed ; no drainage for these. Am informed by attendant that the same boiler in which the pigs' food is boiled is used daily for washing the milk cans. Water supply good. This place is most unsatisfactory in its general management.

No. IX.—Large dairy farm, over 50 cattle. No. 1 Cowshed—walls wood, roof iron ; well ventilated. Water supply plentiful. Floors, cobble stones, stated to be laid on concrete, very dirty and caked with manure, brushed but not washed. Walls dirty and splashed with filth. Channels run into catchpit within the cowhouse ; cement on one side, cobbles on the other ; cesspit on each side of

cowhouse—which is double, cows standing facing each other with central feeding passage. Cowshed No. 2—open shed, that is opens from yard direct, with one wall and roof. Floor of cobble stones and dirty. An open channel runs in front receiving drainage from the former shed. Shed No. 3—of similar construction. All these sheds face inwards to the yard, which is also the manure pit. A proper dairy with stone floor is provided in connection with this farm.

No. X.—A large dairy farm, 60 cows. Shed A.—wooden built, iron roof, floor cement; channel cement, runs into a trapped gully in centre. Roof low but ventilation good. Floors brushed but not washed; walls splashed with filth. Shed B.—stone and slate built, concrete floor, not kept clean; walls splashed. Drainage to gully trap, external to shed. Shed C.—ditto. Water supply from well—liable to pollution from cattle pond within which there is an opening to the well. Dairy open and well ventilated and with stone floor, but immediately outside, where cart receives the milk cans, two deep ruts have been formed, within which at all times there is decomposing liquid. Piggeries are in close proximity to dairy. Drainage of these runs outside in a channel with slight fall, and there is a resultant nuisance. Food stuffs for cattle kept in buildings immediately outside which this channel passes. This farm is generally most ably managed and kept, but towards the Autumn there was a most decided falling off. Some remarks concerning this dairy farm are made under diphtheria.

No. XI.—Unsatisfactory as to cleanliness. Inspection only allowed under condition that it is not made use of.

No. XII.—Wooden shed in field; earth floor. Cows stated to be milked in the open excepting in wild weather.

Speaking generally the condition of the rural cowsheds is most unsatisfactory, but I most emphatically desire to express my sympathy with my *confrere* in that district at the heartrending work that is before him, should he—under present circumstances—undertake to practically revolutionize this condition of affairs.

Need we wonder that our infantile death rate from intestinal disorders is so great!

There are 58 Dairymen and Purveyors of Milk on the register, a great increase on the previous year. In reality there is a decrease in the number of Purveyors, as many places were so unsuitable that they were persuaded to cease supplying. A house-to-house inspection of the district was made, and the seeming increase is solely due to better registration.

The larger dairy places are well kept, and everything has been done to have these brought up to the ideal standard, and the occupiers have ably seconded our efforts, and it is with pleasure that one records this. The smaller Purveyors, where milk is sold with every variety of goods possible to enumerate, from

Bakers, Butchers, Greengrocers, General Dealers, etc., etc., can not be considered satisfactory. The milk is bought in small quantities and kept anywhere. An attempt has been made, and with some measure of success, to have the utensils kept where the milk could not come into near contact with customers in the shop, and where, as far as possible, it would be free from serious risk of contamination. It has been rigidly insisted upon that all vessels containing milk must be kept covered (preferably with butter muslin), but I find many careless. Our Bye-laws as regards the Dairies and Cowsheds Act require amendment.

ICE CREAM TRADE.

During the year energetic measures were taken to bring these places into a better condition than previously, and with some measure of success. One place has been entirely rebuilt, and is now conducted as if under the Dairies and Cowsheds Act. The plans were submitted to me for approval before commencing to build. One place, which started the manufacture and sale during the Summer, was in such an insanitary state that on a preliminary notice under the Public Health Act, and a personal interview, the proprietor at once ceased. The remaining places have much improved, and during the Summer season are visited frequently, with a consequent high standard of cleanliness. Any neglect in supervision, I find, means quick deterioration.

FISH FRYING ESTABLISHMENTS.

There are six of these in the district, an increase of one. Some of them are in congested districts and have to be most carefully conducted to prevent serious nuisance. In every case covered pans, with proper flues to carry off all effluvia, have been insisted upon, and have been provided, reducing obnoxious smells to a minimum.

The greatest difficulty found is in the disposal of the fish cases. There is a tendency amongst the fish friers to store these on their premises for an indefinite time, to reduce cost of return carriage, and nuisance invariably results. We are insisting upon their daily removal after cleansing, but meet with considerable opposition and evasion.

Inspection of the fish is made at intervals, and of the manner of cooking, and these have invariably been found most satisfactory. In no case have I found cotton-seed oil being used for frying purposes. It is nearly always good dripping.

FOOD INSPECTION.

Under this heading we have a dual Authority, which seems to me rather anomalous, but having been in existence for many years has to be accepted.

The administration of the Food and Drugs Act is under the control of the Chief Constable, to whom I have constantly to send complaints regarding the standard of milk, butter, and other commodities, which have been made to the Health Department.

The difficulties in the way of food inspection are great as regards meat, and it may confidently be stated that inspection is reduced to such a minimum as not to be worthy of the name. The ten slaughter houses within the Borough are scattered ; slaughtering is done at irregular times and hours, and practically the only opportunity that arises is when the meat is exposed for sale, and, naturally, it is not to the liking of the trade, as being conducive to business, for the Sanitary Authority to be frequently inspecting carcasses in open shops. As is mentioned in another place, for the protection of the public, a public abattoir has become a necessity.

Three cases of ptomaine poisoning, attributed in each case to the food supply, were brought to my notice during the year ; in one case in particular, a confectioner's, the evidence was undoubted, as the day previous to the attack of poisoning I had occasion to make grave remonstrances to the proprietor regarding the insanitary state of his place, and his method and place of storing of comestibles.

One seizure of unsound meat was made. It was accidentally found stored in an abominable coach-house, and was intended to be hawked around amongst the poorer classes. Action was taken and a fine of £5 imposed.

Two seizures of fish in bulk were made, but as the owners had themselves called attention to it, no steps to prosecute were taken. Particular attention is paid to the Costermonger class in the matter of fruit and fish, but they are, generally speaking, found satisfactory.

Through the courtesy of the Chief Constable I am enabled to give the following particulars under the Food and Drugs Act :—

Chief Constable's Office,

Weymouth Police,

January 7th, 1907.

Samples taken under Food and Drugs Act during 1906 :—

Number.	Description.	Genuine.	Adulterated
21	Milk	19	2
10	Butter	10	...
2	Lard	2	..
7	Cheese	7	...
1	Margarine ..	1	...
41		39	2

FRANK EACOCK.

SLAUGHTER HOUSES.

There are ten slaughter houses on the register, all seemingly licensed under the Public Health Amendment Act, 1890. As these licenses are granted for stated periods of not less than one year, I have reported to the Sanitary Committee the necessity of enquiry into the period for which the licences were granted, and for the annual, or otherwise, application to be made for their renewal. Few of them can be considered as in any way meeting modern requirements, and one or two of them are unfit for the purpose without considerable alteration. Considerable improvement has been shewn during the year in the matter of cleanliness as regards apparatus, and in keeping the walls clean from blood, etc., but there is great difficulty in this latter from the buildings not having been specially built for the purpose. The walls are frequently of rough brick, and cannot be efficiently cleansed. The drainage of one in particular—which has been for some time unoccupied, but now, I understand, reopened—must be reconstructed. The lairages in all cases are not in accordance with the most humane principles, some are distinctly cruel. The difficulty of proper supervision is great from their distance from each other, and that they are frequently found locked up at our visit. Inspection of meat within the slaughter houses is practically a dead letter with the present staff and under present circumstances.

The matter of a Municipal Abattoir in a central position becomes more and more urgent, and is not looked at in so hostile a manner as formerly by a great number of the Butchers. The subject has been brought before the Sanitary Committee but not discussed.

A Municipal Abattoir means that all animals slaughtered are inspected for tuberculosis and other diseases, and implies that the meat supply is slaughtered and kept under the best possible conditions. For a Health Resort it is essential that the food supply should be above suspicion, and that the Health Authorities should be able to state so with confidence when appealed to.

OFFENSIVE TRADES.

There are three places which may be classed as such. One gut scraping, one tripe boiling, and one artificial manure manufactory. Some of the Butchers dress and boil tripe in or about their slaughter houses, a practice which I cannot commend. There are no bye-laws dealing with offensive trades, an omission not yet remedied.

HOUSING OF THE WORKING CLASSES.

The work in connection with this, that was in hand at the close of last year, has been completed, with the exception of the paving of a back lane at North View Terrace, which was transferred from this department. An insanitary area

at Horsford Street, upon which I gave my certificate under the Housing of the Working Classes Act in the closing days of last year, was reported upon by the Sanitary Committee, who proposed to the Council to pull the area down and widen the street. The Council failed to sanction the proposal under Part I. of the Act, and the whole matter is for the present in abeyance. The most unsanitary of the houses are unoccupied, but I am still under the belief that the whole area ought to be dealt with and not individual houses.

There are other districts where Part I. of the Act might with benefit be brought into operation, but it is so cumbersome and expensive in its methods as to cause one serious consideration before adopting it, and to delay, if possible, in the hope that some simpler means may before long be introduced.

There is a lack of accommodation for the type of working man earning under 25/- per week, with the result that two families have to join at one house, which too frequently can only comfortably accommodate one. The result is that overcrowding occurs. Several cases of this sort have come under my notice during the year, chiefly in connection with infectious disease notifications, and it is frequently a hardship to have to interfere and practically turn the family out, to have the same thing probably recur in another house. The only method has been to advise that the family man must share with the non-family man, so as to equalize somewhat. If some of our more congested areas were cleared, and a type of tenement house built which has been so successful in Glasgow and other places, this overcrowding ought to be entirely prevented. There are some tenement dwellings in the town, but as these were not originally intended for that purpose, they cannot be taken as a type of what is needed. There is an opening in this direction for the philanthropic builder who is content with a very moderate interest on his outlay.

COMMON LODGING HOUSES.

There are three common lodging houses, an increase of two. The two newly registered ones are fairly well conducted. The old one is very inefficiently conducted. One unregistered house was detected during the year and was closed.

COLLECTION AND DISPOSAL OF HOUSE REFUSE.

The collection of house refuse is done by the Corporation direct, and is under the Borough Surveyor's Department.

The scavenging is so arranged that every house shall be visited three times a week, and the two main business streets daily. The refuse so collected is conveyed in covered carts to Westham, where it is destroyed in one of Meldrum's Destructors. The steam generated by the destructor is used for working the engines which pump the sewage of the Borough to the outfall in the bay.

In accordance with the bye-laws every house is to be provided with a "suitable covered receptacle" for house refuse. In the past this bye-law has been more honoured in the breach than in the observance, few of the heterogeneous articles used as a receptacle being either suitable or covered, with a consequent unsightly and unsavoury display, and a littered street or path daily in evidence. Notices calling attention to the bye-law have during this Summer been delivered to every householder, and steps are now being taken to take the names of all offenders, for report to the Sanitary Committee, with a view to further action.

HOUSE DRAINAGE.

During the year nine houses were found not to be connected to the main sewers, and one factory. All the houses, with two exceptions, have now been connected up, and the factory will shortly also be remedied.

One exception is a farm which is efficiently drained into a cesspit of recent construction. The other is a house on the Marsh, and is at present under consideration.

Inspection and testing of house drains has been done continually throughout the year, in some cases at the request of prospective tenants of houses, and in all cases where there has been reason to suspect any deficiencies, from the occurrence of diseases of a septic type. As will be noticed from the Sanitary Inspector's Report there has been a considerable increase of work in this direction from any previous year, and the method of testing having been altered from smoke alone to water and smoke, the defects found have also much increased. In the majority of houses where the drains have been laid open to make good defects, it has been found that the original laying has been, to use the familiar term, "scamped." Some of comparatively recent origin have had clay joints, falls have been reversed, sharp angles taken, right angle connections, and even junctions making a reverse flow. In no case has a concrete foundation to the drains been laid. It is needless to add that a strict supervision is kept that such irregularities do not recur. Objection is taken by the owners to the expense of laying the drains on concrete, but in the long run it will repay them, as it in some measure lessens the tendency to cracks from subsidences, through the drying of the clay which forms so great a part of the soil of Weymouth.

As was outlined in my Report of last year, permission was sought of the Council, and granted, that all drains of new houses should be tested by the Sanitary Staff before being covered in. The necessity for this will be shewn by the fact that out of 45 new houses erected since the power was given not a single one passed inspection at first. Of the total number 23 were not laid on concrete foundations as required by the bye-laws. One row of 10 houses was

found to have the soil pipe from the indoor w.c.'s on the first floor conveyed inside the houses, and no ventilation provided. The same row have all the connections in the inspection chambers entering at right angles. The bricks with which the inspection chambers are built are embedded in mortar which some months later is still soft enough to admit the point of a lead pencil without breaking.

Another row of houses have in some cases the drain from the w.c., in others from the scullery, joining the main drain at an acute angle pointing in the reverse direction to the flow.

I give these as examples, as one may say, of the usual procedure, and as shewing the necessity of the most careful and continued supervision during construction.

Some of these houses are occupied practically before the plaster is dried, and, as at present situated, we have no power to prevent them. Some additions and modifications of the Building Bye-Laws are urgently required, and the power to prohibit the occupation of a new house until a sanitary certificate has been given of its fitness for occupation. This matter must occupy the attention of the Sanitary Committee at an early date.

All this work has sorely tried the Sanitary Staff, which is much understaffed, and further qualified assistance has become a necessity.

Another urgent matter that may be considered under this heading is the provision of a water supply to w.c.'s. The whole town is on the water carriage system for the removal of excreta (I know of only two houses that are not on this system). An expensive and, in my humble judgment, an efficient system of main drainage has been provided by the Corporation for the same purpose; in fact every provision is made save the essential one. *Water* for flushing purposes in more than half the houses is not provided in a manner to be useful. As near as can be calculated some 2000 w.c.'s are unprovided with a flushing cistern and water supply, and are in consequence in an insanitary state. It has, I think, been conclusively shewn by Dr. Thresh, and my own experience bears this out, that hand flushing unseals the trap. Apart from this, where children are, and even adults, the flushing is done at very irregular intervals and heavy accumulations of excreta result in the pans.

The Park District has been particularly brought to the notice of the Sanitary Committee, as from the slight fall of the drains continual blockages from this cause alone have occurred, and in the Summer season particularly few weeks elapse without a complaint.

No steps have been taken to remedy, what I can only consider a grave menace to the public health. It no doubt is a matter of considerable expense to landlords to put in cisterns, etc., but this should not be considered where the public

health is at stake. One other consideration does arise in connection with this, and that is the peculiar situation the Borough is in with the Water Company. This Company—within the Borough, but not without—charge a domestic rate for water, but do not include in this rate a supply for one w.c., hence every cistern used means an extra payment for water rate. Comment on this anomaly is needless. The Water Company would be well advised to forego their pound of flesh in this direction, and put the Borough on the same footing as the Rural District around.

The main sewers—one for Weymouth and one for Melcombe Regis—convey the sewage to a tank at Westham, in proximity to the destructor, whence it is pumped during ebb tide to a point in the sea 1150 feet from the Nothe Point, and 25 feet under the low water level of ordinary Spring tides. There are two local sewers—in the Belfield and Old Castle Districts—which take the drainage of some 80 houses, and at present discharge into Portland Roads.

The sewers are ventilated by 66 upcast shafts and 13 Webb's lights.

RADIPOLE LAKE.

This sheet of water, familiarly known as the Backwater, has an acreage of about 250 acres, and is tidal.

The Western boundary is partly in the Rural District, and the River Wey enters the lake at its upper or Northern end. The Southern boundary is formed by a masonry dam, with a lock gate, by means of which the waters are held up during ebb tide. Situated towards the Northern and Western boundaries is an island, upon which the Corporation have established a swannery, and a large number of swans tend to still further increase the natural beauty and picturesqueness of the scene.

The major portion of the lake is shallow, with the exception of a channel meandering through it, and when the lock gate is opened extensive flats are seen at low water. Upon these flats grow various species of Algae, locally termed "weed," and the presence of this fungus growth during the months of August and September—and later occasionally—is apt to cause an obnoxious smell if laid bare and exposed to the sun's rays, unless great care is taken to have all that may be thus exposed promptly removed.

The remedy for this occasional nuisance has been one of the problems troubling the Corporation for many years. It seems that at one time the deposition of sewage matter was blamed for the nuisance that was undoubtedly present, but at the present time, so far as the Borough is concerned, no sewage matter is now allowed to enter, though it still receives the whole of the drainage

of that part of the Rural District comprising Radipole, Nottingham, Broadway, and Upwey villages. The presence of sulphurous waters from Nottingham Spa and Radipole, as also from certain points on the Western side, may tend to some very slight extent to increase the obnoxious effluvia occasionally present. For many years past the only remedy used has been the removal of the "weed" by manual labour, raking it into floats and on to the banks and carting it away. An expensive method of treatment, which while at times successful has also at other times tended to increase the nuisance, from the quantity collected being beyond the means of quick disposal. The method of treatment has been temporarily remedial but not curative. After observation during two Summer seasons I have reported to the Sanitary Committee that it is time to attempt some curative treatment, and this was done early in August on a very small scale. The season, I think, was too late to begin the experiment, and the means at our disposal too primitive and entirely too small. Those watching the experiment were of the opinion that some success attended it, and now later in the year, when the patch of flat experimented upon has been laid bare at each tide, I am inclined to agree with them.

My argument to the Committee is that the growth being fungus in origin, and increasing or multiplying in great part through spores, any form of destruction must be such as will be bactericidal, and that raking up the flats, or dredging them, will be of no benefit, but rather otherwise. Not considering myself sufficiently expert upon this subject, I have advised calling in some expert bacteriologist or scientist to give an opinion, favourable or otherwise to my theory, and then to act, and act energetically.

During the past year there was entire freedom from effluvia until the beginning of October, when in the usual course the men employed in clearing the weeds were withdrawn. Operations had to be again commenced, and continued until the end of November.

FACTORY AND WORKSHOPS ACT.

There are 16 factories and 249 workshops on the register, which may be considered a complete return. During the year a systematic inspection, street by street, was completed, and every workshop, factory, and workplace has now been entered on the register.

Dressmakers and Milliners. These are all in good order. In three cases overcrowding was detected and remedied. In one case extra w.c. accommodation was required by H.M. Inspector of Factories, and was provided. In two cases insanitary premises were found and remedied.

Tailors. As is usual, the only objections found have been want of ventilation, invariably due to the workman closing up all openings. One room—an underground one—was found overcrowded, and remedied under the Public Health Act.

Laundries. These are all satisfactory in every way.

Bakehouses. There are 41 in the district, an increase of two. Some of these are of very old construction, and are barely passable from a public health point of view. In one case notice has been served that the place has become dangerous to health, and steps are in progress to have the place closed. Much difficulty is found, with the older type of bakehouse, in having a proper standard of cleanliness kept up. Coal is shot upon the bakehouse floor, and stoking done and ashes raked out in the midst of the baking materials, with a consequent adulteration of the bread with dust, etc. Proper coal bins are insisted upon, but the removal of ashes still remains a nuisance. As several plans for new bakehouses have been deposited during the year, I have urged that the stoking of the fires should be arranged to be outside the bakehouse. It is found that buildings have been converted from other purposes into bakehouses and been occupied as such before notice has been given, with the result that they are found to be totally unsuitable for the purpose intended. It is then considered a great hardship for the Sanitary Authority to interfere, and the obstacles placed in the way of intervention are usually successful.

There are two underground bakehouses that have received a certificate under the Act. Improvements in ventilation have been secured in one, though I do not yet consider it a satisfactory place.

The sanitary arrangements and drainage of one factory have been found unsatisfactory. The alterations to this are likely to be completed during the ensuing year, being held in abeyance from the likelihood of considerable extensions.

In two factories notice was served to provide separate accommodation for female employees. In both the female employees have been dispensed with.

During the year, in company with H.M. Inspector of Factories, an investigation was made as to factories or workshops used for the preparation of meat for human consumption. Three factories were found where meat was prepared for sausages, etc. Some alterations as to drainage will require to be done, but as far as cleanliness and care in preparation was concerned all were satisfactory.

HOMeworkERS.

Nine lists of Homeworkers were received twice during the year, and six were received once, it only having come to our knowledge that Homeworkers were employed by these latter firms late in the year.

The large majority of Homeworkers are engaged in the making, etc., of wearing apparel. All the houses have been visited, and everything found satisfactory. No case of infectious disease has been found in the residence of a Homeworker.

MIDWIVES' ACT.

This being the first full year in which this Act has been in force, it gives one an idea of the benefits that are likely to accrue from it in its present form, and of any difficulties that are likely to arise in its administration.

So far as this Borough is concerned, in spite of active measures on my part, the Act is to the present a dead letter. Total inertia in all concerned marks the beginning and the end of the whole matter, and despite private visiting, with personal instruction, and a collective meeting of Midwives in the middle of the year, I have been unable to move them out of the old rut, in which they have so long moved. One has been disinclined to take extreme steps with these women, such as reporting them individually to the Local Supervising Authority, before using every possible means of persuasion, but the time has now come, in my belief, to do so, and if necessary make examples.

Of the eleven who sent in notice of their intention to practice in the district (after I had written to them to do so) all are on the register from having been in private practice prior to the Act. None of them have kept a register of their cases, none have sent in notice of their having required to call in medical aid. None of them possessed a bag with the necessary appliances.

At my last visit to them in August, one or two had promised to "toe the line," if I may so term it, and two had provided a so-called bag with a few instruments.

To deal with this type of Midwife in the manner one would deal with those who have undergone special instruction would be accounted harsh treatment, and the result of any action for the removal of their name from the register would simply lead them to call themselves Monthly Nurses, and continue their work as heretofore, but without any supervision. Hence I have taken the method of introducing reform by degrees, and hope before many months are over to have succeeded to a great extent in overcoming the inertia that has been so long prevalent.

It is a source of complaint with the Registered Midwives that those who did not take the opportunity of registering still continue in practice, and are not worried by visits and enforcement of rules which they cannot see the use of.

This is a fatal defect in the Act and will continue to be so for some years yet, as I can find no case where a prosecution or conviction has resulted from unregistered women acting as Midwives, as long as they have not termed themselves Midwives.

If the Medical Profession generally would act towards these unregistered Midwives as they would act towards an unregistered Medical Practitioner it would soon drive them out of practice ; but humanity towards the suffering mother is generally pleaded as the excuse, a plea that one must uphold. They might, however, act in the emergency, then report to the Local Supervising Authority, with a warning to the unregistered person that they would not again respond to any call on her behalf.

It does not seem to be generally known that the local register of Midwives is open for the inspection of the public during office hours.

GENERAL SANITARY WORK.

Complaints received	...	...	...	...	...	86
Houses and premises visited	...	...	...	...	...	1186
Notices to abate nuisances, etc.	...	...	...	...	...	106
Legal notices served	...	...	...	...	...	14
Legal proceedings	...	...	...	...	...	2
Drains choked and cleared	...	...	...	...	...	72
Bell and Mason's traps removed	...	...	...	...	...	66
Drains disconnected and ventilated	...	...	...	...	...	30
Rooms and premises disinfected	...	...	...	...	...	90
Articles disinfected	...	...	...	...	...	4273
New drains laid...	...	...	...	...	...	15
Drains tested	...	...	...	...	...	81
New w.c.'s	...	...	...	...	...	25
Drains repaired and relaid	...	...	...	...	...	37
Rainwater pipes cut off and traps provided	...	...	...	...	...	18
Yards paved and repaired	...	...	...	...	...	6
Container closets removed	...	...	...	...	...	5
Water laid on to w.c.'s	...	...	...	...	...	23
Manure removed	...	...	...	...	...	25
New manure pits	...	...	...	...	...	3
Houses drained to sewer	...	...	...	...	...	3
Ventilation improved	...	...	...	...	...	17
Fowls removed from yards	...	...	...	...	...	5
Earth closets provided	...	...	...	...	...	1
Flushing cisterns fixed	...	...	...	...	...	14

TABLE I.—Vital Statistics of Whole District during 1906 and previous Years.
Name of District—Borough of Weymouth and Melcombe Regis.

Year.	Population estimated to Middle of each Year.	Births.		Total Deaths Registered in the District.				Total Deaths in Public Institutions in the District.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Net Deaths at all Ages belonging to the District.	
		Number.	Rate.*	Under 1 Year of Age.		At all Ages.					Number.	Rate.*
				Number.	Rate per 1000 Births registered.	Number.	Rate.*					
1	2	3	4	5	6	7	8	9	10	11	12	13
1896	18,830	494	26.2	50	101.2	251	13.3	25	...	...	...	...
1897	19,039	462	24.2	52	112.5	231	12.1	39	...	...	...	...
1898	19,250	463	24.0	57	120.9	259	13.4	34	...	...	...	...
1899	19,464	481	24.7	76	158.0	345	17.7	49	...	...	...	...
1900	19,680	483	24.5	41	84.8	287	14.5	42	...	...	...	...
1901	19,897	518	26.0	59	113.8	303	15.2	41	...	...	...	...
1902	20,133	480	23.8	41	85.4	269	13.3	38	12	6	263	13.0
1903	20,336	507	24.9	67	132.1	312	15.3	52	25	5	292	14.3
1904	20,560	496	24.1	54	106.8	307	14.9	65	26	2	283	13.7
1905	20,788	548	26.3	55	109.3	335	16.1	51	24	5	316	15.2
Averages for years 1896-1905	19,798	493	24.8	55	111.5	290	14.6	43	22	4.5	289	14.0
1906	23,300	511	21.9	53	103.7	292	12.5	45	23	10	279	12.0

* Rates in Columns 4, 8, and 13 calculated per 1000 of estimated population.

Area of District in acres } Total population at all ages ... } 19,843 }
(exclusive of area } Number of inhabited houses .. } 3,881 }
covered by water). } Average number of persons per house ... } 5.1 } At Census of 1901.

I. Institutions within the District receiving sick and infirm persons from outside the District.	II. Institutions outside the District receiving sick and infirm persons from the District.	III. Other Institutions, the deaths in which have been distributed among the several localities in the District.
Princess Christian Hospital Royal Hospital Eye Infirmary Union Workhouse	County Asylum, Dorchester County Hospital, Dorchester Borough Isolation Hospital, Chickerell	

**TABLE II.—Vital Statistics of Separate Localities in 1906
and previous Years.**

Name of District—Borough of Weymouth and Melcombe Regis.

NAMES OF LOCALITIES.			1.—WEYMOUTH.				2.—MELCOMBE REGIS.			
YEAR.			Population estimated to middle of each year.	Births regis- tered.	Deaths at all Ages.	Deaths under 1 Year.	Population estimated to middle of each year.	Births regis- tered.	Deaths at all Ages.	Deaths under 1 Year.
			<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>	<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>
1896	...	...	.....	...	...	...	.....	...	..	...
1897	...	...	.....	...	...	...	.....	...	...	...
1898	...	...	.....	...	...	...	.....	...	...	...
1899	...	...	.....	...	...	...	.....	...	...	...
1900	...	...	.....	...	...	...	.....	...	...	...
1901	...	...	.....	...	...	...	.....	...	...	...
1902	...	...	10,177	...	140	..	9,956	...	123	...
1903	...	...	10,372	311	167	44	9,964	196	125	23
1904	...	...	10,486	319	145	26	10,074	177	138	27
1905	...	...	10,626	358	178	48	10,162	190	138	7
Averages of years 1902 to 1905			10,415	329	157	39	10,039	188	131	19
1906	...	...	11,800	328	150	31	11,500	183	129	22

TABLE III.—Cases of Infectious Disease notified during the Year 1906.

Name of District—Borough of Weymouth and Melcombe Regis.

Notifiable Disease.	Cases notified in Whole District.							Total Cases notified in each Locality.		Number of Cases removed to Hospital from each Locality.	
	At all Ages.	At Ages—Years.						1	2	1	2
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.	Weymouth.	Melcombe Regis.	Weymouth.	Melcombe Regis.
Small-pox ... ..	...	...	...	...	...	...	...	...	..	...	...
Cholera ... ..	...	...	...	...	...	...	...	...	...	...	...
Diphtheria	42	1	17	17	6	1	...	29	13	26	9
Membranous croup ... ..	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	6	...	...	2	2	2	...	4	2	..	...
Scarlet fever	35	...	5	23	2	5	...	27	8	26	4
Typhus fever ... ..	...	...	...	...	...	...	...	...	..	..	...
Enteric fever	4	...	...	1	2	1	..	1	3	1	3
Relapsing fever ... ..	...	...	...	...	...	...	...	...	...	...	...
Continued fever ... ..	...	...	...	...	..	...	...	...	...	...	...
Puerperal fever ... ..	...	...	...	...	...	...	..	...	...	...	...
Plague .. ...	...	...	...	...	...	...	...	...	...	...	...
Phthisis (Voluntary) ...	3	...	...	1	1	1	...	3	...	...	...
Totals	90	1	22	44	13	10	...	64	26	53	16

Isolation Hospital—Chickerell.

TABLE IV.—Causes of, and Ages at, Death during Year 1906.
Name of District—Borough of Weymouth and Melcombe Regis.

Causes of Death.	Deaths at the subjoined Ages of "Residents" whether occurring in or beyond the District.							Deaths at all Ages of "Residents" belonging to Localities, whether occurring in or beyond the District.						Total Deaths whether of "Residents" or "Non-residents" in Public Institutions in the District.
	All Ages.	Under 1 Year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	9	10	11	Weymouth.	Melcombe Regis.	14	
1	2	3	4	5	6	7	8							16
Small-pox...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping-cough ...	1	1	...	...	...	...	...	...	...	...	...	1	...	...
Diphtheria and membranous croup ...	6	...	4	2	...	...	...	...	...	...	5	1	...	...
Croup ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fever { Typhus ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Enteric ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Other continued ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Epidemic influenza ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Plague ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea ...	7	1	2	...	...	...	4	...	...	...	3	4	...	...
Enteritis ...	7	6	...	...	...	...	1	...	...	...	5	2	...	...
Puerperal fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Erysipelas ...	1	...	...	...	...	...	...	...	...	...	1	...	...	...
Other septic diseases ...	2	...	...	...	...	...	...	...	...	...	2	...	...	...
Phthisis (Pulmonary Tuberculosis) ...	21	1	...	...	7	13	1	...	...	...	12	9	...	2
Other tubercular diseases ...	7	3	...	2	...	...	...	...	...	...	4	3	...	...
Cancer, malignant disease ...	21	...	...	...	...	13	8	...	...	...	10	11	...	4
Bronchitis ...	13	3	...	...	...	1	9	...	...	...	6	7	...	1
Pneumonia ...	11	3	1	...	...	5	2	...	...	...	6	5	...	2
Pleurisy ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other diseases of Respiratory organs ...	2	...	...	...	...	1	1	...	...	...	...	2	...	...
Alcoholism ...	5	...	...	...	...	2	3	...	...	...	...	5	...	...
Cirrhosis of liver { ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Veneral diseases ...	2	2	...	...	...	...	...	...	...	...	1	1	...	2
Premature birth... ..	7	7	...	...	...	...	...	...	...	...	3	4	...	...
Diseases and accidents of parturition ...	4	1	...	...	...	...	...	...	...	...	4	...	...	...
Heart diseases ...	40	...	1	...	3	19	17	...	...	...	17	23	...	3
Accidents ...	4	...	...	...	...	4	...	...	...	...	3	1	...	3
Suicides ..	2	...	...	...	...	2	...	...	...	...	...	2	...	...
All other causes ...	116	25	4	...	6	25	56	...	...	...	68	48	...	27
All causes	279	53	12	4	16	92	102	...	...	...	150	129	...	45

TABLE V.—Infantile Mortality during the Year 1906.

DEATHS FROM STATED CAUSES IN WEEKS AND MONTHS UNDER ONE YEAR OF AGE.

Name of District—Borough of Weymouth and Melcombe Regis.

CAUSE OF DEATH.		Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 1 month.	1-2 months.	2-3 months.	3-4 months.	4-5 months.	5-6 months.	6-7 months.	7-8 months.	8-9 months.	9-10 months.	10-11 months.	11-12 months.	Total Deaths under 1 year.
All causes ...	Certified	8	7	3	3	21	7	6	2	4	4	1	3	1	...	1	2	52
	Uncertified	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
i. Common Infectious Diseases	Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chicken-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Measles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Scarlet fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
ii. Diarrhoeal Diseases	Diphtheria: Croup	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Whooping cough	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Diarrhoea, all forms	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Enteritis, Muco-enteritis, Gastro-enteritis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
iii. Wasting Diseases	Gastritis Gastro-intestinal Catarrh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Premature birth	4	2	1	...	7	...	...	...	...	...	...	...	...	...	...	...	...
	Congenital defects	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Injury at birth	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
iv. Tuberculous Diseases	Want of breast-milk, starvation	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Atrophy, debility, marasmus	...	2	2	2	8	3	2	1	1	1	...	1	...	...	...	...	...
	Tuberculous meningitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Tuberculous peritonitis: Tabes mesenterica	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
v. Other causes	Other tuberculous diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Syphilis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rickets	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Meningitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Convulsions	3	2	...	1	6	1	...	...	...	...	...	...	...	...	...	...	...
	Bronchitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Laryngitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Pneumonia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Suffocation, overlying	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other causes		...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Total		9	7	3	3	22	7	6	2	4	4	1	3	1	...	1	2	53

Population (estimated to middle of 1906), 23,300.

Births in the year: Legitimate, 489; Illegitimate, 22.

Deaths in the year of Legitimate Infants, 49; Illegitimate Infants, 4.

Deaths from all Causes at all Ages, 279.

Factories, Workshops, Laundries, Workplaces and Homework.

1.—Inspection.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises. 1	Number of		
	Inspections. 2	Written Notices. 3	Prosecutions. 4
Factories (Including Factory Laundries)	17	1	...
Workshops (Including Workshop Laundries)	378	57	1
Workplaces (Other than Outworkers' premises included in Part 3 of this Report)	25	2	...
Total	420	60	1

2.—Defects Found.

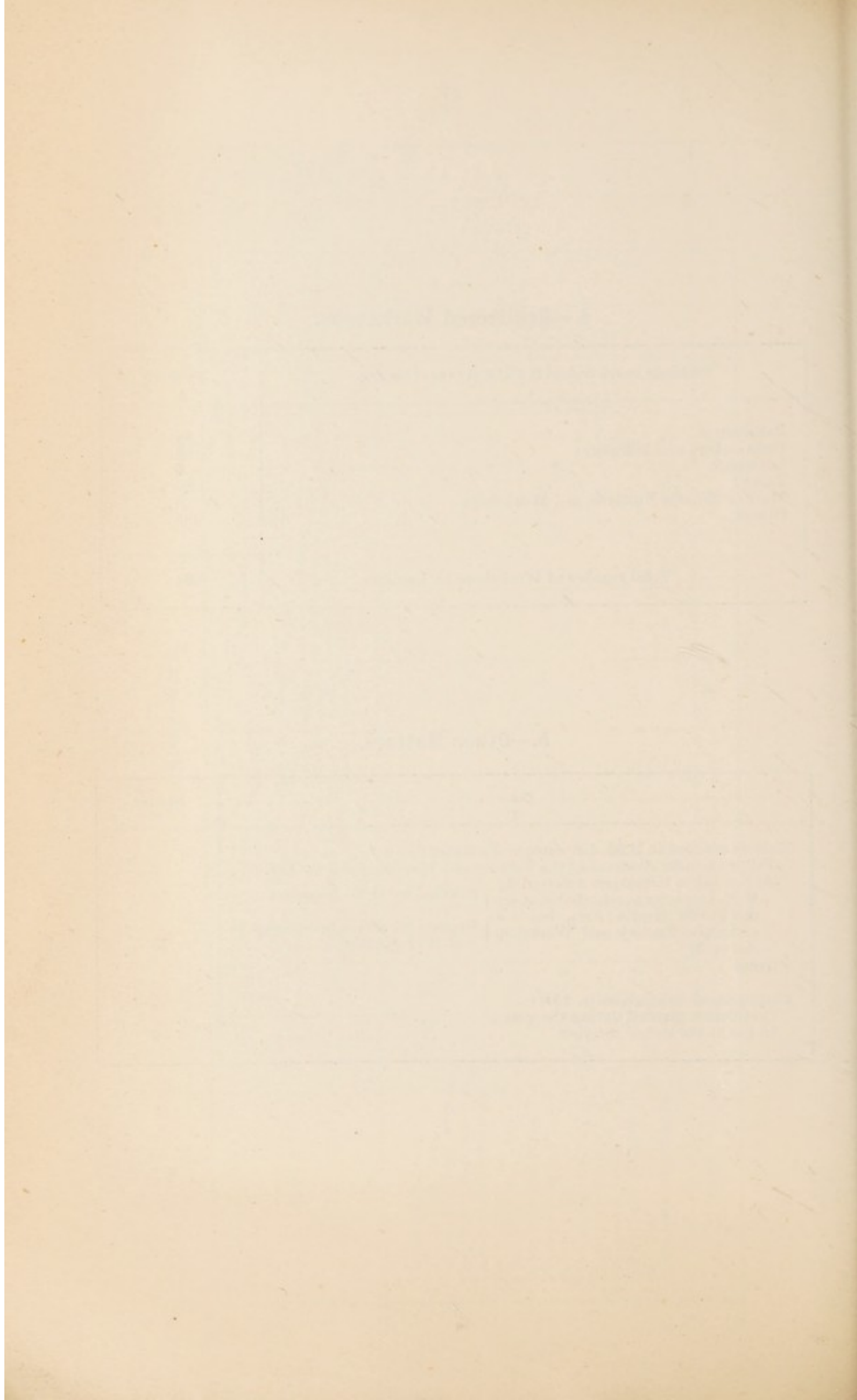
Particulars. 1	Number of Defects.			Number of Prosecutions. 5
	Found. 2	Remedied. 3	Referred to H. M. Inspector. 4	
<i>Offences under the Factory and Workshop Act :—</i>				
Want of cleanliness	14	11	...	...
Want of ventilation	6	5	1	...
Overcrowding	3	3	1	1
Want of drainage of floors ... ..	...	...	...	...
Other nuisances	14	11	...	...
Sanitary accommodation {	insufficient	19	14	...
	unsuitable or defective	2	2	...
	not separate for sexes	2	1	...
<i>Nuisances under the Public Health Acts :—</i>				
Illegal occupation of underground bakehouse(s.101)	..	...	...	...
Breach of special sanitary requirements for bakehouses (ss. 97 to 100).	...	...	...	...
Other offences (excluding offences relating to outwork which are included in Part 3 of this Report )	...	...	...	...
Total	60	47	2	1

4.—Registered Workshops.

Workshops on the Register (s. 131) at the end of the year. 1	Number. 2
Bakehouses	41
Dressmakers and Milliners	43
Laundries	6
Tailors	23
Meat or Sausage Factories and Workshops	8
Others	143
Total number of Workshops on Register	264

5.—Other Matters.

Class. 1	Number. 2
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Act (s. 133) ...	3
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5) {	
Notified by H.M. Inspector ...	13
Reports (of action taken) sent to H.M. Inspector ...	13
Other ... ..	...
Underground Bakehouses (s. 101) :—	
Certificates granted during the year... ..	...
In use at the end of the year	2



Borough of Weymouth and Melcombe Regis.

ANNUAL REPORT

AND

RESULTS OF THE OBSERVATIONS

MADE

DURING THE YEAR 1906,

AT THE

METEOROLOGICAL STATION, WESTHAM.

LATITUDE, $50^{\circ} 36' 20''$ N. LONGITUDE, $2^{\circ} 26' 50''$ W.

HEIGHT ABOVE SEA LEVEL—25 FEET.

I. J. BROWN, F.R.Met.Soc.,

Honorary Meteorologist.

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To the
Worshipful the Mayor, Aldermen, and Councillors
of the Borough of Weymouth and
Melcombe Regis.

GENTLEMEN,

I have the honour of submitting to you my Ninth Annual Report relative to the administration of the Meteorological Department of the Borough of Weymouth and Melcombe Regis, in the year 1906, and the principal results of the Observations made during that year. All the Instruments entrusted to my care are in good working order, the Readings being taken daily at 9 a.m., local time.

The Station was inspected by Mr. W. Marriott, of the Royal Meteorological Society, on July 17th and 18th, and all the Instruments reported to be in a satisfactory condition.

At Mr. Marriott's suggestion the Sunshine Recorder was removed and fixed on the roof of Sunnybank House. The whole of the Instruments being now at the Municipal Works.

The Charts recording the *bright sunshine* are forwarded each month to the Secretary of the Royal Meteorological Society to be verified.

RETURNS—Daily Weather Telegrams are forwarded throughout the year to the "Daily Telegraph," and from May to September, inclusive, to the "Standard," "Daily Chronicle," "Daily News," "Morning Leader," and the "Wolverhampton Express." Weekly Returns are sent to all the Local Papers, and full Monthly Reports to the Royal Meteorological Society for publication in the Meteorological Record, and to Dr. H. R. Mill for British Rainfall.

I am, Gentlemen,

Yours faithfully,

I. J. BROWN.

2 St. Thomas Street,
Weymouth,

February, 1907.

BAROMETER—9 a.m.

Corrected for Temperature and Altitude.

1906.	Mean.	Difference from the Average.	Highest.	Date.	Lowest.	Date.
January	Inches. 30.005	Inches. + .061	Inches. 30.668	23rd	Inches. 29.388	8th
February	29.823	- .012	30.335	1st	29.026	11th
March...	30.053	+ .064	30.471	3rd	29.484	12th
April ...	30.176	+ .228	30.590	9th	29.429	29th
May ...	29.862	- .118	30.252	5th	29.574	17th
June ...	30.156	+ .121	30.424	20th	29.662	1st
July ...	30.081	+ .040	30.306	9th	29.915	27th
August	30.010	- .081	30.427	28th	29.650	13th
September	30.224	+ .200	30.623	27th	29.698	15th
October	29.877	- .181	30.428	25th	29.232	30th
November	29.988	- .026	30.574	25th	29.196	18th
December	30.028	+ .171	30.601	20th	29.107	26th
Year	30.023	+ .032	30.668	January 23rd	29.026	February 11th

SHADE TEMPERATURE.

1906.	9 a.m.	Max. mean.	Min. mean.	Range mean.	Max. and Min. mean.	Differ- ence from the Average	Highest	Date.	Lowest	Date.	Relative Humidity.
January	44.3	49.5	39.9	9.6	44.7	+ 3.7	53.0	5th & 14th	25.8	24th	% 84
February	40.8	46.2	35.2	11.0	40.7	- 0.6	51.3	21st	29.2	14th	82
March	43.7	49.5	37.0	12.5	43.2	+ 0.4	57.2	2nd	28.7	23rd	79
April	48.9	55.0	39.1	15.9	47.0	- 0.3	68.0	8th	31.4	26th	65
May	52.8	59.0	45.7	13.3	52.3	- 0.3	74.2	14th	36.4	1st & 18th	80
June	55.2	63.5	50.0	13.5	56.7	- 1.7	72.1	22nd	44.6	11th	71
July	63.1	69.3	53.6	15.7	61.4	...	75.9	4th	44.2	1st	72
August	63.9	69.4	57.2	12.2	63.3	+ 1.7	74.4	6th	49.9	18th	79
September	60.8	67.6	52.1	15.5	59.8	+ 1.2	76.8	4th	44.2	26th	77
October	55.9	60.9	50.0	10.9	55.4	+ 3.7	66.5	3rd	34.8	31st	87
November	48.6	53.2	44.0	9.2	48.6	+ 1.2	58.0	5th	34.5	13th	82
December	41.5	46.6	37.0	9.6	41.8	- 1.3	55.9	3rd	27.8	27th	84
Year	51.6	57.5	45.1	12.4	51.3	+ 0.7	76.8	Sept. 4th	25.8	Jan. 24th	78

BRIGHT SUNSHINE.

As registered by the Campbell-Stokes Lense Burning Recorder.

1906.	Actual Sunshine.		Difference from the Average.		Greatest Daily Amount.		Date.	Days on which Sun Shone.	Sunless Days.	Amount of Cloud.	Difference from the Average.
January	h.	m.	h.	m.	h.	m.	19th	25	6	0 to 10	- 0.5
February	112	08	+15	24	8	00	4th	23	5	6.2	- 0.7
March	137	55	+27	56	8	30	28th	24	7	5.5	+ 1.3
April...	233	10	+17	43	11	00	14th & 16th	27	3	6.8	- 1.7
May ...	162	15	+74	22	12	45	25th	26	5	3.8	+ 2.4
June ...	247	00	-73	57	12	40	19th	29	1	7.3	+ 0.2
July ...	249	30	+16	30	15	00	24th & 25th	31	0	5.1	+ 0.2
August	226	26	- 8	30	15	00	29th & 31st	31	0	5.5	+ 0.9
September	216	40	- 5	54	12	50	1st	29	1	4.3	- 0.8
October	103	08	+50	46	12	45	14th	30	1	6.4	+ 0.7
November	67	58	- 1	10	8	50	10th & 11th	17	13	7.0	+ 0.2
December	73	10	- 6	14	8	30	7th	20	11	6.3	- 0.3
Year ...	1908	20	+130	14	15	00	June 19th July 24th & 25th	312	53	5.8	+ 0.1

RAINFALL.

1906.	Total Amount.	Difference from the Average.	Wet Days or falls of 0.01 in. or more.	Difference from the Average.	Mean Wet Day rate of Rainfall.	Greatest fall in 24 hours.	Date of greatest fall.
	<i>Inches.</i>	<i>Inches.</i>			<i>Inches.</i>	<i>Inches.</i>	
January	5.64	+ 3.23	22	+ 7	0.25	0.98	16th
February	3.07	+ 1.04	15	+ 4	0.20	0.51	22nd
March	1.00	- 0.82	8	- 4	0.12	0.40	13th
April	0.85	- 0.82	7	- 5	0.12	0.23	24th
May ...	2.96	+ 1.42	15	+ 5	0.19	0.76	23rd
June ...	1.59	- 0.32	6	- 4	0.26	0.80	28th
July ...	1.04	- 0.87	10	- 2	0.10	0.47	28th
August	0.64	- 1.25	9	- 3	0.08	0.22	2nd
September	0.85	- 1.39	5	- 6	0.28	0.26	14th
October	5.13	+ 2.05	26	+ 11	0.19	0.71	8th
November	3.60	+ 0.13	14	- 2	0.29	0.95	6th
December	1.94	- 1.16	15	- 1	0.13	0.35	25th & 30th
Year ...	28.31	+ 1.24	152	...	0.18	0.98	January 16th

THE WINDS.

Observed daily to 16 points, but in table reduced to 8 points of the compass.

1906.	Velocity in Miles per Hour.		Direction. Number of Observations—9 a.m. and 9 p.m.								
	Total.	Mean per day	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calms.
January	11304	364	8	1	0	3	1	10	28	8	3
February	9576	342	8	3	2	1	3	5	17	14	3
March	9568	308	9	13	1	2	5	5	18	5	4
April	8424	272	11	5	12	5	3	0	15	3	6
May	8400	271	7	4	2	5	8	11	19	2	4
June	7152	238	4	1	10	6	4	5	19	7	4
July	7464	240	4	1	12	2	3	6	22	7	5
August	8928	288	3	0	8	1	6	3	30	8	3
September	9408	313	6	9	18	3	1	2	12	7	2
October	9016	291	5	1	4	2	10	16	21	2	1
November	9792	326	4	4	8	0	7	8	23	3	3
December	9600	309	6	2	8	1	1	5	21	15	3
Year	108632	296	75	44	85	31	52	76	245	81	41