#### Annual report of the Medical Officer of Health, 1898.

#### **Contributors**

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# PLUMSTEAD VESTRY.

# ANNUAL REPORT

OF THE

# MEDICAL OFFICER OF HEALTH.

1898.



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# Medical Officer of Health,

## PLUMSTEAD.

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Medical Officer of Health—
SIDNEY DAVIES, M.A., M.D., D.P.H.

Chief Sanitary Inspector—
ALBERT G. DUCK (Cert. San. Inst.)

District Sanitary Inspectors—

John W. Rance (Cert. San. Inst.), West District.

WILLIAM LITTLE (Cert. San. Inst.), Central ,,

WILLIAM WOOD (Cert. San. Inst.), South ,,

Alfred G. Potter (Cert. San. Inst.), East ,,

Public Health Committee Clerk—
CHARLES ELLIS.

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### ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH, PLUMSTEAD.

1898.

To the Chairman and Members of the Vestry.

GENTLEMEN,

I have the honour to present you with my Eighth Annual Report on the health of Plumstead.

#### A .- Vital Statistics.

1. Population.—On the assumption that the population has continued to increase since the 1896 Census at the same rate as it was found to have increased between the Censuses of 1891 and 1896, it was, on the 30th June last, 62,603. The number of inhabited houses on the same date was 10,298, namely 3,256 in West Plumstead, and 7,042 in East Plumstead.

This gives 6.08 persons to a house, compared with 6.15 last year. (West and East here refer to the districts of the West and East Rate Collectors, not, as usual, to the districts of the Registrars of Births and Deaths; West comprises the N.W., W., and S.W. Wards). Probably the population is underestimated by at least 700.

2. Births.—The birth-rate was only 30.2, 1.8 per 1,000 lower than in 1895; which had the lowest birth-rate then on record. In 1889 the rate was 38.4; since then it has steadily

decreased. If the birth-rate continues to decrease in the same ratio, the deaths will probably exceed the births in about 15 years time.

The decrease was mainly in East Plumstead.

There were 989 males and 907 females born, namely, 226 males and 227 females in West, and 763 males and 680 females in East Plumstead.

3. Deaths.—The death-rate, 16.2, was higher than in any year since 1893. There was an excess of deaths from Measles, Whooping Cough, Diarrhæa, Influenza, Bronchitis, and Pneumonia, which accounts for the higher death-rate.

TABLE A.

and make the same	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898
Deaths from Influenza	0	9	44	27	35	7	17	9	9	26
" Bronchitis and	93	136	207	176	204	124	166	138	126	151
Pneumonia Phthisis	69	95	114	100	111	70	96	81	96	88
Total	162	240	365	303	350	201	279	228	231	265
Total deaths, all causes	759	923	920	849	994	736	930	931	835	1016

Table A shews that Influenza, Bronchitis, and Pneumonia both caused more deaths than in any years but three since 1889.

The deaths of 584 males and 508 females were registered.

4. Meteorology.—1898 was a warm and dry year. The first and fourth quarters had a temperature considerably above the average, and the fourth quarter was notable for the un-

usual amount of sunshine. The weather of these quarters was favourable to health. The warm summer on the other hand was unfavourable.

- 5. The highest number of deaths was in the first quarter, when Influenza prevailed, and the next highest in the third or summer quarter, when Diarrhœa was so fatal (see Table II.)
- 6. Infant Mortality.—The number of deaths under 1 year per 1,000 births, 156, was higher than in any year since 1885. The previous highest number was 140 in 1893. The excess of deaths under 1 year was mainly from Diarrhæa, Measles, Whooping Cough, and Bronchitis. Many of the deaths attributed to Bronchitis are probably really caused by Measles, Whooping Cough, and Influenza.

#### TABLE B.

7. Deaths under 1 year per 1,000 births :-

	WEST.	EAST.
1893	 132	 143
1894	 77	 100
1895	 96	 146
1896	 98	 145
1897	 106	 119
1898	 174	 150

Table B shews that the infantile mortality was, for the first time since 1893, higher in West Plumstead than in East.

Table II. shews that children under 5 years suffered more in West Plumstead in proportion to population from Whooping Cough and Bronchitis, and there were more cases of Premature Birth in West than East Plumstead.

8. The death-rate from the principal Zymotic Diseases (Small Pox, Scarlet Fever, Diphtheria, Enteric Fever, Measles,

Whooping Cough, and Diarrhæa) was 3.5, which is the highest it has been since 1885 with one exception, in 1893. The rate was 2.6 in West Plumstead and 3.9 in East Plumstead.

Scarlet Fever, Diphtheria, Measles, and Diarrhœa were more fatal in East Plumstead.

9. There were 42 uncertified deaths, giving a rate of 4·1 per cent. of total deaths. In the three previous years the rates were 3·0, 2·9 and 1·3 respectively. The rate in Plumstead has been high for several years, but last year it was so high as to call for special comment.

Uncertified deaths are those where there has been no registered medical practitioner in attendance, or if there has been one, he has for some reason refused to certify the cause of death, and the coroner has not considered it necessary to hold an inquest. Of the 42 deaths, 15 were under 5 years and 27 over. Most of those under 5 were infants a few months old, whose deaths were attributed by the registrar to such indefinite causes as convulsions and debility, several were found 'dead in bed.'

Speaking generally, it may be said that healthy children do not die suddenly of convulsions, that children, who are taken care of, do not die of debility, and that when children are found 'dead in bed,' without having been ill enough to require medical attendance, there is usually, at least, gross neglect on the part of the parent or guardian. In many places, every death not certified by a medical practitioner forms the subject of an inquest. Not a single one of the 33 large towns had so many unregistered deaths as 4 per cent. of total deaths. The rate in London was 0.6, and in the 33 towns 1.2.

10. Inquests.—There were 38 inquests held on persons

living in Plumstead, compared with 34, 39 and 35 in the three preceding years.

Ten were on persons under 5 and 28 on persons over 5. 6 were in West Plumstead and 32 in East.

Of the deaths over 5 years in which inquests were held, there were two suicides, one by drowning and one by shooting. One was killed by a fall of a gun in the Arsenal, and one from falling off a bridge into the Arsenal Canal. Two were found drowned in the Thames, and one was drowned as the result of the boat he was in colliding with a ship. An old man was choked by a piece of meat in his throat. A child of 6 years was scalded by upsetting a saucepan of boiling water, and a child of 5 years by accidental burns. A man died from chronic lead poisoning. Two persons were killed by vehicles in the streets. Eight deaths were from natural causes.

Of the deaths under 5 years, three were children suffocated in bed, and one burnt in bed by the clothes catching fire. Another was accidently burnt. One fell down stairs. One swallowed some Ammonia (a strong poison which is very carelessly used). One was from Sunstroke, one from Convulsions, and one Bronchitis.

#### TABLE C.

## 11. West and East Plumstead compared.

there has been a slow but steady incert	WEST.	EAST.
Population—Census 1891	15867	36566
,, ,, 1896	16714	42538
,, estimated to middle of 1898		45503
Birth Rate	26.5	
Death Rate	16.1	16.2
Deaths under 1 year per 1000 births	174	150
Zymotic Death Rate	2.6	3.9
Phthisis Death Rate	1.2	1.4

12. Plumstead compared with other Sanitary Districts.— Plumstead had a lower death-rate than any of the 33 large towns with the exception of West Ham, Croydon, Cardiff and Huddersfield; Croydon and Huddersfield alone had a lower infantile death-rate.

Of the forty-three sanitary areas of the Metropolis, eight had a lower death-rate, namely, Lewisham, Lee, Wandsworth, St. Martin-in-the-Fields, Stoke Newington, Hampstead, St. George's, Hanover Square, and Paddington. Twelve areas had a lower infantile death-rate. In 1897 it will be remembered Plumstead had the lowest infantile death-rates of all the sanitary areas.

When a correction for sex and age distribution of the population is applied, Plumstead takes a much higher place as regards the general death-rate. Its place was thus raised in 1897 from sixth to third.

- 13. Small Pox.—There were no cases of small pox notified as last year. In 1896 there were 3. The new Vaccination Act appears to be working satisfactorily. There were 427 vaccinations in the first three months of the current year.
- 14. Scarlet Fever.—There were 423 cases of Scarlet Fever notified, compared with 61, 584, 527, 480, 328, 352 and 372 in the seven preceding years.

This shews that there has been a slow but steady increase of cases since 1895.

- 15. 328 cases went to Hospital compared with 215 and 233 in the two preceding years.
- 16. There were 12 deaths, 3 at home and 9 at Hospital, giving death-rates of 3·1 per cent. at home and 2·7 at Hospital.

#### SCARLET FEVER DEATH RATE.

#### TABLE D.

Per	100 cases.		At home.		At Hospital.
	1893		4.0		8.0
	1894		3.3		4.8
	1895		3.0	a dem	3.0
	1896		4.3		3.7
	1897		0.7		2.1
	1898	4	3.1		2.7

Table D shews that the Death Rate (especially the Hospital Death Rate) was higher than in 1897, but with that exception the lowest since 1892.

- 17. There were 73 cases in the first quarter of the year, 63 in the second quarter, 92 in the third, and 195 in the fourth.
- 18. Table IV. gives the number of cases occurring in each ward. The rate per 1000 population was 12·0 in the North East Ward, 8·4 in the East, 7·8 in the North, 6·4 in the South, 5·1 in the West, 4·9 in the North West, 4·8 in the South East and 4·6 in the South West. As in the past two years the South West Ward had one of the two lowest rates. The East Ward had the highest rate in 1897.
- 19. It appears from Table V. that Earl Street School had the highest number of cases, Ancona Road, Vicarage Road, and Bloomfield Road coming next. As usual Eglinton Road had far the smallest number of cases among the big schools, but it must be remembered that this school receives a large number of Woolwich children.
  - 20. From Table V. we may see that the 423 cases of

scarlet fever occurred in 339 houses, so that 84 or one-sixth of the total were secondary cases. There were 283 houses in which one case only occurred, and 56 houses or 16 per cent. of the total, in which two or more cases occurred. In 1897, 18 per cent. of the total number of houses had two or more cases.

- 21. Concealed and undetected cases attending Schools.—I was informed by the head teacher of the school of two children who were observed to be desquamating while in attendance. I visited both cases at their homes; in the first I felt convinced that the mother had acted with culpable negligence in sending the child, but as usual there was no evidence to justify a prosecution. The second case was, I believe, purely an oversight on the parent's part.
- 22. Return Cases.—In four cases I learnt that, within a short period previous to the patients being taken ill, another child in the same house had returned home from the Fever Hospital after having Scarlet Fever.

In none of these cases did I discover any sign of infectiousness about the returned case, and they may have been mere coincidences.

Dr. Simpson, Professor of Tropical Medicine at King's College Hospital, is now investigating the whole subject of return cases on behalf of the Asylums Board.

#### DIPHTHERIA.

23. There were 110 cases of Diphtheria notified, compared with 131 in the preceding year. The number of cases was fewer than for six years, as Table E shews.

#### TABLE E.

	No.	OF CAS	ES.	No.	OF DEATH	IS.
1891		37			6	
1892		118			38	
1893		179			65	
1894		118			34	
1895		148			34	
1896		198			60	
1897		131			24	
1898		110	***		15	

24. There were 95 cases which went to Hospital, of whom 13 died, and 15 cases which were treated at home, of which 2 died. Thus the death-rate was 13.6 both at hospital and home.

The gross case death-rate was far the lowest in the last seven years.

- 25. There were 49 cases and 11 deaths in the first quarter of the year; 14 cases and 3 deaths in the second quarter; 21 cases and no deaths in the third quarter, and 26 cases and 1 death in the fourth quarter. Thus besides being more prevalent, the disease was also much more fatal in the first quarter.
- 26. Per 1,000 population there were 1.7 cases. The death-rate per 1,000 population was 0.24 in Plumstead and 0.39 in London. Only six areas had a lower rate than Plumstead.
- 27. The following are the rates per 1,000 population of all cases occurring in the several wards:—East, 3.4; North-East, 2.3; North-West, 2.2; South East and South, 1.7; North, 1.5; West and South-West, 0.7.

The only way in which these rates resemble those of 1897,

is in the continued low rate of the West ward, which in former years was noted for its high rate.

28. Plumstead Road with 9 cases, and Earl Street and Burrage Grove with 7 each were the schools most affected.

Most of the cases did not attend any School.

- 29. The 110 cases occurred in 87 houses. Only 12 houses had more than one case each.
- 30. The steady decrease in the number of cases of diphtheria, and more especially in the number of deaths, in the past three years, is a subject of congratulation. The large proportion of cases which went to the Fever Hospital is evidence of the appreciation by the public of the benefit of the anti-toxin treatment. As there was no lack of accommodation at the Hospital, it was not necessary to take advantage of the supply of anti-toxin offered by the Asylums Board, when the Hospitals are full.
- 31. Towards the end of the year, you authorized me to incur the expense of having a bacteriological examination made in any doubtful case of Diphtheria, as I recommended in my last report.

The method adopted is to keep at the Health Office tubes and swabs all prepared for obtaining the secretion of a suspected throat; when a medical man has a case in which he suspects Diphtheria, but is not certain as to the diagnosis, he applies to the Health Office, a tube is supplied, which after use he puts in a case provided with the tube, and forwards it to the Clinical Research Society. The Society sends a report by telegraph within 24 hours, which is then forwarded to me. No examinations were made before the end of 1898, but several

applications have been received and reports obtained since the beginning of the present year, the results of which have demonstrated the utility of the plan.

#### ENTERIC FEVER.

32. There were 28 cases of Enteric Fever, compared with 22, 29, 26, 214, 29, and 25 in the six preceding years. There were only two deaths, the lowest number in proportion to population recorded in Plumstead.

Twenty-one cases went to Hospital, compared with 12 in 1897.

33. Table IV. shews that the North Ward had the highest number of cases in proportion to population, and the East Ward the next highest.

The East Ward has been, for the past three years, one of the two wards having the highest number of cases of Enteric Fever.

34. Three cases occurred in Tewson Road, two each in Benares Road and Pattison Road, and one each in Reidhaven Road, Hartville Road, Abery Street, Orchard Road, Frederick Place, Radnor Terrace, Whitworth Road, Palmerston Road, Maxey Road, Plumstead Common Road, Bramblebury Road, Burrage Grove, Manthorpe Road, Station Road, Burrage Road, Charlotte Street, Eton Street, Park Road, and Bastion Road.

Nineteen out of 26 houses concerned are situated at a level below that of Raglan and Brewery Roads.

35. The case in Plumstead Common Road no doubt got the infection at Deal. Five cases were likely from their occupation to contract the disease outside the parish, namely, a messenger

in the Arsenal, a foreman on the railway, a labourer at Crossness outfall, a carpenter in search of work, and a man employed at Erith. Two patients were employed at Public Houses in Woolwich, and one in addition at a Woolwich cookshop. One took in washing from Woolwich, one had oysters and another whelks in the Arsenal Square shortly before their illness.

Serious sanitary defects were found in five houses.

- 36. Twenty-two cases were males and seven females. Two were under 10, twelve from 10—20, and fourteen from 20—40 years old.
- 37. There were 0.05 deaths per 1000 population. In London there were 0.13. Plumstead had the lowest rate but one of the London areas.

#### PUERPERAL FEVER.

38. There were 7 cases of Puerperal Fever and 7 deaths. In the three preceding years there were 7, 3, and 3 cases respectively.

CHOLERA.

39. The three cases notified as Cholera occurred in the East Ward, and were all notified by one medical man, and were not of the nature of Asiatic Cholera. None died.

### ERYSIPELAS.

- 40. There were 54 cases of Erysipelas, compared with 53, 43, and 46 in the three preceding years. Two cases died. Five cases, including one fatal one, were under 5 years of age.
- 41. In my last report, I related a death from Erysipelas following vaccination, and remarked that "it is desirable that

"vaccination sores should be carefully dressed with antiseptic precautions until they heal": the regulations of the Local Government Board for Public Vaccinators, under the recent Vaccination Act, give full directions for this being done.

#### MEASLES.

- 42. There were 59 deaths from Measles, compared with 68 and 3 in the two preceding years. Fifteen deaths occurred in the first quarter, 41 in the second, and 3 in the third.
- 43. These numbers shew that an epidemic of Measles raged in the beginning of the year.

By means of the action you had taken in asking the School Board to call their teachers' attention to their printed regulations re notifying infectious diseases, I began, at the commencement of the year, to receive intimations as to children away from school on account of Measles in their home. In the course of the year I received altogether 609 such notifica-Several teachers, however, either did not receive, or did not attend to, the School Board's instructions; for on the 10th February I was informed that 71 children, out of 142, were absent from the Knee Hill Board School on account of Measles, and, two days later, I was informed that 141 children were absent from Eglinton Road School for the same reason. In both cases, this was the first intimation that I had received of the existence of Measles at these Schools. The Infant Departments of both these Schools were closed for a period of six weeks.

44. Later on it became necessary to close the Infant Departments of the following schools:—Vicarage Road, Slade, Conway Road, High Street and Plumstead Road. These latter schools were closed for five weeks only. The first of

them was closed on the 29th May and the last on the 7th June.

- 45. The good effect of the closure of the schools was marked. The spread of the disease at each end of the parish was obviously stopped by the closure at Abbey Wood and Eglinton Road. The good effect of the closure of the other five schools is seen from the deaths registered from measles in each of the eight weeks following the 14th May, viz., 4, 4, 4, 11, 2, 4, 2, 0.
- 46. The school notification of measles was of much service in enabling me to take early measures for the closure of the above schools. It would be more useful if more uniformly and more carefully employed. Evidently several teachers omitted to notify, and it was found, on visiting the house, in a large number of cases, that the patient had recovered some time.
- 47. Each house was visited on notification, a paper of instructions left, and means taken to prevent other children in the house from attending other schools (including Sunday Schools) than that from which the notification had been received.
- 48. As only the Infant Departments were closed, there was no serious interference with education, indeed, it may well be doubted whether it was not altogether a good thing for the infants affected to be kept from school and left free to play out of doors in the summer months of May and June.
- 49. In Woolwich the epidemic was more serious than in Plumstead, the deaths being 50 per cent. of population more than in this parish.

PHTHISIS.

50. There were 86 deaths from Phthisis, compared with 96, 81, and 96 in the three preceding years.

There were, in addition, 30 deaths from other tuberculous diseases.

- 51. The death-rate from Phthisis was 1.27, being 1.2 in West Plumstead, and 1.4 in East Plumstead.
- 52. In all these cases of death, and in some others notified by the Poor Law Medical Officers attending them, a Sanitary Inspector called at the house, left printed instructions, and offered disinfectants for spittoons, and fumigation on death or vacating of rooms. Only in eight cases was fumigation accepted however.
- 53. The 86 deaths occurred in 85 houses, situated in 60 streets. Five houses in Maxey Road were affected, and three in each of the following—Eglinton Road, Ann Street, Pattison Road, Walmer Road, and Bannockburn Road.
- 54. I consulted with the Principal Medical Officer of the Royal Arsenal on measures for preventing the spread of tubercle in the Arsenal, and on his recommendation spittoons containing some disinfectant have been, I understand, provided in the principal workshops by the Arsenal Authorities.
- 55. The formation of the Society for the prevention of tuberculosis, and its inaugural meeting at Marlborough House, have called public attention in the past year to the fact that tuberculosis is a preventable disease, and to the necessity for taking measures for its prevention. But many Medical Officers of Health, including myself, have for years past being advising their sanitary authorities to take the steps recommended by the new society.
- 56. It is doubtful, however, whether very much will be done in diminishing the spread of tubercule infection until

cases of tubercle are notified. I have recommended voluntary notification, but it appears that there is no power to pay for it. Such power is urgently needed.

No doubt something may be done by public lectures and distribution of leaflets in educating the public on how tubercle may be avoided.

But until the cases of tubercle are known to the Health Office, the most important kind of instruction, *i.e.*, instruction of the patient, cannot be attained. The leaflet I have prepared and used is appended.

The Woolwich and Greenwich Tramway Company very readily acquiesced in my request that notices should be posted in the cars forbidding expectoration on the floors. Such notices are, I believe, now to be found in all the tram cars.

57. I recommended that the County Council should be requested to provide covered seats or shelters on Plumstead Common for the use of Phthisical persons seeking open-air treatment. Such seats would enable delicate persons to take the air on the Common in all weathers, whereas without them they require fine and calm weather. The request was endorsed by the Committee and forwarded to the Council, but they refused to comply with it on the ground, I believe, that such seats would be used for inproper purposes.

I fail to see the validity of this objection. What useful contrivance exists that is not abused? The objection simply means that the Council needs to be convinced of the usefulness of such shelters.

58. Per 1,000 population there were 1.48 deaths from phthisis in Plumstead, 2.08 in Woolwich, 0.88 in Lee, and 1.72 in London.

59. Alcohol. Eleven deaths were certified as either from alcoholism, or cirrhosis of the liver, a disease which is the direct result of alcoholism. But one may say certainly that alcoholism was to a great extent responsible for a large part of the deaths attributed to phthisis, bronchitis, pneumonia, heart disease, and other diseases.

Alcoholism does not simply mean drunkenness, but also habitual indulgence in alcoholic drinks beyond the physiological quantity.

60. Rheumatism.—There were two deaths from acute rheumatism (rheumatic fever), compared with 4 and 1 in the two preceding years. Twenty-three cases of acute and subacute rheumatism were nursed by the District Nursing Association compared with 15 and 17 in the two preceding years. Three cases were in Station Road and two in Reidhaven Road.

#### B. Administration.

61. Water Supply.—The water supply continues to maintain its high quality.

My attention was called to a house in Barnfield Road without a proper and sufficient supply of water.

This was situated in a back yard with which the house had no direct communication.

I recommended that the house should be re-united with the adjoining one of which it originally formed part, and which had a water supply, and the whole let to one family for which it was by no means too large. This was done, and a water supply was thus put on the premises.

62. Sewer Insufficiencies.—Complaints were received of flooding in Benares Road during some rather heavy rainfalls in the Summer. This occurred repeatedly. The question arose

whether this was due to the insufficiency of the parish sewers or of the main outfall. It appears that \(\frac{1}{2}\)-in. of rainfall over South London, occurring in 24 hours, causes the outfall to be surcharged. This amount of rainfall occurred 11 times between April 1st and September 30th.

It is also true, I believe, that the Reidhaven Road Sewer is frequently unable to empty itself on account of the surcharging of the outfall. But whether the same cause occasioned the flooding in Benares Road, or whether this was due to the insufficient size and fall in the Benares Road Sewer itself, is still a matter of question.

Flooding also occurred at several houses in Reidhaven Road on one occasion when the Reidhaven Road Sewer was greatly surcharged.

It seems that the southern outfall does not satisfactorily provide for the drainage of the lower parts of Plumstead, and the health of its inhabitants must suffer in consequence.

Flooding also occurred in some houses drained by a long combined drain into Crescent Road Sewer, which last year I reported as insufficient. Some steps are being taken to remedy this.

as in 1897 found them in an unsatisfactory state. The ditch along the Arsenal wall has been kept clean, and the Arsenal authorities have, I believe, satisfactorily performed their usual flushing. But several other ditches, notably one running through the allotments, and another at Abbey Wood, have been in a very filthy state. On my suggestion a Special Subcommittee was appointed to inspect and report on the ditches. It recommended that a new penstock should be constructed to facilitate flushing, and that the two above mentioned ditches

should be more frequently cleansed by the Vestry's Contractor; also that notices should be posted warning persons against depositing refuse in these ditches.

64. Testing Sewers and Drains.—For years past I have advocated a more thorough examination of new sewers and drains before they were passed, including the application of the water test.

The Vestry have now decided to adopt the systematic use of the test in all new and re-laid sewers and drains, a decision which I would characterise as the most notable sanitary advance of the year.

65. Water-closets in new houses.—As in previous years, the Health Committee had before it several cases in which the Inspectors found that water-closets had not been constructed in accordance with the bye-laws, notably some houses in Brookdene Road, where the seats were so placed as to make the closet almost unusable.

In consequence, a resolution was passed "that it is desirable "that the inspection of drains, water-closets, and their connections, and waste pipes, both in the case of new and re-laid or "repaired drains, be continued until the Surveyor is satisfied "that they have been properly completed and connected in "accordance with the L.C.C. and Vestry's Regulations and "Bye-laws, and that a register of all new buildings and build-"ings re-constructed be kept, in which shall be recorded the "date and result of each inspection, and that the Surveyor be "directed accordingly."

66. The Churchyard.—There were 193 interments in the Plumstead Churchyard as compared with 318, 358, 253 and 177 in the four preceding years. 16 more bodies were therefore interred than in the preceding year. The increase may be

partly accounted for by the higher death-rate of last year, but the sudden cessation of the decrease in interments makes one wonder whether the late Vicar's undertaking has been adhered to (i.e., that only those having relatives already buried in the churchyard should be interred there).

67. The Mortuary was used for 33 bodies, one being a case of infectious disease, namely, Diphtheria. This compares with 23 and 31 in the two preceding years. There were 23 post mortems compared with 16 in 1897. I inspected the Mortuary and found it kept clean.

The new Mortuary has not been commenced, but I understand that plans are being prepared.

- 68. The Health Refuge was again not used once during the year.
- 69. Bakehouses.—I inspected the Bakehouses twice as usual, and reported that they were satisfactory with one or two exceptions.
- 70. Cowhouses and Milk Supply.—I made a special inspection of the cowhouses with the chief Sanitary Inspector. I reported to you at the time that although only one of these was bad enough to justify opposing the renewal of the license, there was hardly one which was quite satisfactory. In only one shed is there as much as 800 cubic feet of air space allowed per head, which is the minimum desirable. In some, the cows' hind quarters were found coated with dung. The floors are not generally well swept and clean. Some sheds are deficient in light and ventilation. In three sheds we noticed cows coughing. I do not by any means wish it to be inferred that the Plumstead cowsheds are worse than others, indeed, I expect they are better than most. I made my report after visiting a

model shed, where I saw how cows should and could be kept. But if things are so imperfect in London under the thorough County Council inspection it is easily understood that they are much worse in country districts where there is often little or no inspection. And most of the milk sold in Plumstead comes from a distance.

With a view to educating cowkeepers as to how cows should be kept, the Health Committee instructed me to prepare a leaflet on the subject. This was printed and distributed to all cowkeepers known to supply milk in Plumstead. It is appended to this report.

71. The subject of the milk supply has attracted much attention recently as being a recognised means of the communication of tubercle to infants. There is great need for further powers to prevent the sale of milk from tuberculous cows.

In many districts specimens of milk are systematically examined bacteriologically for the detection of the tubercle bacillus. I think it is desirable that this should be done in Plumstead.

- 72. Slaughterhouses.—These were inspected by the Chief Inspector and found satisfactory with one exception. But the slaughterhouse may be most sanitary and yet the meat killed there unfit for food. Until it is compulsory that all animals shall be killed in public slaughterhouses and then systematically inspected before they are cut up, it will be impossible to prevent the sale of meat that is tuberculous or otherwise diseased.
- 73. Workshops.—I inspected 20 workshops, principally dressmakers. I found the conditions mostly satisfactory, but in a few instances there was some overcrowding, which was remedied on its being pointed out.

The factory inspector was informed of two workshops unknown to him.

74. Dust-shoots.—I did not become aware of any dust shoots contravening the bye-laws. The bulk of the house refuse was deposited on the levels outside the prescribed distance.

In my last report I referred to a deposit of house refuse having been made on Wright's estate, within 100 yards of houses, by the Vestry's former contractor. The deposit was discontinued for a time on complaint to the contractor, but was soon after found to be once more in progress. Notice was then served on Mr. Wright to remove the deposit, and not complying, he was summoned at the Police Court, and after several adjournments to give opportunity for the removal, was finally fined 40',- and 3/- costs. Considering the trouble he had given to the Vestry's officers, the repetition of the offence, and the prolonged neglect to remedy the nuisance, this may be considered a very moderate fine, and totally inadequate costs.

- 75. Dust Collection.—There have not been so many cases of neglect to remove house refuse as in 1897, and the collection in respect of regularity may be said to have been fairly satisfactory. But, as I reported last year, the dust carts are frequently overloaded and never properly covered, with the result that dust is frequently spilt on the ground and even more frequently blown about in the air. There is urgent need for proper dust carts with hinged doors.
- 76. Smoke Nuisance.—There has been, on the whole I think, less black smoke emitted from the Arsenal chimneys. I have noticed particularly that one old offender has been much less frequently at fault. An adjoining one, however, has given off more smoke.
  - 77. Registration of houses let to two or more families.—Four

houses were on the register at the beginning of the year. During the year I recommended, at various times, the addition of 68 houses after specially inspecting each. A few were registered and still remain on the register. Of the others, a large proportion were ordered to be registered, but the notice to register had the effect that the occupiers or lodgers were turned out, and the houses reduced to occupation by one family. The remainder the Committee did not consider required to be registered, but ordered them to be kept under observation for a time.

Of course wherever pronounced overcrowding or other conditions were found these were remedied after notice. There remain on the register at the present time twenty houses.

- 78. As the above facts testify there still remains very strong prejudice against the registration of these houses. I believe that already this prejudice is beginning to wear off a little now that landlords see that the registration in no way resembles that of common lodging houses. There is no doubt that the registration is of great value in promoting the sanitary condition of these houses. They are inspected at least twice a year, and the regulations facilitate the removal of nuisances, by making it unnecessary to prove a nuisance before any cleansing can be ordered or overcrowding put a stop to.
- 79. One reason why more houses were not ordered to be registered was the well known difficulty that persons ejected on account of the notice to register would have in procuring house accommodation elsewhere. The class of people usually found in houses which require registration have very great difficulty in finding a landlord who will accept them as tenants. Nearly all the new houses built are designed for the better class of artisans to buy for their own use. The working man on 24/- a week, with half-a-dozen children, is not catered for.

It is for this class that there is urgent need of the application of Part III. of the "Housing of the Working Classes Act."

80. Reidhaven Road District.—The following table gives the statistics of Reidhaven Road District compared with Plumstead as a whole. It will be seen that the Birth-rate was much lower than in 1897. The Death-rate compares more favourably with Plumstead than was the case last year, and this is more especially the case with the Infantile Death-rate, or deaths under 1 year per 1000 births. Both rates are still, however, much higher than in the rest of Plumstead.

wanty housesy and	Reidhaven Road Dist.				Plumstead 62603					
Population	3733									
	1894	1895	1896	1897	1898	1894	1895	1896	1897	1898
Total Births				169	143	1910	1866	1950	1975	1896
Birth Rate				45.2	38.3	33.6	32.0	32.7	32.3	30.2
Total Deaths	72	84	61	79	74	736	930	931	835	1016
Death Rate	19.8	23.1	16.2	21.1	19.8	12.4	15.9	15.6	13.6	16.2
Deaths under 1 year	15	42	26	31	25	180	250	261	230	296
" per 1000 births				183	174	94	134	133	116	156
,, 1.5 years	17	18	14	13	14	127	143	176	99	156
Diphtheria deaths	1	3	5	2	0	40	31	60	24	15
" notifications	5	11	15	6	4	118	148	198	132	110
Enteric Fever deaths	2				1	6	30	4	3	2
" notifications	13	2	3	2	3	26	214	29	25	28
Diarrhœa deaths	5	12	8	13	15	10	48	30	81	105
Phthisis "				12	7	70	96	81	96	88

<sup>81.</sup> The deaths from Diarrhœa, are again more than

twice as numerous, proportionally, as in Plumstead. The deaths from Phthisis are 30 per cent. more numerous. The Enteric Fever deaths and notifications were more numerous, but Diphtheria less so than in Plumstead.

82. This district has received a large amount of attention in the past eighteen months, most of the houses having been twice inspected in that time, with the result that, in some respects, there is great improvement in its sanitary condition.

In my last report, I gave three reasons for the high mortality I had found, viz. (1) lowness of site, and high level of the ground water; (2) contamination of the soil with organic matter, partly from previous dust deposits, partly from defective drains; (3) the overcrowded and dirty condition of many of the houses.

- 83. The chief improvement made has been in this third condition. When marked overcrowding was found, it was abated directly by notice; but the chief abatement has been indirect, following the proposal to register a number of the houses occupied by two families. This proposal, in nearly all cases, had the effect of tenants or lodgers, or both, being ejected, and the house let to one family.
- 84. During the last six months, nearly all the drains in this district have been tested with the smoke test, and where found defective, which was the case with a large proportion, repaired and tested with the water test before being passed. I anticipate that, in future years, we shall see the good effect of these measures in diminution of Diarrhæa, Enteric Fever, Phthisis, and perhaps Diphtheria.
- 85. It is possible that the already noted improvement in the general and infantile death-rates compared with Plumstead,

may be the result of diminished overcrowding. But it must be remembered too, that diminished overcrowding means smaller population, and that probably, therefore, the estimated death-rate appears to be lower than it really is. This possible error, however, does not affect the infantile death-rate.

86. Infirmary drains.—By request of the Guardians, the drains of the Infirmary were tested by the smoke test, and the Chief Sanitary Inspector reported fully on the result. His report shewed that, although the plan and gradients of the system of drainage at the Infirmary is satisfactory as far as he found, the joints of the drain pipes, the gullies, manholes and inspection pits were generally faulty. On this report, I recommended the construction of four new manholes, the reconstruction of the defective inspection pits and gullies, and the relaying of a considerable portion of the drains.

The manholes and gullies have been completed as advised, but only a portion of the drains that I recommended to be relaid were done.

- 87. Drainage of All Saints Schools.—The Chief Inspector was also occupied with the defective drainage of All Saints Schools. After some delay the drains were re-constructed in a satisfactory manner.
- 88. Underground Dwelling Rooms.—Thirty very insanitary underground rooms, chiefly in Spray Street, were found by Inspector Rance, to be used as living rooms. I inspected all of them, and was of opinion that they were unfit for habitation. As they were occupied along with rooms above ground, they could not be closed under Sec. 96 of the Public Health Act, but on the ground that the use of such rooms rendered the house unfit for occupation, action might be taken under Part II. of the Housing of the Working Classes Act for closing the

house. Fortunately, however, this was not necessary, as the owner agreed to close the underground rooms, which he did.

In some underground rooms in Palmerston Road the landlord undertook to open up a partition wall by which two small rooms, unfit for habitation separately, were transformed into one fairly healthy living room, the back small room having been above ground.

- 89. Inspectors' Work.—See Table IX. 2895 houses were inspected, house to house, compared with 2082 in the previous year. Besides these, 3105 houses were inspected for infectious diseases, complaints, &c., making a total of 6000 inspections (not necessarily 6000 houses). 337 drains were tested by smoke, and 96 by the water test. 731 chocked and defective drains were dealt with, and 54 combined drains examined and referred to the Works Department for repairs.
- 90. 2498 written intimation notices were served; 957 of these were followed by statutory notices, and 137 of these again, not being attended to, were reported to the Clerk for proceedings. But in only 31 instances were the offenders summoned to the Police Court. Convictions were obtained in each of the 31 cases. Seven fines were imposed, 40/- for an accumulation of house refuse, 40/- for a yard not properly paved, 15/- for reconstructing a w.c. contrary to L.C.C. bye-laws, 10/- for removal of offal during prohibited hours, and smaller sums in other cases. 7/- costs were obtained in one case, 4/- in three cases, 3/- and 2/- in the remainder. A closing order was made on three houses in Red Lion Lane. On the subject of legal proceedings I would refer to what I said in my last report, paragraph 78. It is satisfactory that some penalties have been obtained, but they are hardly large enough to be deterrent. In 1897, 191 cases were reported to the Clerk, and 42 summonses taken out.

- 91. Overcrowding.—90 cases of overcrowding were found and remedied, compared with 21 and 38 in the two preceding years. This increase in overcrowding confirms what I have said above and in my last report as to the need of house accommodation for a certain class.
- 92. Disinfection.—Rooms in 513 houses were disinfected after infectious disease. In a large number Formalin was used for fumigation instead of Sulphur or Sulphur Dioxide.

This substance does not injure metal, its smell is less objectionable, the time required is not so long, and its efficacy is said to be greater. It is, unfortunately, rather dearer than Sulphur. As in former years, bedding, &c., was disinfected by the Lyon super-heated steam apparatus, in which it is exposed to a temperature of 260° for 30 minutes.

A piece of disinfecting soap is now left at each house by the disinfecting officer to be used for scrubbing floors, woodwork and furniture in the infected rooms. It serves as a useful hint in many cases of the desirability of this scrubbing.

The new disinfecting apparatus has not yet been provided. The present apparatus requires four hours for drying the articles in it after the 30 minutes saturation; but the new appliances will do the whole work in  $1\frac{1}{2}$  hours.

93. Additional Inspector.—Mr. Welsh having retired from the post of analyst's Inspector, Chief Inspector Duck was appointed to do his work in addition to his other duties. The work of Analyst's Inspector does not occupy a large amount of time, but requires a good deal of acumen. I think Mr. Duck admirably fitted for the post. In consequence partly of this, partly of the immediate need of an inspector to devote himself to the Reidhaven Road District, a new Inspector was advertised for and Mr. Potter appointed. This is his first appointment

as Sanitary Inspector, but he has shewn himself thoroughly competent for his new duties.

Plumstead may now be considered very well staffed as regards male Sanitary Inspectors. There is only one desideratum for the Sanitary Staff and that is a Lady Inspector, to visit houses which are occupied by two or more families, and endeavour to advance domestic hygiene; she would also visit places where women are employed, such as dressmakers, laundries, &c. This I hope the Vestry may consider at a future date.

94. In conclusion I have to acknowledge the very able and devoted assistance I have received from the Chief Inspector, the Health Committee Clerk, and all the Staff, and to thank you, gentlemen, for the support accorded me in my work.

I have the honour to be, gentlemen,

Your obedient servant,

SIDNEY DAVIES

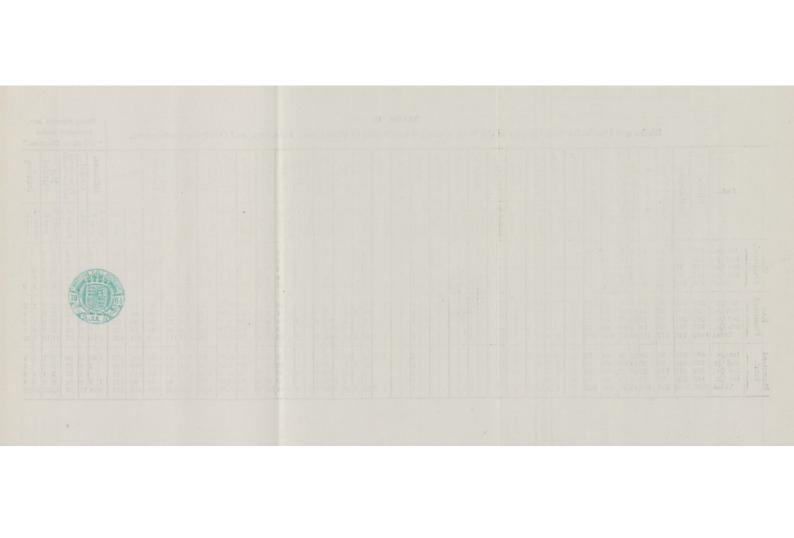
26th April, 1899.

TABLE I.

Summary of Statistics for 1898, compared with Registration London.

					Plumstead.	London.
1.	Area				3,388 acres	77,410 acres
	Inhabited houses (June	e, 1898)			10,298	OUT HALL
	Number of persons to	house			6.08	
2.	Population (Census 189	6)			59,252	4,421,955
	Population, estimated	to June	30th, 18	898	62,603	4,504,766
	Total Deaths (correcte	d for Pu	blic In	stitu-	1,016	82,037
	tions) Total Births				1896	132,432
	Naural increase of pop	ulation			880	50,395
	Estimated increase				1513	
3.	Birth Rate				30.2	29.5
	Death Rate		5 64	٠.	16.2	18.3
	Zymotic Death Rate	JUL	D.		3.5	2.77
	Deaths under 1 year, p	er 1000	births		156	166
4.	Uncertified deaths, per	cent. of	total d	eaths	4.1	
	Deaths from violence				26	
	Inquest cases				38	
5.	Death Rate, 1896				15.6	18.1
	,, 1897				13.6	17:7
	,, 1898				16.2	18.3

TABLE II. These Figures are included under Births and Deaths for each Quarter of the Year, corrected for Deaths in Workhouse, Infirmary, and Out-lying Institutions. All other Diseases." Diphtheria. Relapsing. Inquests. Small Pox. Scarlatina. Erysipelas. Influenza. Continued Fuerperal. Typhus. 5 and under 15. 15 and under 25. 25 and under 65. Cancer. Cholera. 1 and under 5. Under 1 Year. TOTAL Total Deaths. Over 65. under 5. under 5. over 5. over 5. 1st Qr. 2nd Qr. 3rd Qr. 4th Qr. Total 108 124 110 111 453 80 64 70 62 276 18 2 1 8 1 3 8 2 5 1 3 39 6 7 5 3 4 4 12 3 6 2 1 3 18 6 1 4 6 8 9 27 16 12 33 18 79 10 9 15 12 46 34 20 41 23 118 46 44 29 39 158 19 21 16 19 75 24 19 11 16 70 18 15 16 18 67 2 2 1 2 3 1 1 4 8 4 2 - - - 4 4 1 5 3 6 4 2 2 1 9 2 7 4 8 11 19 6 26 2 2 4 2 1 1 1 811 8 2 37 9 4 48 12 10 18 11 7 14 4 10 117 36 31 1 4 24 2 30 8 23 2 4 34 3 18 111 1st Qr. 2nd Qr. 3rd Qr. 4th Qr. Total 65 48 47 45 205 49 25 27 33 134 127 95 92 92 406 201 184 191 164 740 37 41 81 58 217 12 12 8 25 57 1 10 9 8 16 43 47 36 40 36 159 74 89 99 72 34 2 1 1 1443 9 2 5 7 1 7 5 8 4 3 4 4 9 2 8 5 8 15 27 10 28 11 18 112 17 158 1 6 34 2 39 2 8 28 3 4 46 6 20 157 461 281 475 248 492 261 468 226 1896 1016 2 4 2 1 1 8 12 1 20 3 2 4 2 2 1 2 2 2 24 11 Plumstead. Total. 73 44 38 49 204 53 55 11 5 53 56 13 13 114 26 13 7 76 19 5 13 296 156 42 38 1st Qr. 2nd Qr. 3rd Qr. 4th Qr. Total 84 69 63 64 280 1 26 46 9 15 6 6 24 19 16 18 16 34 84 65 51 56 54 226 5 4 7 6 108 109 140 95 452 173 139 121 131 564



(A)

TABLE III.

Table of DEATHS during the year 1898, in the Parish of Plumstead, London District, classified according to DISEASES, AGES, and LOCALITIES.

and the same of th	Mon	TALIT					ES,	4 - 19	1	3/	1	IOR	FALI	TY I	гвот Сні	LDI	BJO	UNI	DC	FIVE	s, DI	STING	OF A	ING D	EATE	18 0	F	0	
Names of Localities adopted for	89	ear	10	15	r 25	r 65	rds		1	2	3	4	5	6	7	8 8	1 1	0 1	1 1	2 13	14	15	16	17	18	19	20	21	22
the purpose of these Statistics; Public Institutions being shewn as separate localities.  (a)	(q. At all Ages	© Under 1 year	(d) 1 & under 5	© 5 & under 15	(f) 15 & under 25	(5) 25 & under 65	(h) 65 & upwards	(i)	Small Pox	Scarlatina	Diphtheria	Membran ous Croup		Enteric or H		Relapsing .	Cholone	Erreinalas	Monelon	Whooping	Diarrhosa &	Rheumatic   Fever	Phthisis	Bronchitis, Pneumonia, and Pleurisy	Heart	Cancer	Injuries	All other Diseases	TOTAL
WEST PLUMSTEAD	242	79	36	4	6	61		Under 5 5 upwds.			1						i.			7 8	13		20	20	1 ::	15	3	52  55	
EAST PLUMSTEAD	623	213	101	25	24	160	100	Under 5 5 upwds.		3	1						4			2 18	83		51	43	33	18		123  130	
WORKHOUSE & INFIRMARY	227	6	11	3	6	91	110	Under 5 5 upwds.											i ·	8	7	·:	34	30	15	 17	9	3 102	21
Totals	1092	298	148	32	36	312	266	Under 5 5 upwds.			2									2 26	103		105	65	1 61	50		178 287	64
The subjoined	numb	ers l	have	als	so to	be	tak	en into a	cco	un	t in	ı ju	dgi	ng	of t	he a	abo	ve :	rec	ords	of n	nort	ality				T		
Deaths occurring outside the district among persons belonging thereto.	73	3	19	11	4	29		Under 5 5 upwds.			10			2			2			1	1 1	· · · · · · · · · · · · · · · · · · ·	7	2 3	4	5	6	4	2: 5
Deaths occurring within the district among persons not belonging thereto	149	5	11	1	2	61	69	Under 5 5 upwds.	18 17			200		i					i ·	3	6		24	2	7	ii	2 7	8  65	18

Table of POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1898, in the Parish of Plumstead; classified according to DISEASES, AGES, AND LOCALITIES.

(B)

	1	LATION T AGES.	hs.					THE B	NOV	VLED C OF	GR (	OF T	CHE			T	HEIR	Ho	MES I	NT	HE S	EVE	BAL	Lo	CALI	FIRS
Names of Localities adopted for the purpose		Esti-	Births.	Aged under 5	1	2	3	4	5	6	7	8	9 1	0 11	12	1	2	3	4	5	6	7	8	9 1	0 11	12
of these Statistics; Public Institutions being shown	Census	mated	red	or				183		FE	FERS	g.	_1	1.					SI		FEV	ERS		_	1.	1
as separate localities	1896. (b)	to mid- dle of 1898.	a Registered	over 5	Smallpox.	Scarlatina,	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid,	Continued.	Relapsing.	Puerperal.	Cholera. Erysipelas.	TOTAL.	Smallpox.	Scarlatina	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera, Erysipelas	TOTAL.
NODWY				Under 5		11	5							. 1	17.		8	5								13
NORTH WARD	5329		••	Over 5 Under 5		31 20	3			5				. 2	41 24	::	24 15	3			3		**			29
NORTH-EAST ,,	5651			Over 5		48	10	1:	::	1				. 4	63		39	10			2					5
NORTH-WEST	5289	male and		Under 5		10 16	2 6		.,	3				: 7	12 33		8	6			3					2
	5269			Over 5 Under 5		6	1						1.		7		3	0	**			::			:	
WEST ,,	5222			Over 5		21	3			2				. 3	29		12	3			2					1'
SOUTH-WEST ,	7152			Under 5 Over 5		11 22	2 3		::	1	• •			1	13 27		7 18	1 4			1					2
				Under 5		21	7							. 1	29		11	7								1
SOUTH-EAST ,,	10646			Over 5		31	11			3	.:			. 6	51 49		20 25	9								29
EAST	11011		1	Under 5 Over 5	::	61	14 24	::	::	8			3	3 19			53	13		:	6	::				78
				Under 5		16	7								23		11	6								1'
SOUTH "	8952			Over 5 Under 5		41	9			4			3.	. 7	64		32 6	6			3					4:
INFIRMARY				Over 5		4				1					5		4				1					1
WORKHOUSE				Under 5 Over 5		9									9		9									1
WORKHOUSE				Over 5		0									0		0									1
TOTALS	59252	62603	1896	Under 5 Over 5		142 281	41 69	::	::	28	1		7	. 5 3 49	189 437		103 225	36 59			21					308

Ages, Schools and other particulars of the cases of SCARLET FEVER AND DIPHTHERIA.

					AGES			S	EX.	Houses	Houses	Houses	Houses	No.
		Cas	tal ses. Under	to 5	5 to 19	10 to 20	Over 20	Males.	Females	with 1 Case only.	with	with 3 Cases.	with 4 Cases or more.	treated in Hospita
SCARLET FEVER		4	23 6	131	185	88	13	196	227	293	38	10	8	328
DIPHTHERIA & MEN	IBRANOUS	1	10 1	40	40	12	17	52	58	75	9	3		95

	-	-	_		- 1		1 1775						1			
	100	Ancona Road.	erl set.	rage ad.	mstead Road.	Purrett Road.	ad.	Slade.	Burrage Grove.	ad.	gh set.	Conway Road.	Hill, Wood	ım ne.	set.	ner pols.
	-	Anc Ro	Earl Street.	Vicarage Road.	Plumstead Road.	Pur	Bloomfield Road.	The S	Bur	Eglinton Road.	High Street.	Con	Knee	Plum Lane.	Lee Street.	Other Schools.
	_	On Roll 1357	On Roll 1141	On Roll 1149	On Roll 1058	On Roll 1207	On Roll 1360	On Roll 934	On Roll 1053	On Roll 1301	On Roll 1219	On Roll 763	On Roll 142	On Roll 351	On Roll 389	
SCARLET FEVER		37	52	32	23	13	31	12	16	3	22	9	3	2	8	29
DIPHTHERIA & MEMBRANOUS CROUP		3	7	1	9	4	1	2	7	3	3	2	2	1	1	5

TABLE VI.
Summary of the Vital Statistics of the Parish of Plumstead, 1885-1898.

OHOES BELLEE	ted ion year.	insignon	3.		nual R 1000 li		rom al seases	У.	S.	ever.	ria.	Cough	8.	ever.	and Fever.	ea.	, to	ous	s of under age to rths.
Year.	Estimated Population middle of year.	Births	Deaths.	Births.	Deaths.	Principal Zymotic Diseases.	Deaths from Principal Zymotic Diseases	Smallpox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping (	Typhus.	Enteric Fever.	Simple and Undefined Fev	Diarrhœa.	Phthisis.	Other Tuberculous Diseases.	Deaths of Children unde 1 year of age t 1000 births.
1885	40,354	1390	607	34.4	15.1	1.71	69	3	14	2	4	27		5		14			120
1886	42,235	1609	735	38.2	17.5	2.64	111		48	2	11	12		3	1	34			124
1887	44,204	1667	714	37.8	16.2	2.36	104	2	22	2	11	32		2		33			* 116
1888	46,264	1703	689	36.9	14.9	1.58	73			3	19	33		2		16			112
1889	48,420	1852	759	38.4	15.7	2.03	98		43	5	13	14		2		21	69)		115
1890	50,676	1933	923	37.5	17.9	2.47	127		33	11	14	44	1	2		22	95 )		137
1891	52,754	1867	920	35.3	17.4	1.57	83		33	1	6	24		4	97.	15	114		124
1892	54,060	1932	849	35.7	15.7	2.48	136		19	25	38	29		3		22	100		108
1893	55,398	1914	994	34.5	17.9	3.71	211	2	47	31	65	23		8		35	111	49	140
1894	56,770	1910	736	33.6	12.9	2.06	123	2	20	21	34	30		6		10	70	25	94
1895	58,175	1866	930	32.0	15.9	2.5	153	2	24	10	34	5		30		48	96	26	134
1896	59,615	1950	931	32.7	15.6	3.5	213		68	14	60	35		4		30	81)	26	133
1897	61,090	1975	835	32.3	13.6	2.2	138		3	6	24	21		3		81	96 5	26	116
1898	62,603	1896	1016	30.2	16.2	3.5	224		59	12	15	31		2		105	88	30	156

TABLE VII.

Analysis of the Vital and Mortal Statistics of the Sanitary Districts of the Metropolis after Distribution of Deaths occurring in Public Institutions during the year 1898.

			010 1	uouc	1708000	unons	during	ine	your 1	000								
	pula-	MILE			nual R 1000 liv		from Zymotic	ı,		er.	ct	ugh.		ver.	d ever.			lldren of age hs.
SANITARY AREAS.	Estimated Population in the middle of 1898.	Births.	Deaths.	Births.	Deaths.	Principal Zy- motic Diseases	Deaths from Principal Zymo Diseases.	Small Pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough	Typhus.	Enteric Fever.	Simple and Undefined Fever.	Diarrhœa.	Phthisis.	Deaths of Children under 1 year of age to 1000 births.
London	4,504,766	132,432	82,037	29.5	18.3	2.77	12,482	1	3,069	581	1,756	2,157	3	554	9	4,352	7,746	166
Paddington Kensington Hammersmith Fulham Chelsea St. George's, Hanover Sq Westminster St. James', Westminster	172,174 107,370 125,275 96,713 80,608 52,574	2,967 3,633 3,026 4,307 2,332 1,411 1,081 446	2,809 1,964 2,155 1.752 1,039 1,090	23·3 21·2 28·3 34·5 24·2 17·5 20·6 20·1	16·1 16·4 18·3 17·2 18·2 13·2 20·8 18·6	2·41 2·02 3·19 3·16 2·73 1·29 3·00 1·51	307 347 342 395 262 104 157 33	1	93 120 129 59 92 35 52 15	8 24 22 35 15 4 5	61 26 23 61 41 10 22 5	44 52 36 41 26 16 43 1	2	17 13 12 18 14 9 3	1	83 110 120 180 74 29 32 9	175 217 159 184 168 105 138 42	161 181 183 168 176 120 182 177
North Districts.  Marylebone Hampstead St. Pancras Islington Stoke Newington Hackney	78,755 243,416 344,616 34,660	4,061 1,516 6,857 9,442 839 6,445	4,651 5,712 475	29·0 19·3 28·3 27·5 24.3 29·4	18·3 11·7 19·2 16·6 13·7 16·4	2·36 1·40 2·49 2·78 1·56 2·64	381 110 602 958 54 576		129 26 111 334 10 111	13 3 53 26 1 30	45 19 96 90 5 120	43 27 87 180 9	1	22 10 41 36 2 41	1	79 24 214 291 27 180	251 58 482 501 36 304	132 125 170 159 108 152
Central Districts. St. Giles	30,056 66,120 41,076	1,026 179 496 807 2,072 1,853 469	192 532 747 1,432 1,054	27·4 14·4 21·4 26·9 31·4 45·2 16·2	20·2 15·5 22·9 24·9 21·7 25·7 19·1	1.88 0.88 1.76 3.37 3.75 4.04 1.17	71 11 41 101 246 165 34		26 1 13 35 61 37 8	2 1 2 2 13 15 2	6 3 4 22 36 24 10	9 1 4 12 35 24 2		5 1 4 2 7 2 6	1	23 4 14 28 94 63 5	125 22 77 95 155 108 54	137 156 171 221 196 150 128
East Districts. Shoreditch Bethnel Green Whitechapel St. George-in-the-East Limehouse Mile End Old Town Poplar	129,027 80,559 48,241 58,661	4,266 4,779 3,123 2,083 1,912 4,294 5,907	2,872 1,622 1,192 1,390 2 229	35·2 37·1 38·9 43·3 32·7 38·3 34·8	22·3 22·3 20·2 24·8 23·8 19·9 21·2	3·95 3·90 2·10 3·31 4·26 3·51 3·72	480 503 169 159 249 393 629		108 152 45 33 57 93 130	21 11 8 6 5 8 22	44 62 20 14 26 63 89	98 119 24 39 62 74 120		17 17 9 7 8 13 30	1 1	192 142 63 60 90 142 237	245 279 209 130 140 164 311	196 184 144 195 208 155 191
South Districts St. Saviour, Southwark St. George, Southwark Newington St. Olave, Southwark Bermondsey Rotherhithe Lambeth Battersea Wandsworth Camberwell Greenwich Lee Lewisham Woolwich Plumstead	123,183 11,288 85,738 40,849 304,073 171,921 202,526 261,189 180,441 39,717 88,562	739 2,138 4,165 357 3,090 1,298 9,266 5,157 5,186 7,425 5,625 891 2,317 1,253	1,470 2,520 232 1,771 773 5,422 2,897 2,902 4,261 3,336 592 1,350 844	30·2 35·5 33·9 31·7 36·1 31·9 30·0 25·7 28·5 31·3 22·5 26·2 30·3 <b>30·4</b>	23·6 24·4 20·5 20·6 20·7 19·0 17·9 16·9 14·4 16·4 18·5 14·9 15·3 20·4 16·3	3·09 3·99 3·17 2·31 3·02 2·24 2·50 2·93 2·40 3·08 1·97 2·50 4·13 2·85	76 241 388 26 258 91 755 503 484 628 555 78 221 171 178		17 43 55 5 59 33 135 114 111 117 108 6 35 58	1 20 24 1 19 10 30 28 16 18 21 7 10 5	15 36 72 3 44 11 114 120 89 87 44 14 26 19	14 34 45 11 47 15 159 68 86 128 122 14 32 27 33		4 9 10 1 9 1 35 14 16 26 38 7 6 8	1 2	25 99 182 5 80 21 281 157 166 252 222 30 112 54 57	75 192 298 25 184 74 506 257 229 398 272 46 78 86 <b>92</b>	211 188 173 132 157 169 154 166 144 160 176 160 161 173

Industry of the Vical and Mortal Statistics of the Sanitary Districts of the Heltopolis ofter Distribution of Doubs noturing the year 1689.

Annual Hate per 1000 living the year 1689.

Sanitary Annual Annual Hate the Sanitary Annual Hate the first that the firs

TABLE VIII.
Abstract from Mortuary Register for 1898.

Date.	Age.	Sex.	Inquest or no.	Post Mortem or no.	Cause of Death.
71.0			**		
Feb. 3	50 years	Female	Yes	No	Found drowned
,, 8	32 ,,	Female	Yes	Yes	Perforated bladder
Mar. 14	3 ,,	Male	No	No	Diphtheria
,, 16	60 ,,	Male	Yes	Yes	Ruptured bowel
,, 17	3 ,,	Female	Yes	No	Acute inflammation produced by the deceased having swal- lowed a quantity of ammonia
April 4	28 ,,	Male	Yes	Yes	Cartridge penetrated brain (manslaughter)
,, 25	63 ,,	Male	Yes	Yes	Heart disease
,, 25	42 ,,	Male	Yes	No	Suicide during temporary in- sanity
,, 25	53 ,,	Male	Yes	Yes	Syncope from failure of heart's action
May 22	28 ,,	Male	Yes	No	Found drowned
June 3	40 ,,	Female	No	No	Heart disease
,, 14	37 ,,	Male	Yes	Yes	Chronic lead poisoning
July 6	80 ,,	Female	Yes	Yes	Natural causes
,, 19	7 weeks	Male	Yes	Yes	Half fits and half convulsions
., 26	34 years	Male	Yes	No	Suicide during temporary de- rangement
Aug. 14	Abt. 30 yrs.	Male	Yes	No	Suicide, there being no evi- dence to show the state of deceased's mind
,, 16	73 years	Male	Yes	No	Suicide during temporary in- sanity
,, 23	84 ,,	Male	Yes	Yes	Asphyxia
Sept. 9	62 ,,	Male	Yes	Yes	Syncope, consequent upon ribs being fractured and pene- trating lungs
,, 16	6 ,,	Male	Yes	Yes	Accidental death due to shock following scalds
Oct. 10	57 ,,	Female	Yes	Yes	Natural causes
,, 16	53 ,,	Female	Yes	Yes	Natural causes
., 25		Male	Yes	Yes	Half fits and half convulsions
Nov. 3	33 ,,	Male	Yes	No	Suicide whilst temporarily in- sane
,, 10	14 months	Female	Yes	Yes	Convulsions
,, 15	23 years	Female	Yes	Yes	Suicide during temporary in- sanity
,, 18	59 ,,	Male	Yes	Yes	Compression of the brain, result of a fall
,, 26	3 ,,	Female	Yes	Yes	Injury to brain and bowel, the result of a fall downstairs
,, 29	61 ,,	Male	Yes	Yes	Accidental death
Dec. 16	10 ,,	Female	Yes	Yes	Fever
,, 16	47 ,,	Male	Yes	Yes	Aneurism of the aorta
20		Male	Yes	Yes	Suffocation
,, 20				The second secon	

## TABLE IX.

Summary of Notices abated, Notices served, and General Work of the Public Health Department for 12 months ending 31st December, 1898.

income discount of the contract of the contrac	strict tor.	istrict tor.	strict tor.	From 23rd Sep. to Dec.	pector.	
PREMISES INSPECTED.	West District Inspector.	Central District Inspector.	South District Inspector.	East District Inspector.	Chief Inspector	TOTAL
No. of Houses inspected, House to house, Re-inspections after service of notices ,, Houses and Premises specially inspected, including infectious diseases	580 2044	774 2179	1311 1980	230 460	965	2895 7628
and complaints	783	705	438	131	1048 312	3105 312
by smoke test	55	40	28	202	12	337
by water	25	14	8	45	4	96
NUISANCES ABATED.  DRAINS.	-2	· mai	-	LELL		
Waste pipes from baths, lavatories and wash- house sinks, repaired or disconnected Choked and defective drains Defective traps Defective and unventilated soil pipes Combined drains examined and referred to	117 145 65 25	95 243 40 4	16 204 46 26	16 77 10 1	13 62 11 8	257 731 172 64
Works Department					54	54
bined drains						301
W.C.'s W.C.'s repaired, new traps or pans provided, fittings repaired	267 103	362 236	293 163	82 56	59 42	1063 600
PREMISES. Interiors cleansed, repaired, and defective roofs repaired	232	251	223	72	34	812
Damp walls remedied	211 181 47	205 194 26	64 126 17	19 55	11 26 1	510 582 91
waste water Defective guttering and rain-water pipes Dustbins supplied	17 75 249 7	7 188 285 2	2 69 283 5	45 6	18 9	30 395 832
Basements closed as unfit for habitation	30			::	::	30

## TABLE IX.—continued.

Animals.	West District Inspector.	Central District Inspector.	South District Inspector.	East District Inspector.	Chief Inspector.	TOTAL
Animals kept in such a state, as to be a nuisance	4000	8	5	2	6	21
Defective and foul water tanks remedied Defective water pipes, rendering premises	13		1		3	17
damp Insufficient supply and water cut off by Water	8	14	3	13	2	40
Company	3		2	1	12	18
MISCELLANEOUS.						DE ALTE
Obstructions of footpaths		65	2		17  16 17 	18 137 31 90 17 38 13
DISINFECTION	N.				!	Total.
No. of houses disinfected after infectious disea ,, cases disinfected for other parishes (Lee	e and I	Eltham)			::	513 41
Letters received			March :			856 1188 631 2588 1243 518 2498 957 523

TABLE X.

Prosecutions under Public Health Act (London).

DATE.	OFFENCE.	3	SITUATION.	RESULT.
1898.				
5th Jan	Defective w.c. flushing ap	pa-	307, High Street	Work done, 2/- costs
	Defective yard paving			Work done, 2/- costs
5th Jan	Foul privy		Old Manor House, Wickham Lane	Order to abate in a days and 3/- costs
5th Jan	Nuisances		148, Ann Street	Order to abate in a days and 3/- costs
5th Jan	Yard not properly paved		148, Ann Street	Fine 40/- & 2/- costs
5th Jan	Damp wall		6, Kashgar Road	Work done, 3/- costs
17th Mar.	Nuisances		148, Ann Street	Order to abate forth with and 3/- costs
28th April	Nuisance		60, Riverdale Road	Work done, 3/- cost
28th April	Nuisance		1, Reidhaven Road	Work done, 3/- cost
25th May	Nuisance		1, Francis Street	Order to do work in days and 3/- costs
25th May	Nuisance		99, Plumstead Com- mon Road	Work done, 3/- costs
25th May	Nuisance (accumulation house refuse)	of	Brickfield, High St., (east end)	Adjourned 6 week for defendant to re move accumulation —further adjourned
			low gardings	3 weeks and again week to 2nd August when order to abat forthwith and fine 40/- and 3/- costs
8th June	Nuisance		45, Princes Road	Order to do work and
8th June	Inefficient flushing appara	tus	45, Princes Road	Work done, 2/- cost
11th July	Accumulation of refuse		Field, Church Manor- way	Prohibition Orde and 3/- costs
11th July	Defective w.c. drain		44. Burwash Road	Work done, 3/- cost
11th July	Defective w.c. drain		46, Burwash Road	Work done, 3/- cost

45
TABLE X.—Continued.

DATE.	Offence.	SITUATION.	RESULT.
1898.			
27th July	Defective flushing apparatus	101, Villas Road	Fine 5/- and 2/- costs
27th July	Occupying house without water certificate	9, Bostal Hill	Fine 1/- and 2/- costs
27th July	Letting house without water certificate	Statistics of the latest to th	Fine 1/- and 2/- costs
3rd August	Removal of offal during pro- hibited hours	Park Road	Fine 10/- & 2/- costs
15th Sept.	Defective w.c. pan and trap	149, Plumstead Rd.	Work done, 3/- costs
22nd Sept.	Letting house without water certificate	84A, Riverdale Road	Fine 1/- and 2/- costs
22nd Sept.	Letting house without water certificate	84B, Riverdale Road	Fine 1/- and 2/- costs
22nd Sept.	Nuisances	138, Riverdale Road	Work done, 3/- costs
31st Oct	Reconstructing w.c. (pan) contrary to L.C.C. Byelaws	16, Wood View Ter.	Fine 15/- & 2/- costs
8th Dec	Nuisance	1, Francis Street	Order to abate forth- with and 3/- costs
8th Dec	Nuisance	10, Florence Terrace	Work done, 3/- costs
8th Dec	Nuisance	49, Red Lion Lane	Closing Order and
8th Dec	Nuisance	50, Red Lion Lane	Order to abate forth- with and 4/- costs
8th Dec	Nuisance	51, Red Lion Lane	Order to abate forth- with and 4/- costs

#### APPENDIX I.

#### PLUMSTEAD VESTRY.

#### PRECAUTIONS AGAINST MEASLES.

- 1. Measles is a dangerous infectious disease, and requires medical advice and very careful nursing. There are far more deaths from Measles than from Scarlet Fever.
- 2. The symptoms do not commence till 10 to 14 days after the disease is caught.
- 3. The early symptoms resemble a common cold. When Measles is prevalent, as now, every child with a feverish cold should be suspected to have taken the disease, especially if he attends school.
- 4. It is quite true that a child will probably get measles sooner or later, but it is most important to make it later, for the disease is much more dangerous in young children. Nine out of ten of those who die from Measles are under 5 years, and three-quarters are under three. It is therefore very important to avoid exposing little children to the infection, and they must be separated at the very beginning of the first symptoms, or it may be too late.
- 5. Ordinary cases of measles which are carefully nursed usually get well without medicine, but it is most important to have medical advice, for the disease may be mistaken, or complications may arise which should be detected early. that treatment may be applied at once. No stimulants or medicine should be given unless ordered by a doctor.
- 6. It is of great importance to keep the patient warm, but this is not so necessary while the fever lasts as after the child appears better and wants to get up. Then is the great danger of catching cold and getting bronchitis and inflammation of the lungs. The patient should be kept in a warm room till the cough and other symptoms are gone.
- 7. Fresh air is equally important with warmth. If it is too cold to open the window the door should be kept open. Cleanliness is also desirable. There is no danger in a warm bath if carefully given, and a frequent change of night dress, which should be woollen, is very beneficial.
- 8. The infection lasts three to four weeks from the beginning of the illness.

SIDNEY DAVIES, M.A., M.D., Oxon.,

Medical Officer of Health.

# APPENDIX II, PLUMSTEAD VESTRY.

#### PRECAUTIONS AGAINST CONSUMPTION.

1. Consumption is an infectious, curable disease.

2. The infection however never attacks people unless their system is

seriously weakened.

3. Most of those who get Consumption have inherited a special weakness of the lungs from their parents, but in other cases the system is weakened by intemperance, want of nourishment, disease, and insanitary conditions, especially confinement to close unventilated rooms, in damp houses.

The infection is conveyed in two ways: —

(1). By breathing or swallowing infectious particles from the sputa of consumptive persons. If the sputa becomes dry, the infection may be inhaled as dust with the air breathed.

(2). By swallowing the milk or meat of tuberculous animals.

5. Consumptive persons should never spit on the floor or into handker-chiefs, but into some cup containing some disinfectant, or, failing that, some water. The cup should be frequently emptied down the w.c., and washed out with boiling water. Disinfectants may be obtained free at the Health Offices, Maxey Road.

6. If no kind of vessel containing liquid is at hand, small pieces of rag or paper may be used. These should be burnt as quickly as possible, or

the pieces may be thrown down a water closet.

7. For those who have to leave home, pocket spittoons may be bought through any Chemist—price, about 3s. 6d.

8. Consumptives should carefully avoid swallowing their own expector-

ation, or they may reinfect themselves.

9. Consumptives should avoid kissing altogether.

- 10. All danger of infection from milk and meat of tuberculous animals may be avoided by boiling the milk and thoroughly cooking the meat, preferably by boiling. Members of Consumptive families should specially attend to this rule.
- 11. Close and crowded rooms, concert halls, theatres, and public houses should be avoided.
- 12. The rooms occupied by a Consumptive person should contain rounnecessary furniture; and, especially curtains, bed hangings, clothes hanging about, should be avoided as far as possible. The rooms should be frequently cleaned out when the Consumptive is not in them.

On the Consumptive ceasing to occupy any room, it should be thoroughly disinfected. This will be done, on application, by a Vestry

Official, free of charge.

13. Consumptives should pass as much time out of doors as possible,

and when indoors the room should be well ventilated.

When sufficient clothing is worn the windows may safely be kept open day and night, unless the weather is very severe, but draughts must be avoided. As much sunlight as possible should be admitted.

14. No one else should occupy the same bed with a Consumptive

person, and where possible a separate bedroom should be used.

15. When the above precautions are taken there is no danger of a Consumptive person infecting anybody else.

#### APPENDIX III.

### PLUMSTEAD VESTRY.

#### SANITARY RULES FOR MIDWIVES,

Recommended by the Medical Officer of the Plumstead Vestry for the use of all Midwives practising in the Parish of Plumstead.

- 1. Midwives should wear dresses made of light cotton or other washable material, with short close fitting sleeves.
- 2. The hands should be kept scrupulously clean. Nails should be kept close cut. The hands should always be washed before making a vaginal examination, as well as after. The nails in the first washing should be scrubbed with a nail-brush, soap and hot water for five minutes. After this, the hands should be soaked in a disinfecting solution for two or three minutes.
- 3. Before examining, the finger or hand should be smeared with glycerine which contains one grain of corrosive sublimate in two ounces of the glycerine. The midwife should carry such a solution with her in a bottle labelled "Poison," and should avoid using vaseline or other grease found in the patient's house.
- 4. Examinations should not be made more frequently than is absolutely necessary.
- 5. If a syringe is used at all, it should be one kept exclusively for the patient. It should be carefully washed before and after use, and the nozzle should be smeared with the glycerine and corrosive sublimate. The safest injection is hot water containing enough permanganate of potassium to make it as dark as claret.
- 6. Any catheter used should be very carefully cleansed before and after use, and should be smeared with the corrosive sublimate glycerine.
- 7. When the placenta does not come away of itself, or by gentle pressure on the abdomen, within an hour after delivery, medical aid should be sought. No other means of removal should be adopted by the midwife, except abdominal pressure or expression.

- 8. The midwife should see that the sick room is kept clean. The blinds should be drawn up by day, unless the patient desires to sleep, or is unpleasantly affected by the light. The windows should be kept open a few inches at the top, day and night, unless the weather is severe. At the same time, care must be taken to protect mother and child from any draught.
- 9. Under Section 55 of the Public Health (London) Act, midwives are responsible for notifying to the Medical Officer of Health the existence of puerperal fever or other infectious disease from which a patient may be suffering. Any such disease must be notified immediately.
- 10. Midwives should summon the aid of a medical man in the following cases:—
  - (1). All cases of homorrhage before the birth of the child, and any unusual loss of blood after the delivery.
  - (2). All cases where the patient shews signs of an attack of any illness of a serious nature.
  - (3). All abnormal positions and presentations of the child, and any case where the presentation is uncertain.
  - (4). In presenting placenta or placenta-prævia even where there is no hæmorrhage.
  - (5). In any case of unaccountable delay in the birth of the child,
  - (6). In rupture of the perinæum.
  - (7). If the placenta be not expelled complete an hour after the birth of the child, even if no bleeding has occurred.
  - (8). In twins or multiple births.
  - (9). In the apparently dead new-born child.
- 11. Where a doctor is summoned, the midwife should send him a short written statement of the cause for which medical aid is sought.

SIDNEY DAVIES, M.D.,

Medical Officer of Health.

Vestry Offices.

#### APPENDIX IV.

### PLUMSTEAD VESTRY.

Recommendations to Dairymen and Cowkeepers, who supply milk in Plumstead, for the Prevention of Infectious and other Diseases.

The following recommendations are intended to supplement the County Council Regulations.

- 1. Of all foods none is so likely to convey infectious disease as milk, and, therefore, all possible means should be taken to secure its purity.
- 2. Disease may be conveyed through milk in three different ways:—
  (1) By illness of the cow; (2) by illness of the milkers or other persons who have to do with the milk; (3) by dirt accidentally conveyed to the milk.
- 3. Cows should be frequently inspected by a Veterinary Surgeon, so that illness may be detected, and the proper measures be taken.
- 4. All cows who are in any way sick should be separated from the others, and kept in a distinct shed.
- 5. Cows should always be carefully kept clean. The udders and teats, if necessary, should be cleansed before milking.
- 6. The floor of the cowshed, besides being frequently washed down, should be swept several times a day, so that dung is never allowed to lie on the ground.
  - 7. The walls and roofs of cowsheds should be kept scrupulously clean.
- 8. It is most important that sheds should be well ventilated, and the best ventilation is by means of openings in the walls on each side, just above the level of the cows' heads.
- 9. No doubt cows kept warm yield more milk, but if the warmth is obtained at the expense of fresh air, the cows will sicken and, in the end, yield less milk.
- 10. Those who milk, or attend on the cows, should be obliged to report themselves whenever suffering from any illness, and produce a Medical certificate. It is most important that no one suffering from infectious disease or consumption, and no one exposed to infectious disease at their home, should be allowed in any cowshed or dairy.

- 11. The hands of milkers should be thoroughly washed with soap and hot water before milking, and if they become soiled during milking, the washing should be repeated. If a cow has any affection of the udder or teats, the hands should be washed immediately after it has been milked and before proceeding to another cow. Equal cleanliness is necessary for all employed in dairies.
- 12. The milk should be emptied into the churns in a clean covered place, well away from the cowshed and dung-pit. It should be cooled by some form of refrigerator before being sent out.
- 13. There is one form of disease common to cattle and human beings, which from its frequency far surpasses in importance all other diseases. This is tubercle: causing grape disease, pearl disease, wasters, piners, snorters, wens, and hard swellings of the udders in cows: and consumption, consumptive bowels, and inflammation of the brain in human beings.
- 14. There is no doubt that when the tubercle in the cow affects the udder, the milk conveys germs of the disease to those who drink it, causing in the susceptible the diseases just mentioned. Probably a large proportion of children who die from consumptive bowels and inflammation of the brain are infected by milk.
- 15. Tubercle being an infectious disease, plenty of fresh air, by the cows being out in the fields in summer, and having ample cubic space and ventilation in the cowshed, together with separation of those affected, are the important measures of prevention.
- 16. The discovery of Koch's tuberculin has given us a sure means of detecting tubercle, which often exists without shewing obvious symptoms. The injection of this substance causes a feverish re-action in the tuberculous cow for one or two days, but healthly ones are unaffected.
- 17. Cows who re-act should be separated from the others, and if the disease is not far advanced, and they are suitably treated, many will recover,
- 18. In this way many herds of cows have been completely freed from tubercle, to the great advantage of the owners and the public, who are learning to suspect all milk from cows which have not been tested.
- 19. Anyone wishing to apply the tuberculin test to his cows should communicate with the Principal of the Royal Veterinary College, Camden Town, N.W.
- 20. Cowkeepers are strongly recommended when buying new cows to insist on having with them a certificate from a Veterinary Surgeon that they have been tested with tuberculin and found free from tubercle.

SIDNEY DAVIES, M.D.,

Medical Officer of Health.

#### APPENDIX V.

#### PLUMSTEAD VESTRY.

## PRECAUTIONS AGAINST FEVER, DIARRHŒA, &C.

- 1. Use absolute cleanliness in your person.
- 2. Keep your windows open.
- 3. Burn all your house refuse that can be burnt, and see that the remainder is regularly removed; if it is not removed at the right time complain to the Sanitary Inspector, Vestry Hall, Maxey Road.
- 4. No pail, box, or other receptacle is to be placed with refuse in front of the house, except a Metal Receptacle with Cover on.
  - Note.—The Dust Contractor is bound to call for Dust once a week.

    The Dustmen are liable to a fine of Twenty Shillings if they demand any fee or gratuity for removing any house refuse from any premises.
- 5. Keep your house clean, and if there is any insanitary condition that you cannot remove, complain to your landlord; if he does not attend to it, complain at the Vestry Hall, Maxey Road.
- 6. Flush your Water Closets (which are connected with Sewers) with two or three pails of water every Saturday at 11 o'clock in the morning, If all do it at the same time it will flush the combined drains and sewers also.
  - 7. Boil all your milk.
- 8. Avoid strong alcoholic drinks, indigestible food, unripe and decaying fruit, fish and meat not perfectly fresh.
- 9. Do not neglect Diarrhea or other signs of ill health, but apply at once for medical assistance.

Signed, by order of the Vestry,

SIDNEY DAVIES, M.D. Oxon., D.P.H. Cambridge,

Medical Officer of Health for Plumstead.