

## **[Report of the Medical Officer of Health for Southall-Norwood].**

### **Contributors**

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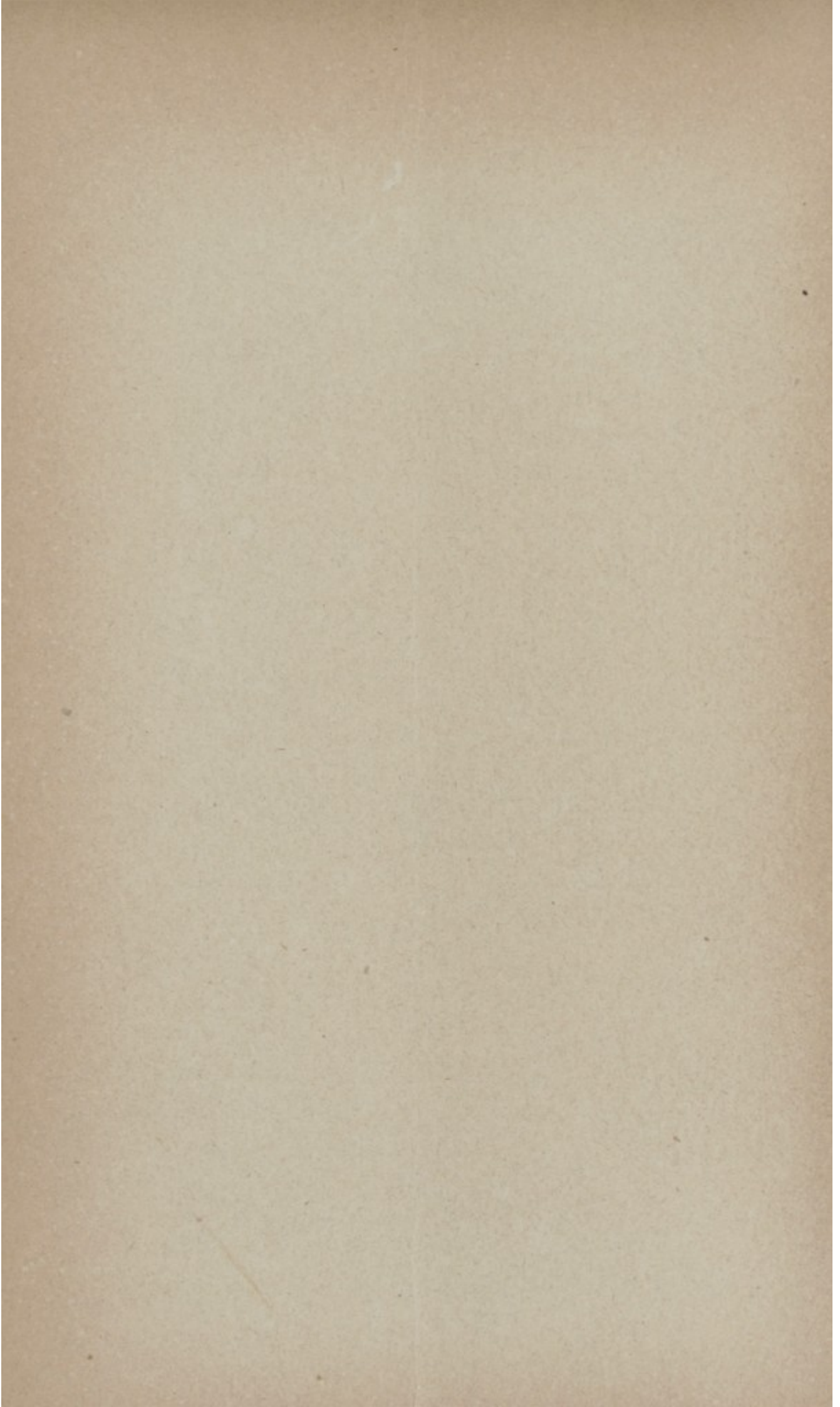
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Annual Report

OF THE  
Medical Officer of Health.

**JANUARY, 1898.**





# Annual Report

OF THE

## Medical Officer of Health,

**FOR 1897.**

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*To the Chairman and Members of the Southall-Norwood Urban  
District Council.*

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GENTLEMEN,

I have the honour to submit for your consideration my 7th Annual Report on the vital statistics and sanitary condition of your District: which also contains an account of the various Infectious Diseases which have been prevalent, and the steps which have been taken and still require to be taken to prevent their spread, and recurrence in the future.

With regard to the vital statistics, the general death rate is popularly taken as a criterion of the healthiness of a District; but it is only when we can compare the rates for a consecutive number of years that it becomes of value, and even then, numerous factors have to be taken into consideration before it can be said that such a rate is a good or bad indication, and especially so, before we can institute comparisons with the healthiness of other places.

Regard must be had to the social conditions and occupations of the populations and more especially must we take into consideration the Zymotic Death Rate and Infantile Mortality.

As will be seen from the tables further on, the general death rate is 1·3 per 1,000 less than for 1896, and is the lowest rate recorded—with 2 exceptions—for the past 14 years. This alone then, from what has gone before would constitute a satisfactory indication as to the healthiness of the District; but when it is taken in conjunction with the fact that the Zymotic Death Rate has steadily declined during the past six years and that the Infantile Mortality is very much lower than in previous years, we cannot but draw the inference that the sanitary condition and general healthiness of your District is very satisfactory.

Reviewing the sanitary conditions existing at the present time:—Reference to Section III will show that our method of Refuse Disposal (Sewerage, &c.) is on modern principles and most efficient. Privies and Cesspits are virtually abolished. The District has a good supply of pure water. There are no polluted surface wells in the District. No serious nuisance exists in the District at the present time.

Your Sanitary Officers exercise supervision over Slaughter Houses, Dairies, Bake Houses, &c., i.e., over the Food Supply of the District.

There are means for the Isolation of Infectious Diseases at the Joint Hospital, Hillingdon, but there is no proper Disinfecting Apparatus in the District. Remarks on the importance of this matter will be found in Section II.

I have, the honour to be,

Your obedient Servant,

J. D. WINDLE.



## SECTION I.

### Vital Statistics.

#### Estimated Population for 1897—7913.

It is exceedingly difficult to accurately estimate the population of a rising District like yours, more especially as the estimate has to be made to the middle period of the year.

If the method of the Registrar General were used, the result would be erroneous, since it takes for granted that the population goes on increasing or decreasing in the same ratio during a Census interval, that it did in the previous Census period.

During 1897, 134 new houses were brought into rating—that is to say were occupied—bringing up the total number of inhabited houses in the District to 1425.

At the Census of 1891, the number of persons per house was 5·3, so multiplying the number of inhabited houses by the probable average number of inmates in each house, we get 7552 persons as the estimated population.

To this must be added the inmates of the St. Marylebone Schools about 361 : so that for statistical purposes the estimated population is 7913. The Education Department regards the number of children between the ages of 3 and 13 as  $\frac{1}{6}$  of the whole population.

I do not consider the average number of persons per house (5·3) is too high, as allowance must be made for the fact that an unusually large number of houses are occupied by members of more than one family.

The inmates of the London County Asylum, Norwood are not included in this Estimate.

The patients and resident staff number about 2167.

POPULATION CENSUS, 1891.		ESTIMATED POPULATION TO MIDDLE OF 1897.	
Southall.....	4407	Southall - Norwood and	} 7913
Norwood Village.....	781	Inmates of St. Maryle-	
London County Asylum...	2037	bone Schools (about 361)	
St. Marylebone Schools....	335	London County Asylum	} 2167
		Resident staff & patients	
	7560		10080
Total number of inhabited houses .....	971	Total number of inhabited houses .....	1425

### Acreage. ←

The area of the District is about 2,564 Statute Acres ; 2,515 of land ; and 49 acres of water.

Including the inmates of the Asylum, and St. Marylebone Schools, the density of population is 4 persons per acre.

The number of persons per house averages 5·3.

The number of inhabited houses per acre is 1·7.

### Birth Rate, 32·1 per 1,000.

The total number of births registered during 1897, was 254. 142 being males and 112 females. Still births not registered, 8.

This is the largest number of births that has been registered for the past ten years.

It is a remarkable fact that in all countries there are more male than female children born (the proportion is about 103—105 males to 100 females) but this disproportion begins to be reduced at the point of birth, since more male children are still born than females (in the proportion of about 14 to 10), and even in the first year of life the liability to disease is different in the two sexes, and generally at the end of the first year the sexes will be about equal from the greater number of male deaths. Throughout the remainder of life females at all ages are usually in the majority, since more male deaths occur by their exposure to accident and disease in the pursuance of their occupations.

The birth rate per 1,000 for England and Wales is about 30·8.

The birth rate per 1,000 for the County of Middlesex is about 27·9.

Year.	Births.			Rate.			Population.		
1891	...	...	208	...	...	40·9	...	...	5188
1892	...	...	193	...	...	37·2	...	...	5188
1893	...	...	189	...	...	34·6	...	...	5456
1894	...	...	184	...	...	31·9	...	...	5756
1895	...	...	188	...	...	28·1	...	...	6684
1896	...	...	207	...	...	28·8	...	...	7184
1897	...	...	254	...	...	32·1	...	...	7910

Mr. A. Newman, the Vaccination Officer, informs me that there were 205 cases of successful vaccination during the year.

### Death Rate.

The total number of deaths registered in your District at all ages and from all causes during the year was 90.

This number does not include deaths which occurred in the London County Asylum, in the Union, or in the Joint Isolation Hospital. These are taken into account in Table A appended to the Report : since we are concerned only with those deaths actually registered in the District.



The death rate calculated on the estimated population for 1897 is 11·3 per 1,000.

The following table shows the number of deaths and rates since 1883 :—

Year.	Deaths.		Rate.		Population.	
1883	...	102	...	24·2	...	4164
1884	...	84	...	20·2	...	—
1885	...	83	...	19·9	...	—
1886	...	77	...	16·8	...	—
1887	...	66	...	15·8	...	—
1888	...	55	...	13·2	...	—
1889	...	77	...	16·8	...	—
1890	...	83	...	19·9	...	—
1891	...	64	...	12·3	...	5188
1892	...	75	...	14·4	...	—
1893	...	63	...	11·5	...	Estimated. 5456
1894	...	63	...	10·9	...	5756
1895	...	93	...	13·9	...	6684
1896	...	91	...	12·6	...	7184
1897	...	90	...	11·3	...	7913

Table showing ages at Death.

Under 1 year, 28.	5 and under 15, 3.	25 and under 60, 13.
1 and under 5, 13.	15 and under 25, 7.	60 and upwards, 26.

*Causes of Death.*

Diphtheria, 3.	Whooping Cough, 1.	Enteric Fever, 1.	Diarrhœa, 10.
Phthisis, 4.	Bronchitis and Diseases of Lungs, 14.	Heart Disease, 4.	Injuries. 5.
Other diseases not classified, 48.			

**Table of Deaths in London County Asylum.**

Total number of deaths registered 149. The ages and causes of death were as follows :

15 and under 25, 0.	25 and under 60, 96.	60 and upwards, 53.
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*Causes.*

Phthisis, 16.	Bronchitis, 10.	Heart Disease, 8.	Diarrhœa, 1.	Enteric Fever, 4.
Other causes, 110.				



### Table of Deaths in the Hillingdon Union Workhouse of persons from this District.

Total number of deaths, 6.

15 and under 25 years, 1.		25 and under 60 years, 1.		60 and upwards, 4.
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#### *Causes.*

Phthisis, 1.		Bronchitis, 1.		Other Causes, 4.
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### Table of Deaths in the Uxbridge Joint Hospital (Hillingdon) of persons from this District.

Total number of deaths, 10.

1 and under 5 years, 7.		5 and under 15 years. 3.
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#### *Causes.*

Scarlet Fever, 3.		Diphtheria. 7.
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### St. Marylebone Schools.

No death was registered as having occurred amongst inmates of this Institution, illustrating the fact that good hygienic conditions lessens the susceptibility of young children to disease.

### Zymotic Death Rate.

The death rate from those diseases which are known as Zymotic diseases, but which are not notifiable, viz:—Measles, Whooping Cough, and Infantile Diarrhoea, was .7 per 1,000; as compared with 2.0 for 1896. The death rate from these diseases may be taken as a fairly satisfactory indication as to the sanitary condition of a District.

The rate in our District has fallen steadily during the past 5 years as shown by the following table:—

1892	...	...	...	3.2 per 1,000
1893	...	...	...	2.7 " "
1894	..	...	...	2.2 " "
1895	...	...	...	1.3 " "
1896	...	...	...	2.0 " "
1897	...	...	...	.7 " "

### Respiratory Death Rate.

The death rate from these diseases, viz.:—Bronchitis, Pneumonia, Phthisis, &c., is 2·2 per 1,000.

This is the lowest rate recorded during the past 6 years with one exception.

1892	...	...	...	5·2 per 1,000
1893	...	...	...	1·4 „ „
1894	...	...	...	2·3 „ „
1895	...	...	...	4·6 „ „
1896	...	...	...	2·9 „ „
1897	...	...	...	2·2 „ „

### Infant Mortality.

The deaths of children under 1 year of age is equivalent to 110·2 per 1,000 children born and registered, as compared with 149·7 for 1896.

1892	...	...	...	139·8 per 1,000
1893	...	...	...	74·0 „ „
1894	...	...	...	146·7 „ „
1895	...	...	...	139·5 „ „
1896	...	...	...	149·7 „ „
1897	...	...	...	110·2 „ „

Table A appended to the Report, illustrates very strikingly the fact that the greatest number of deaths are those of infants under 1 year of age; and it is a matter of every day experience that the greatest liability to disease is in the first year of life. In this country out of every 1,000 children born, 142 die before the end of the first year of life. Whilst in the more crowded districts of large towns more than half the deaths are of children under 1 year old. On the other hand in well-to-do suburban districts, the infantile death rate does not exceed 100 per 1,000. This is also the average infantile death rate for Norway, which is the lowest of any European country.

Hence it is that the children of the well-to-do are much less affected by disease than those of poorer parents, clearly showing that the mortality is very greatly influenced by the way in which infants are cared for.

In illustration of this, Dr. Tatham in his Health Reports for the Borough of Salford, has shown that the mortality amongst illegitimate children has amounted to 710 per 1,000.

Now it is a very remarkable fact that three-fourths of the deaths of infants under 1 year of age are of those brought up on artificial food, and by far the larger number are due to diseases of the digestive system induced by improper feeding.



Hence it is that these deaths are called preventible deaths, since it is reasonable to conclude that if proper care in feeding was exercised in every case where it is required their number would be very considerably reduced.

In previous reports I have urged the desirability of distributing pamphlets dealing with artificial feeding and management of infants, and for this purpose I have formulated the following rules, so that a copy of these may be given to parents on the registration of infants from this District.

1. The mother's milk is the natural and only proper food for an infant, for the first 8 or 9 months of life. Up to this period the necessary juices to digest any other food than milk are not formed; so that bread, biscuits, rusks and all other starchy foods must be strictly avoided, even if mixed with milk.
2. If for any reason the infant cannot be nursed, cow's milk is the next best food. The milk should be boiled before use. For the first two months there should be twice as much water as milk, a piece of lump sugar to sweeten it, and a pinch of salt added. From 2 to 3 months use equal parts of milk and water. From 3 to 6 months one third part of water.
3. Times for feeding and amount of food:—For the first month a baby should be fed every two hours in the day-time, one to two ounces of food prepared as above being given each time. By gradually increasing the interval he is in time fed every 3 hours (between the ages of 3 and 4 months), and eventually 4 hours at the age of 6 to 8 months.
4. When 8 months old the baby may be allowed in addition to milk, boiled bread and milk, baker's rusks, oatmeal, arrow-root or wheat flour.  
  
When about 9 months old he should have less of the mother's milk or bottle, and more of these foods, or a little beef tea or mutton broth.
5. Weaning.—At one year old the baby should be entirely weaned, and soon should have every day a little under-cooked meat pounded to a pulp, with gravy and salt, or a little milk pudding.  
On no account should he be allowed wine, beer, spirits, tea or coffee, though he may have cocoa and milk.
6. Meals should be given regularly, and he should not be allowed to pick at bread, cake, sweets, fruit, &c., between meals.

7. The best bottle to use is the old-fashioned long straight one with a short indiarubber teat ; it is often called the slipper or boat bottle. It is so designed that it can be kept perfectly clean with a minimum of attention. The worst kind of bottle is that with a long india rubber tube, named the "Alexandra" and other fanciful names ; it would be fitly named the infant's "death trap." "A 'foul' bottle" is the most common cause of diarrhoea.
8. The worst nourished, fat, flabby, rickety children are those brought up on Swiss milk and the various patent starchy foods. Every day and twice a day if possible the child should be taken into the fresh air, unless there be a cold wind, fog or rain. It should be washed all over night and morning in warm water. No child should ever be put in a cold bath.

Woollen clothing should always be worn next to the skin.

A child cannot be "hardened" by scanty clothing and cold baths. Neck, arms and legs should be covered as well as the chest and body.

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As might be expected child mortality (deaths occurring between the ages of 1 and 5 years) also differs greatly under different circumstances.

Thus in the healthy parts of England, out of every 1000 children (under 5 years of age), only 50 will die during the year, whilst in the most unhealthy districts 100 or 110 per 1000 perish annually.

In addition to their liability to the various Infectious Diseases, exposure to cold is a very common cause of disease, *e.g.*, Bronchitis in children. This is accounted for by the small bulk of child's body which renders it more susceptible to changes of temperature and also allows cold to penetrate more deeply into its tissues than into those of adults, a fact which is well worth remembering in the clothing of children.

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## SECTION II.

### Infectious Diseases.

Table B appended to the Report to the Local Government Board, shows the number of cases of Infectious Disease which have been reported under the Infectious Diseases Notification Act during the year.

The total number of cases recorded was 152. 18 of these cases occurred in the London County Asylum, Norwood, so that the number occurring amongst members of our population proper was 134.

The Certificates related to the following diseases :—

Scarlet Fever.....	39.....	
Erysipelas .....	10.....	{ (Including 9 in London County Asylum).
Diphtheria.....	88.....	
Enteric Fever .....	15.....	{ (9 in London County Asylum and 5 in St. Marylebone Schools.

	1893.		1894.		1895.		1896.		1897.
Scarlet Fever... ..	76	...	45	...	23	...	56	...	39
Diphtheria.....	9	...	4	...	2	...	2	...	88
Membranous Croup..	9	...	11	...	4	...	2	...	—
Typhus Fever .....	—	...	—	...	—	...	—	...	—
Enteric ditto .....	6	...	—	...	1	...	2	...	15
Puerperal ditto .....	1	...	—	...	—	...	1	...	—
Erysipelas.....	16	...	18	...	20	...	7	...	10
Small Pox.....	1	...	3	...	1	...	4	...	—

The following table shows the various localities in which the diseases occurred :—

	South side.		North side.		Hayes Bridge.		Norwood Village.		L.C. Asylum.		St. Marylebone Schools.
Scarlet Fever.....	12	...	18	...	6	...	2	...	—	...	1
Diphtheria.....	12	...	48	...	25	...	2	...	—	...	1
Enteric Fever ...	—	...	1	...	—	...	—	...	9	...	5
Erysipelas .....	—	...	—	...	—	...	1	...	9	...	—

All the cases of Scarlet Fever and all those of Diphtheria notified, with the exception of three, were removed to the Joint Isolation Hospital for treatment.

The cases of Enteric Fever occurring in the London County Asylum and St. Marylebone Schools were treated at the Isolation Hospitals in connection with these Institutions.

It will be seen on comparing the foregoing tables, that the increase in the number of recorded cases of Infectious Diseases is entirely due to Diphtheria. Had it not been for the outbreak of this Disease, the statistics under this Section would have been very satisfactory.

Although in the early part of the year there were three cases of Diphtheria in different parts of the District, they had apparently no connection with the outbreak in question, which commenced in the middle of June, with a series of cases in an isolated group of cottages at Hayes Bridge.

My enquiries into the origin of this first set of cases related to water, milk supply and drainage effluvia as probable causes.

In all affected houses the Company's water was used for drinking purposes, and I doubt very much if the water supply had anything to do with the outbreak, as in that case the distribution of cases throughout the District would have been more general.

I, however, submitted a sample of water for Bacteriological and Chemical examination, and the analysis certificate will be found in the Section relating to water supply.

With regard to the milk supply as a probable cause, I found that all infected houses at Hayes Bridge were supplied from Mr. Newell's farm, which at first appeared to be a very suspicious fact; since many extensive outbreaks have been traced to the agency of milk.

Milk may become infected by :—

- (1.) Washing out cans or adulterating milk with foul water.
- (2.) By storage in infected houses.
- (3.) By the presence of disease in the cow from which the milk is obtained.
- (4.) By an infected person milking the cows.

None of these conditions, however, were found to exist, and moreover I ascertained that all milk sold at this farm was boiled before being sent out, constituting what is known as "scalded milk."

This process in itself would prevent infection, as the Diphtheria poison is easily destroyed at the boiling temperature.

Taking all the facts into consideration I had no hesitation in concluding that the milk supply was not the cause of the outbreak, and I may conveniently state here that throughout the outbreak has any case been found to be due to infection from milk.

As to the sanitary arrangements of these premises, they were far from satisfactory, no proper drainage system existed; the cesspools into which they drained having an overflow pipe into the river Crane.

I consider that the defective sanitary arrangements had undoubtedly acted as strong predisposing causes of the outbreak.



It is a well-known fact that defective drainage and Diphtheria outbreaks bear some definite relation to each other, since in a large proportion of households invaded by Diphtheria throughout the country, drainage defects are found to exist, indeed in our District such has been the case. In the great majority of infected houses minor sanitary defects have required attention.

Reporting in November on a group of 15 cases—the majority of patients being Scholars at the North Road Schools, I concluded that the Schools formed the centre of infection.

I visited both schools on the 4th of that month and examined all Scholars present.

I found one child present in School in the early stage of the disease, and she was removed to the Joint Isolation Hospital the following day: and although this was the only case of Diphtheria, I found a large percentage of children in both Schools had enlarged glands in the neck, (29 per cent. in the Mixed Schools, 40 per cent. in the Infants). Such enlarged glands proceeding as they often do from previous sore throat—amongst other causes—often indicate “weakness” of the throat, and this renders a child much more liable to take an Infectious disease like Diphtheria.

I considered it my duty under these circumstances to certify that the closure of the Schools was necessary.

This was thought by some to be a very drastic measure, but it appeared to me to be the only course to take for the suppression of the epidemic. I felt little doubt that the continuance of the disease was due to the attendance at School of mild unrecognised cases of the disease.

It is now well known that a child in good health may carry about in his throat the microbe of Diphtheria, and though this carrier of the microbe may himself resist the attack of the germs a susceptible child receiving it from him may contract a fatal illness.

Again, as to drinking utensils provided for the children, I found only one was in use at the Infant School, and two at the Mixed Schools.

Since these iron vessels cannot be efficiently cleansed before use, they appeared to me to be a very probable means of conveying infection.

A child suffering from a mild attack and drinking from one of these vessels may easily leave thereon a sufficient number of Bacilli to infect another child.

It has been argued that School closure cannot be a very efficient measure in suppressing an epidemic such as Diphtheria, as the children when not at school are liable to meet in the streets or each others houses for play.

But it is clear that infection is less likely to be imparted in a wholesale manner under these conditions than it is at school where



children from different parts of the District, who would not otherwise meet, are brought into contact.

I am strongly of opinion that whenever an outbreak of Diphtheria occurs amongst scholars attending any particular school, that school should be closed.

Children are compelled to attend school, and the Boards concerned are responsible for their safety; and if their closure is the means of preventing even one case, the Act would be justified.

Sir R. Thorne states: "That compulsory school attendance has, in regard to this disease, prevented the fall in the death rate that has occurred in most infectious diseases."

This opinion is becoming more accepted day by day. We have found that while the schools were closed the number of cases declined to a minimum.

### **Measures taken by your Sanitary Officers to prevent the spread of the Disease.**

In every recognised case we have enforced isolation of the patient in hospital; subsequent disinfection of premises and exclusion from school attendance of children from infected houses.

Attention has been paid to the sanitary condition of infected houses, and where necessary, defects have been remedied.

The public schools have been inspected, and the North Road Schools have been thoroughly cleansed with disinfectants and fumigated; and at the Mixed Schools the walls were distempered and painted. During their closure considerable alterations in the sanitary arrangements were carried out.

The public water supply has been analysed and enquiries made as to the milk supply of infected houses.

At the request of the Council I drew up the following handbill which was distributed from house to house in November.

"The Inhabitants are earnestly invited in consequence of the continuance of diphtheria cases in this District to carefully note any illness in the occupants in their respective houses, especially sore throats, and at once call in their own Doctor or the Medical Officer of Health for the District so as to aid in suppressing this disease as speedily as possible.

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### *Remarks on Diphtheria by the Medical Officer of Health.*

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Diphtheria most often occurs in Children between the ages of 2 and 12 years, and the liability to it decreases with every year of advancing age.

Any person suffering from the disease—however mildly—may convey it to every one he comes in contact with.



It does not always produce such serious symptoms as it is popularly supposed to do; very often nothing more may be thought to be the matter than an ordinary cold and sore throat; and the question can only be decided on medical examination.

Such mild cases going about frequently convey the disease in its most virulent form, and unless these mild cases are recognised and medically treated it is impossible to stamp out the disease, and there is no telling when it will end.

Always therefore seek medical advice if any of the following symptoms are noticed in a child:

1. Bad cold with sore throat but otherwise apparently well.
2. If a child previously well vomits, is feverish and drowsy, and especially if there is any difficulty in swallowing.

Such symptoms strongly point to Diphtheria in the early stage.

The epidemic has been remarkable in several ways. For instance, the disease broke out in June, whereas epidemic prevalences of this disease commonly commence in September.

The first cases which occurred were the most severe and fatal, but taken as a whole, the disease has been of a mild type and the mortality low.

This is in accordance with the known fact that the smallest amount of mortality is witnessed in those epidemics which commence in summer. A more remarkable circumstance is the absence of notifications relating to Membranous Croup, since Diphtheria and Membranous Croup are believed to be identical; and in most epidemics the "earlier cases may be referred to Croup, and the later to Diphtheria." (Dr. Thorne Thorne).

In many cases the difficulties of diagnosis have been very great, and when Medical men can differ—and very reasonably differ,—as to whether a case is, or is not, Diphtheria, it is not unreasonable to suppose that the difficulties to the public are greater still, and that many cases are allowed to go about unrecognised; indeed there is as much Diphtheria during an outbreak out of doors as there is indoors, and the continuance of the disease must be put down to the occurrence of these mild unrecognised cases.

A mild Diphtheria often runs its course without attracting attention, although prostration is one of the chief characteristics of the complaint. Still it has been my experience to occasionally see children with well-marked Diphtheretic patches on the throat and with nothing else to suggest the existence of such a serious illness. Such cases as these in a school, or even in the street, are capable of infecting all they come in contact with.

Still more likely to escape recognition by parents, are cases of Nasal Diphtheria, in which patches of Membrane develop in the nose, and may not spread from there, and can only be detected by a careful examination of that organ.



I have noticed in a few cases a peculiar mode of onset. I have notes of three; where children were suddenly taken ill with vomiting, drowsiness and high temperature. An inspection of throat and nose carefully made from day to day failed to reveal any Diphtheretic deposit up to the third day, when the membrane appeared on the Tonsils and the temperature fell to normal. The occurrence of the disease in previously infected houses has caused us to regard all convalescences from Diphtheria with the greatest suspicion.

I regard three weeks from the commencement of the disease as the minimum time for isolation. Before this period at least has elapsed, a child should not be allowed to mix with his companions, and much less attend school. Whether the attack has been slight or severe makes no matter; the same causes have been at work. And although in slight cases the manifestations of the disease may have entirely passed away, yet microscopic examination of the secretions of the mouth have shown that even up to 5 weeks after the membrane had completely disappeared, the microbe of the disease was found in the mouth.

Dr. Herman Biggs, Bacteriologist to the city of New York, subjected the secretions of the mouth of 405 cases of true Diphtheria to repeated Bacteriological examination during convalescence, and he found that the microbe persisted in the mouth for a considerable time after all objective signs of the disease had disappeared.

In 254 cases (60·5 per cent.) microbes persisted for 3 days after complete separation of the false membrane.

„ 103	„ (25·4	„ „ )	„ „ 7 days
„ 34	„ ( 8·4	„ „ )	„ „ 12 „
„ 16	„ ( 4	„ „ )	„ „ 15 „
„ 4	„ ( 1	„ „ )	„ „ 21 „
„ 3	„ ( ·75	„ „ )	„ „ 35 „

Such results from a competent Authority suggest danger in the mixing of convalescents with healthy people, unless a prolonged quarantine has been enforced, for not only are they capable of spreading the disease, but of conveying it in a far more serious form than that from which they have recovered.

### Scarlet Fever.

By far the larger number of the cases of Scarlet Fever occurred during the earlier months of the year, only nine having been notified during the last six months of the year.

In all the latter cases it appeared fairly clear that infection was contracted outside the District. The outbreak upon which I reported last year virtually ended in July.

Systematic medical inspection of the scholars attending schools in the affected area, for a period of 3 months, proved very efficacious in stamping out the disease, as all suspicious cases were excluded from School Attendance.



### **Rubella.**

This disease, known popularly as German Measles, was somewhat prevalent during May and June. In my own practice about 50 cases came under notice. The nature of this complaint is yet very doubtful, but beyond the facts that it is very infectious, the illness is only slight, and in the majority of cases fever is entirely absent; and that the rash presents some of the characteristics of Scarlet Fever, and some of Measles little is known. Cases invariably recover, and it is only of importance that it may be confounded with Scarlet Fever.

### **Enteric or Typhoid Fever.**

Except in Institutions only 1 case of this disease occurred in our District; and it appeared probable that the patient in question contracted the disease away from home. At the London County Asylum, 9 cases occurred of which 4 proved fatal.

The outbreak was investigated by the Medical Officer to the London County Council.

The outbreak of 5 cases in the St. Marylebone Schools did not appear to be due to any sanitary defects existing in that Institution.

### **Erysipelas.**

I am of opinion that this disease should be expunged from the Schedule of Notifiable Diseases. It never assumes epidemic proportions, except where a large number of persons suffering from wounds are crowded together, as in the surgical wards of a large general Hospital.

Although unquestionably contagious under these conditions the notification of cases in a District like ours, is of no importance whatever.

### **Small Pox, Whooping Cough and Measles.**

No outbreak of these diseases has occurred throughout the year.

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The question of providing a separate Isolation Hospital and disinfecting Station for this District is still under consideration. The difficulty we have to contend with is to obtain a suitable site. In my Report for last year I mentioned that the Council had entered into negotiations for the purchase of a site at North Hyde: but for some commercial reasons the Council did not see their way to complete the contract. Providing, however, that a suitable site can be obtained I have no doubt but that the Hospital will soon become an established fact. In November the choice of three adjoining sites at Mount

Pleasant were offered to the Council; upon which I reported as follows:—"The fundamental question we have to answer in considering the suitability of any site for an Infectious Hospital is:—

Are the surroundings such as will ensure perfect purity and cleanliness of the air? For this condition must override all other considerations:

All authorities are agreed that a free supply of pure air, is a curative means of the highest moment, and in the case of Infectious Diseases it is the first essential of treatment, for in such cases it even lessens the duration of the disease and renders convalescence shorter.

The following four conditions are essential for purity of air, and will ensure a healthy site from the patients' point of view.

1. Moderate elevation, and an aspect which gives light and cheerfulness.
2. Facilities for ample and pure water supply.
3. Facilities for drainage.
- 4.—A dry, healthy soil.

For the protection of the public against the aerial spread of disease, the following conditions are necessary.

5. A certain degree of isolation of the site itself from centres of population.
6. The area of the site must be such that at least 40 feet of space can be interposed between the boundary of the hospital site and every building thereon, which is used for the reception of infected persons or articles.

In forming my opinion as to the suitability of the sites in question, I have carefully considered the above requirements, and I find that all the sites conform more or less to the essential conditions; and from a medical point of view alone, any one of them would be eminently suitable, providing drainage can be effected.

From its situation, site No. 2 would be the more suitable, as it would be easily connected to our drainage system; and the principal buildings could be so arranged as to practically occupy the centre of the field.

The shape of this piece of land may appear at first sight to be unsuitable on account of the disproportion between the depth and breadth, but when it is remembered that the ward block must face with the opposite side windows East by South, and West by North respectively, and that the concrete foundation for the temporary ward block must have the same aspect and area as the permanent block, it will be seen that its shape is well adapted for the purpose; as from the arrangement of the buildings shown on the accompanying diagram, the principal ward blocks would occupy a more isolated position than would be possible with a site of the same area, but of different shape."



The Council requested me to furnish them with some information as to the probable cost of building, maintenance, &c., of the proposed Hospital.

In October I presented the following report:—

“The essential parts of a Hospital for Infectious Diseases are as follows:—

- 1.—An administrative block; including rooms for Matron, Nurse, Servant, Dispensary, &c.
- 2.—Wards for Patients.
- 3.—Outbuildings, viz: Laundry, Disinfecting Chamber, Ambulance Shed and Mortuary.

I do not consider it necessary in this report to enter into the details as to the construction of these buildings, and shall confine myself to the amount of accommodation required; the cost of the Buildings, and the cost of maintenance.

The question of Site has been considered in a separate report.

### 1.—Accommodation required for this District.

Before this can be decided it is necessary to consider what Diseases are to be treated in the Hospital. It would be out of the question to make permanent provision for all the diseases named in the Notification Act, as some of these can be quite as efficiently treated in their own homes. In my opinion we should make provision for the isolation of cases of

Scarlet Fever.

Diphtheria.

Typhoid Fever.

Small Pox.

The next point to determine is the number of beds which would be required.

For large towns it has been stated that 1 bed per 1000 of population would be sufficient.

This rule would however, not hold good in the case of our District, indeed it has been proved that for country districts this amount of accommodation is insufficient; for, in country districts infection spreads more rapidly than in Towns.

In forming an opinion we have also to take into account the following considerations:

- 1.—The danger of infection being introduced by visitors owing to our proximity to London.
- 2.—The occurrence of outbreaks of more than one infectious Disease at the same time.
- 3.—The character of the house accommodation in the District. Where in a working class district like ours, the home isolation of any disease requiring it, is practically out of the question in the majority of cases, more beds are required than in a district where better class houses are the rule.
- 4.—Whether the Hospital is intended to be a final and inelastic establishment, or merely a permanent provision sufficient for non-epidemic times, but capable of rapid extension at a few days notice in case of serious epidemic.

### 5.—Probable future increase of Population.

After giving due consideration to the above facts and taking into account the number of cases of infectious disease with which we have had to deal annually since the Notification Act came in force in this District, I am of opinion that permanent provision for 16 beds should be made.

It would only be under exceptional circumstances that we should be called upon to accommodate more than that number of patients at one time, and considering the fact that to my own knowledge the District has not been for any length of time free from Infectious Disease during the past nine years, I do not feel justified in recommending a less number of beds.

These should be arranged as a Ward block of 12 beds, consisting of 2 Wards of 4 beds, and 2 of 2 beds each, arranged for the separation of sex, and of disease if required.

2.—A probationary block of 4 beds in 2 Wards for the reception of doubtful cases before admission to the general Wards, and for convalescents from Scarlet Fever before leaving the Hospital.

These beds would be attached to the Administrative block, and quite separate from the general wards.

In addition we should require a concrete foundation laid down upon which to erect an iron or wooden ward-block in case of any wide spread epidemic occurring, as 16 beds would clearly not be the maximum possible requirements during epidemics of Scarlet Fever and Diphtheria, especially if both diseases were epidemic at one time.

Some arrangement for the reception of small-pox cases would require to be made. Since these cannot by recent regulations be treated on the same site, I would suggest that an Iron Hospital of 4 beds in 2 wards be erected at the Sewage Works. This—with administrative block—would cost with a concrete foundation about £200. Failing this, I would advise that a concrete foundation be laid down, so that a Hospital could be erected on short notice if required.

### Cost of Buildings.

As regards cost, £200 per bed is the usual estimate for a permanent building. This is exclusive of site and furnishing.

It includes :—

- 1.—Laying out of site.
- 2.—Fencing same.
- 3.—Drainage.
- 4.—Water and Gas Supply.
- 5.—Mortuary.
- 6.—Ambulance.
- 7.—Disinfecter.
- 8.—Porter's Lodge, and the whole cost of the Administrative and Ward Blocks.

The furnishing would cost about £350—£400.



## Cost of Maintenance.

The expenses of maintaining an Isolation Hospital, may at first sight appear to be out of proportion to the small number of patients treated in them. This is due to the fact that the Hospital must always be kept in perfect readiness for the admission of patients; and hence arises the necessity for maintaining an efficient staff, even when the Hospital is empty.

It is clear that if the first patients attacked in an outbreak could not be at once admitted, the cases would multiply and the Hospital would then be of little use in preventing an epidemic.

As regards the permanent staff the following Officers would be required.

Medical Officer.	Nurse.
Clerk.	Servant.
Nurse—Matron.	Man and Wife.

Man to act as gate porter, attend to ambulance, disinfectors, keep grounds in order, &c.

Wife to act as laundry woman, and assist in administrative block.

It is not very easy to arrive at a definite figure as regards annual cost of maintenance when the number of patients is so absolutely uncertain; but assuming that the wards were empty for 12 months continuously, I estimate the cost for that period with the above staff would be £270—£300, including uniform and maintenance for nursing staff and servant.

On the other hand, if the beds were fully occupied for a year the cost would be about £520. I estimate that the *average* cost per annum would be about £400, exclusive of interest on Loans.

I have assumed in making this estimate that the Hospital would be perfectly free to the ratepayers. This is only reasonable since the public gain at least as much as the patient by isolation.

Some revenue may be derived from wealthier people who are willing to pay suitable fees for the use of a private ward.

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One of the most important measures in preventing the spread and recurrence of Infectious Disease is efficient disinfection. This can only be carried out by a Steam Apparatus. I have previously (Report for 1896) shown that our system of disinfection after infectious illness is far from satisfactory. It is the weak spot in our Sanitary Armament. It is well known that unless this process is efficiently carried out the germs of disease will lie dormant for long periods in bedding, clothing, toys, &c., and break out into activity again under favourable circumstances.

During the year we have had many cases of Diphtheria occurring in previously infected houses, and it appears to me very probable that some of these have been due to defective disinfection.

I would respectfully urge the Council to purchase a Steam Disinfecting Apparatus at once.

## SECTION III.

### General Sanitary Matters.

#### Water Supply.

The water supply for the District is obtained through iron service pipes from the South West Suburban Water Company, which supplies all houses—except a few in the isolated parts of the District. The supply is nearly a constant one, so that the use of cisterns is not required.

Moreover, the water is of very pure quality and may be safely used for drinking purposes without previous filtration or boiling.

Broadly speaking, any water that requires filtration after it has reached the premises is unfit for drinking. Domestic filtration of water is impracticable, it more often pollutes the water than purifies it. Especially is this the case when charcoal filters are used.

They require the most constant supervision to ensure cleanliness since the pores of the charcoal become clogged with all the decomposing suspended matters of the water which is passed through.

It has been proved that water after it has passed through such filters often contains more organic matter than it did before filtration.

Only recently I had occasion to attend professionally a family for sore throats, and gastro intestinal disturbance, the source of which was clearly proved to be contamination of the drinking water by "filtration" through a charcoal filter. The carbon of the filter was in a very foul condition. It had not been removed since purchase, and had been in use for some considerable time. The only safe way to render a suspicious water potable is to boil it.

#### Analyst's Certificate of Public Water Supply.

"THE WEST-END PATHOLOGICAL LABORATORY,  
" 55, WEYMOUTH STREET,  
" LONDON, W.

#### "Report on a Specimen of Water

("Hygienic, Chemical and Bacteriological)

"To DR. J. D. WINDLE,

*"Medical Officer of Health,*

*"Southall-Norwood Urban District Council.*

"Chemically and bacteriologically this water has revealed itself to be an exceptionally pure water free from any element of suspicion whatever.

"The number of organisms capable of growing on faintly alkaline 10 per cent. nutreul gelatine was only 1580 per cubic centimetre, and



amongst these no unusual species were detected, nor any which would be capable of fulfilling a pathogenic rôle.

"Plate cultivations on gelatin potato potassium iodide mixture produced no bacterial colonies remotely resembling those of *B. Typho abdominalis* or any of the *B. Coli* group.

"Rubbed surfaces of serum, agar, glycerine agar, and Kauthack-Stephens media incubated at 37°C. have failed entirely to reveal colonies at all like those of *B. Diphtheriæ*, *Stuptococcus pyogenes*, *Staphylococci* of pyogenic character, etc., and cover slip preparations have shewn all these organisms to be absent.

"The results of the Chemical Analysis were as follows :—

Colour.....	very faint greenish yellow in deep layers.
Appearance.....	quite clear and bright, no visible deposit.
Odour.....	none.
Reaction.....	quite neutral.
Ammonias	{ "Free" or saline..... 0·002 parts per million
	{ Albuminoid (organic)..... 0·012       "       "
Total Solids.....	30·200 parts per 100,000
Chlorine (Cl).....	2·000       "       "
(Equivalent to Na Cl) .....	(3·290)       "       "
Hardness	{ Temporary (expressed as Ca Co 3). 9·770       "       "
	{ Permanent       "       " ... 4·430       "       "
	{ Total       "       " ...14·200       "       "
Nitrogen as Nitrates and Nitrites.....	minute traces
Poisonous Metals.....	entirely absent

"All the above quantities are below those considered compatible with great purity in potable water.

"WALTER D. SEVERN,

"*July 31st, 1897.*"

The result of my analysis of the water from several trial holes sunk at the sewage works, with a view to obtaining a supply for drinking purposes for the foreman's house, proved the water in every case to be contaminated with sewage matter.

I concluded that it would be impossible to obtain well water sufficiently pure for drinking purposes; and the Council decided to lay on the water from the Grand Junction Water Company's Mains at Hanwell.

During the year, Company's water has been laid on to all new houses erected in the District, and also for the supply of houses at Hayes Bridge and Newell's New Field.

Virtually, surface wells have been abolished in the District. The dangers of these shallow wells are well set forth in the 6th Report of the River's Pollution Commissioners, from which the following paragraphs is extracted.

"The common practice in villages, and even in many small towns is to dispose of the sewage and to provide for the water supply of each cottage, or pair of cottages, upon the premises.

In the little yard or garden attached to each tenement or pair of tenements, two holes are dug in the porous soil; into one of these, usually the shallower of the two, all the filthy liquids of the house are discharged; from the other, which is sunk below the water line of the porous stratum, the water for drinking and domestic purposes is pumped. These two holes are not unfrequently within twelve feet of each other, and sometimes even closer.

The contents of the filth hole or cesspool gradually soak away through the surrounding soil and mingle with the water below. As the contents of the water hole, or well, are pumped out, they are immediately replenished from the surrounding disgusting mixture, and it is not therefore very surprising to be assured that such a well does not become dry even in Summer. Unfortunately, excrementitious liquids, especially after they have soaked through a few feet of porous soil, do not impair the palatability of water; and this polluted liquid is consumed from year to year, without a suspicion of its character, until the cesspool and well receive infected sewage, and then an outbreak of epidemic disease compels attention to the polluted water. Indeed our acquaintance with a very large proportion of this class of potable waters has been made in consequence of the occurrence of severe outbreaks of Typhoid Fever amongst the persons using them."

## **DISPOSAL OF REFUSE.**

### **A.—Household Dust.**

The work of removing household dust has been carried out satisfactorily. No complaints having been received during the year. All houses in the district are now supplied with galvanized iron dust bins provided with covers. They are emptied weekly and the contents taken to a tip provided for that purpose.

The rapid increase of population will in the near future necessitate your consideration of the advisability of providing a refuse destructor, as this is undoubtedly most "sanitary" method of disposing of dust-bin refuse.

From the Report of the Surveyor it appears that during 1896 1,330 loads of refuse were removed at a cost of £211 6s. 6d., equal to 3s. 5d. per load. The number of houses from which dust was collected was 1,335.

### **B.—Sewage Disposal.**

(These particulars are extracted from the report of H. R. Felkin, Esq., C.E., Engineer and Surveyor to the Council).



## Sewers.

The following table gives the length of Sewers in the District, viz :—

6-in. Pipe. Lineal Ft.	9-in. Pipe. Lineal Ft.	10½-in. Pipe. Lineal Ft.	12-in. Pipe. Lineal Ft.	15-in. Pipe. Lineal Ft.	21-in. Pipe. Lineal Ft.	Total Length. M. Fur-Yds.
165.	13,767.	6,425.	7,605.	20,126.	5,265.	10 0 184

### New Sewer to North Hyde.

Tenders were invited for the construction of this Sewer from the Green to the King's Head Public House, Bull's Bridge Road, and the Council accepted the tender of Messrs. Killingback & Co. to lay 15 and 12 inch Hassall's patent double lined Stoneware pipes, and the work has been carried out at a cost of £2,811 11s. 2d.

### Beaconsfield Road.

A Storm Water Sewer has been laid for a distance of 480 feet in the above road at a cost of £39.

New Sewers have been laid in the following roads by the owners :—

Endsleigh Road.  
York Road.  
Spencer Road.  
Hammond Road.

### Sewage Works and Farm.

Method in use in the District { Water carriage system with separate storm water sewers

At the Sewage Works the District Sewage flows in by gravitation and is delivered either into settling tanks or precipitating tanks as may be required. From the settling tanks a 12-in. main is constructed on to the irrigation site, where the sewage is run in open carriers, and distributed at various points on to the land (which is underdrained), and the effluent passes into the river Brent, at the Eastern boundary of the farm. When the sewage is delivered into the precipitating tanks it is treated with lime and alumino ferric, and after being allowed to remain until all the solids are precipitated the supernatant water is drawn off by means of a floating arm and passed through coke breeze filter beds, and is then discharged into the Brent.

The sludge runs from the precipitating tanks by its own gravity into a sludge store, from which it is forced into the filter press by compressed air. Owing to the Trade Refuse discharged from the Margarine Works, we have had considerable difficulty in dealing with the sewage on account of the quantity of fatty matter in it, and it has from time to time clogged the filters to such an extent as to prevent filtration, and an action at law is now pending against the proprietor of that manufactory for breach of his agreement with the Council.

The sewage from the County Asylum flows into two large reception tanks, from whence it is pumped by centrifugal pumps into precipitating tanks, and is treated similarly to the above. During the year 40,150,000 gallons have been pumped.

The following works have been carried out by the Council's workmen, viz. : the ditch at the north-east end of the Farm has been levelled and half carriers laid down and the sides concreted.

The second filter has been filled with coke breeze, an outlet spreader made and fitted to pipe, and carriers laid for the purpose of delivering the sewage evenly over the filter. A dwarf concrete wall has been constructed round the bank near the precipitating tanks, and 3 flights of steps built.

The carriers to the Asylum precipitating tanks have been repaired and made good with cement and concrete.

The pen-stocks on the farm have been thoroughly overhauled and and where defective have been renewed or repaired as the case may be. The banks round the new filter beds have been levelled and sown with grass seed, and a flower bed made ; also a gravel path formed to the Brent.

A concrete pit has been constructed for receiving the rakings of the inlet chambers and deposits in the catch pit.

A doorway has been cut in the press room to enable the man to have direct control over the pressing machinery.

### Pumping Account.

Gallons.	Gallons per day.	Average number of hours employed.
40,150,000	110,000	56½ hours per week.

The cost of the works and pumping, including labour in swilling-out tanks, pressing, &c., is as follows :—

	£	s.	d.
Labour ... ..	306	16	6
Coal, Coke, etc., ... ..	58	2	2
Oil, Waste and Packing ... ..	12	0	7
Repairs, Tools, &c... ..	27	6	11
Total	£404	6	2



### Sludge Pressing.

The old machinery being worn the Council have had new machinery fixed, consisting of 1 patent high and low pressure, and vacuum air exhaust and Compression Pump, 1 27-inch circular 24-chamber Sludge Press with patent pyramid filtering surface and 1 Pneumatic Forcing Ram at a cost of £209.

The following table will shew the quantity of Sewage Sludge, treated by filter pressing by the new machinery.

No. of pressings.	Quantity of Sludge pressed.	Quantity of Sewage cake produced.	Quantity of Press Liquor returned to Tank.
836.	1,063 tons.	277 tons.	786 tons.

As the Farmers do not seem to recognise the fertilizing value of the sludge cake, it is utilized at the present time by filling in the low lying places on the farm to bring them up above water level.

### Farm.

The cost of irrigating and cultivating the farm was as follows:—  
Area of crops  $9\frac{1}{2}$  acres.

	£	s.	d.
Labour ... ..	166	19	1
Team Labour ... ..	57	4	1
Seeds, &c. ... ..	13	2	10
	237	6	0
Value of Crops ... ..	86	10	3
Total Net Cost ...	£150	15	9

## Burial Grounds.

The following Table gives particulars of the Burial Grounds in use in this District:—

	THE CEMETERY.	ST. JOHN'S.
1.—The Situation of the Ground ... ..	Havelock Road, Southall Green ...	The Green, Southall.
2.—Total Area ... ..	About $1\frac{3}{4}$ Acres * ... ..	About $\frac{1}{2}$ Acre.
3.—Dates of first use on first entry in register	April 2nd, 1883 ... ..	March 3rd, 1860. (Consecrated Jan. 23, 1860).
4.—Total No. of Burials to date ... ..	1027 ... ..	1570.
5.—No. of Vaults ... ..	None ... ..	None.
6.—„ Brick Graves ... ..	Four ... ..	13.
7.—„ Earth „ ... ..	455 ... ..	577.
8.—Length and Width of Grave Spaces {	8-ft. × 4-ft. Brick Grave ... ..	Brick Grave, 8-ft. × 4-ft.
	7-ft. × 3-ft. Earth „ ... ..	Earth „ 6-ft. 6-in. × 2-ft. 6-in.
9.—Depth of uppermost coffin below level of ground ... ..	Four feet ... ..	Four feet.
10.—Area of unused Ground... ..	Not quite $\frac{2}{3}$ rds. * ... ..	About 1-fifth. (See below).
11.—Distance of nearest dwelling and whether partially or wholly surrounded by houses... ..	20-ft. (partially) ... ..	Adjoining on North side. North and West sides.

\* Another  $3\frac{1}{2}$  Acres just added, making now about 5 Acres in all.

MEMO.—The Ground unused is the front portion of Churchyard and are principally brick grave spaces.

**Mortuary.**—This Building is situated at the Cemetery, Havelock Road. The accommodation is ample. Provision is made for the performance of post mortem examination.



## Nuisances.

### Nuisance from Soft Core.

In January, I inspected a heap of refuse deposited alongside the Dock at Yeading, in the District of the Uxbridge Rural Sanitary Authority.

I found the deposit to consist of some hundreds of loads of combustible material, containing amongst other things, rags, bedding, paper, and animal and vegetable matter.

The heap was slowly burning and giving off immense volumes of smoke, and since the combustion was not complete, noxious fumes were being given off at the same time.

There can be no question that the foul smells we had experienced, more especially on the South side of our District arose from this heap, and that such odours were injurious to the health of persons exposed to them.

### Alleged Nuisance Mill Pond.

In September, the Council instructed me to report as to an alleged Nuisance at the Mill Pond. I failed to discover any Nuisance which would justify a statutory notice, yet it appeared to me that during the prevalence of hot weather the pond would become a nuisance from the decomposition of the fungus growth, which more or less covers its surface.

### Nuisance from Pig Keepers.

A serious Nuisance from this cause was investigated by the Surveyor and myself. We found the premises in question in a most foul condition and totally inadequate for the number of animals kept. The sewage was found to be polluting the river Crane. Notice was served to abate the nuisance by reducing the number of animals kept by half, and to provide an efficient system of sewage disposal. The notice has been complied with.

### Cowsheds, Dairies and Milk Shops.

Number of Cow Sheds on Register..... 7

Number of Milk Shops on Register..... 5

These premises have been regularly inspected and are in a satisfactory condition. The supervision of the milk supply daily becomes of greater importance, because it is not only a frequent means for the spread of infection disease; but constitutes as it does the chief diet of children, it is highly important to insure its purity. With this end in view the Inspector takes samples frequently, and in case of an adulteration legal proceedings are taken. During the year out of 23 samples taken, only 2 were found to be adulterated.

There is good reason to believe that Scarlet Fever, Diphtheria, Enteric Fever and Cholera are in many cases propagated by means of milk, which may become infected either direct from the animal or by the use of water (for adulteration, cleansing cans, &c.) impregnated with the poison. Since boiling the milk invariably destroys the micro-organism associated with these diseases, this procedure should be invariably carried out as one of the most reliable measures against diseases arising from the use of milk.

### **Slaughter Houses.**

Number of Slaughter Houses on Register, 7.

These have been inspected twice during the year. Only minor contraventions of the Bye-Laws came under notice.

### **Bakehouses.**

Number in District 9. Speaking generally, they were all found on inspection in a clean and sanitary condition. Some minor contraventions of Bye-Laws were dealt with. No contravention of the Factory Acts came under notice.

### **Workshops and Workplaces.**

Number in District.....	10
Number of Inspections.....	22
Nuisances .....	0
Contraventions of Factory Acts.....	0

### **Offensive Trades.**

No offensive trades as scheduled in the Public Health Act are carried on in this District.

### **Moveable Dwellings, Tents, Sheds, &c.**

Number under observation.....	14
Number of Nuisances.....	6
Number removed from District.....	14

### **Food and Drugs Acts.**

Mr. C. Tidy, the Inspector under this Act, has taken 23 samples of food, 2 of these was found by the Public Analyst to be adulterated.

### **Unsound Food.**

Animals seized.....	None
Articles and parcels of food seized and destroyed.....	1



### Canal Boats Act.

The following is an abstract from the Report of the Inspector under this Act (Mr. C. Tidy).

Number of visits to Canal.....	90
Number of boats inspected..	132
Number of boats contravening Acts and Regulations.....	16
Total number of contraventions dealt with.....	16

### Infant Life Protection Act.

There are no licensed premises under this Act in the District.

### Contagious Diseases Animals Act.

No particulars to hand. An outbreak at Hayes Bridge necessitated the slaughter of some infected animals.

### Petroleum Act.

One License granted (renewal).

### Adoptive Acts in Force.

- (1) Infectious Disease (Notification) Act, 1889.
- (2) Infectious Disease Prevention Act, 1890.
- (3) Public Health Amendment Act, 1890.

The Bye-Laws of this Authority are based on the Model Bye-Laws of the Local Government Board, and relate to—

- (1) Cleansing of earth privies, ashpits, and cesspools.
- (2) For the prevention of Nuisances arising from snow, filth, dust, ashes and rubbish, and for the prevention of the keeping of animals on any premises, so as to be injurious to health.
- (3) Relating to common lodging houses.
- (4) New Streets and buildings.
- (5) Slaughter houses.
- (6) With respect to houses let in lodgings, or occupied by members of more than one family, a register of which is now kept.

### Table of Nuisances.

Complaints received.....	104
Total number of houses, premises, &c., inspected.....	530
Number of re-inspections... ..	300
Total number of inspections.....	850
Letters written.....	90
Cautionary Notices given.....	76
Statutory Orders issued.....	29

### Table of Nuisances (*continued*).

Summonses served.....	4
Convictions obtained.....	4
Houses cleansed.....	2
Rooms fumigated.....	60
Roofs repaired.....	1
Guttering repaired.....	2
Yards paved and drained.....	11
Ventilation below floor provided.....	2
Overcrowding.....	1
Accumulation of refuse.....	25
Foul ditches, ponds, &c. ....	5
Foul pigs and other animals .....	5
Other Nuisances .....	8
Wells cleansed, repaired, &c.....	1
New W.C. apparatus.....	1
W.C.'s repaired, cleansed, &c.....	3
Drains examined and tested.....	6
Drains unstopped, repaired and trapped .....	9
Drains ventilated .....	3
Drains reconstructed.....	2
Cesspools emptied, &c. ....	14

All at Hayes Bridge new sewer now being laid to drain same.

I have to thank Mr. Tidy, Inspector of Nuisances, for the particulars contained in tables relating to the various Nuisances dealt with by him. His time has been fully occupied during the year in carrying out the many onerous duties appertaining to his office: he has had a great deal of extra work on account of the outbreak of diphtheria and he has kept me well informed of those matters coming more especially within my province.





(A) Table of Deaths During the Year 1897, classified according to Diseases, Ages and Localities.

Names of Localities adopted for the purpose of these Statistics; public institutions being shown as separate localities.	Mortality from all causes, at subjoined ages.							Mortality from subjoined causes, distinguishing Deaths of Children under Five Years of Age.											
	At all Ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Diphtheria.	Enteric or Typhoid.	Whooping Cough.	Diarrhoea & Dysentery.	Phthisis.	Bronchitis, Pneumonia, & Pleurisy.	Heart Disease.	Injuries.	All other Diseases.	Total.		
Southall-Norwood Urban District .....{	90	28	13	3	7	13	26	Under 5 5 upwds.	3	1	1	9 1	1 3	9 5	4	1 4	17 31	41 49	
London County Asylum, Norwood.....	149					96	53	Under 5 5 upwds.		4		1 16	10	8		110	149		
Totals .....	239	28	13	3	7	109	79	Under 5 5 upwds.	3	5	1	9 2	1 19	9 15	12	1 4	17 141	41 198	

(B) Table of Population, Births, and of New cases of Infectious Sickness, classified according to Diseases, Ages, and Localities.

Names of Localities adopted for the purposes of these Statistics; public institutions being shown as separate localities.	Population at all Ages.		Registered Births.	Aged under 5 or over 5.	New Cases of Sickness in each Locality, coming to the knowledge of the Medical Officer of Health.				Number of such Cases removed from their Homes in the several Localities for treatment in Isolation Hospital.		
	Last Census	Estimated to middle of 1897.			Scarlatina.	Diphtheria	Enteric or Typhoid.	Erysipelas.	Scarlatina.	Diphtheria.	Enteric or Typhoid.
Southall-Norwood Urban Sanitary Dist. {	5188	7913	254	Under 5 5 upwds.	39	88	6	1	39	85	6
London County Asylum, Hanwell.....	2037	2167	—	Under 5 5 upwds.			9	9	Treated in Isolation Hospital at Asylum.		