#### [Report 1898] / Medical Officer of Health, King's Norton & Northfield U.D.C.

#### **Contributors**

King's Norton and Northfield (England). Urban District Council.

#### **Publication/Creation**

1898

#### **Persistent URL**

https://wellcomecollection.org/works/qej58eg7

#### License and attribution

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

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



# Arban District Council

OF

## KING'S NORTON AND NORTHFIELD.

## TWENTY-SIXTH ANNUAL REPORT

ON THE

## SANITARY CONDITION

OF

THE URBAN SANITARY DISTRICT

For the Year ending December, 1898.

BY

## FRANCIS HOLLINSHEAD, M.D.

MEDICAL OFFICER OF HEALTH.

AND

Past-President of the Birmingham and Midland Counties Branch of the Society of Medical Officers of Health

Printed by Order of the Urban District Council.

PRINTED BY J. F. EBORALL & Co., 78-81, PARADE, BIRMINGHAM.

Digitized by the Internet Archive in 2017 with funding from Wellcome Library

# Urban District Council of King's Norton & Northfield

COUNTY OF WORCESTER,

COMPRISING THE PARISHES OF

## KING'S NORTON, NORTHFIELD AND BEOLEY.

Councillor Thomas Gibbins, J.P., Chairman, 10, Carpenter Road, Edgbaston AARON JONES, Vice-Chairman, Glenhurst, Pershore Rd. King's Norton

## Arban District Councillors:

#### King's Norton Ward.

Councillor William Arthur Baldwin, Trostrey, King's Norton

Aaron Jones, Glenhurst, King's Norton

George Pope Underhill, Tresco Lodge, Middleton Hall Road, King's Norton

#### Moseley Ward.

- James William Bray Brown, Glenavon, Forest Road, Moseley.
- James Johnstone Bryden, View Forth, Alcester Road, Moseley Edward Holmes, School Road, Moseley

22

Walter John May, Ravenscliff, Oxford Road, Moseley

#### King's Heath Ward.

- Thomas Edward Bladon, Clydesdale, Park Hill, Moseley
- Edward Davidson, Tenbury House, Tenbury Road, King's Heath

#### Beoley Ward.

Edwin Boden Corah, Masshouse Lane, King's Norton

#### Northfield Ward.

- Thomas Richard Bayliss, Belmont, Northfield.
- William Ward, Bartley Green Farm 22

#### Selly Oak Ward.

- Thomas Gibbins, 10, Carpenter Road. Edgbaston 33
- John Robert Oswald, 29, Bournbrook, Selly Oak

Frank Smith, 20, Heeley Road, Selly Oak

William Henry Whitelock, Dilston, Weoley Park Road, Selly Oak

#### Stirchley Ward.

- John Norris, Highfield, Middleton Hall Road, King's Norton
- George Talliss, Bournville Lane, Bournville

#### Clerk:

#### Medical Officer:

Mr. EDWIN DOCKER.

FRANCIS HOLLINSHEAD, M.D.

Surveyor:

Assistant Surveyor: Mr. J. H. WEBB, C.E.

MR. AMBROSE W. CROSS, C.E.

Moseley.

#### Sanitarn Inspectors:

MR. JOHN HOUGHTON, C.S.I.G.B., MR. A.

T. COTTLE, A.S I., Selly Oak.

### COMMITTEES.

In office until the 15th April, 1899.

#### Buildings Committee.

Councillor Talliss, Chairman.

Councillor BLADON, BRYDEN, Councillor DAVIDSON, HOLMES,

Councillor Oswald, Smith,

Councillor Underhill.

The Buildings Committee meet on the Second and Fourth Thursdays in each month, at 3 o'clock p.m., at the Surveyor's Office, King's Heath.

#### Cemeteries Committee.

Councillor Talliss, Chairman.

Councillor BLADON, CORAL, Councillor May, Norris,

Councillor OSWALD, SMITH,

Councillor WARD.

The Cemeteries Committee meet when and where required.

#### Finance Committee.

Councillor Jones, Chairman.

Councillor BAYLISS, BALDWIN, Councillor BLADON,

Councillor May, Norris,

Councillor OSWALD.

The Finance Committee meet on the First Wednesday in each month, at 2-30 p.m., at the Clerk's Office, 10, Newhall Street, Birmingham.

#### General Purposes Committee.

To consist of Chairman of each Standing Committee, and the Chairman and Vice-Chairman of the Council.

Mr. Brown, Chairman. Meet when required.

#### Health Committee.

Councillor Bladon, Chairman.

Councillor Brown CORAH,

Councillor May, ,, Norris, Councillor Underhill, Ward,

Conneillor WHITELOCK.

#### Hospital Sub-Committee.

Councillor Norris, Chairman,

Councillor Underhill, Ward, Councillor WHITELOCK, BLADON (ex-officio),

#### Parliamentary Committee.

Councillor Brown, Chairman.

Councillor Bayliss,
,, Baldwin,

Councillor Bladon, Davidson, Councillor Jones, ,, Talliss,

Councillor WHITELOCK.
Meet when required.

#### Public Works Committee.

All Members of the Council. Councillor Gibbins, Chairman.

The Public Works Committee meet on the Third Wednesday in each month at 3 p.m., at the Clerk's Office, Birmingham.

#### Fire Brigade Sub-Committee.

Councillor Talliss, Chairman.

Councillor Corah, Norris, Councillor OSWALD, SMITH,

#### Baths and Parks Sub-Committee.

Councillor Oswald, Chairman.

Councillor Bryden, Davidson, Councillor MAY,

SMITH.

Councillor Talliss, Whitelock. WESTON COTTAGE,

SELLY OAK,

NEAR BIRMINGHAM,

January 31st, 1899.

# TO THE CHAIRMAN AND MEMBERS OF THE KING'S NORTON AND NORTHFIELD URBAN DISTRICT COUNCIL.

GENTLEMEN,

I have the honour to submit my First Annual Report to you as an Urban Council, and my Twenty-sixth as Medical Officer of Health.

I purpose starting my Report with giving you the vital statistics for the year, and afterwards building it up based upon the deductions arising therefrom.

From the returns furnished weekly by your Registrar of Births and Deaths, I find that the total number of

#### BIRTHS

registered during the year was 1332, as compared with 1149 for the year 1897. The total number of

#### DEATHS

for the same period was 652, as compared with 643 for the previous year; the deaths included 141 which occurred in Public Institutions, 113 of which did not belong to your district, viz:—The Workhouse, 62; Rubery Hill Asylum, 39; St. Paul's Convent, 4; Moseley Hall Convalescent Home, 6;

the Fever Hospital at West Heath, 2. The total number of deaths which occurred in the Workhouse was 87, as compared with 102 for last year; the deaths in the Fever Hospital were 5, two of which belonged to Tardebigge and Clent respectively, and did not belong to your district; all the deaths in the Hospital were due to Scarlet Fever and its complications. The 113 deaths which occurred in Public Institutions did not belong to your district at all, so that this number is excluded from my calculations of the different mortality rates, as their inclusion would be misleading and not fair to any district. I, however, give the death-rates inclusive of them so that you may compare them.

Of the births, 699 are males, 633 females; of the deaths, 342 are males, 310 females. From diseases of the zymotic class, 59 deaths have occurred as compared with 64 for last year. Of these 34 are males, 25 females; 4 of these deaths occurred in Public Institutions and did not belong to your district, viz:—1 at the Workhouse, 1 at Rubery Hill Asylum, and 2 at the West Heath Fever Hospital.

The foregoing figures are satisfactory with a population of 48,500, which is estimated to the middle of the year 1898, and this estimate is under than over, as the population if absolutely taken would be over 50,000. It is, however, better rather to under-estimate it than not, as you can then be quite satisfied that your mortality rates are fairly estimated and would show more favourably than otherwise. The estimated figures, I may say, are based on the census of 1891, and represent a birth-rate for the year of 27.46 per 1000 persons living, and a death-rate of 11.34 per 1000 of the population, and a zymotic death-rate of 0.9 per 1000, as compared with a birth-rate of 27.07 per 1000, and a death-rate of 12.1 per 1000, and a zymotic death-rate of 1.4 per 1000 for the year 1897, and a birth-rate of 27.04, and a death-rate of 11.54, and a zymotic death-rate of 1.1 for the year 1896.

The death-rates are exclusive of the deaths in Public Institutions, which did not belong to your district; inclusive of these, the death-rate is raised to 13·19 as against 15·05 for 1897.

The statistics for the past year show again a very high sanitary standard. They continue pretty uniform year by year, but the past year they are more favourable still, and this condition is maintained in the face of a rapidly increasing population and density of buildings.

The following figures show the birth and death-rates, and also the zymotic death-rates of the neighbouring Authorities for the past year, 1898, in order that you may make a comparison as regards your own district.

	Urban District Council of King's Norton.	Erding- ton District	Aston Manor.	Solihull Sanitary Authority	Birming- ham.	Hands- worth Urban.
Birth-rate	27.46	23.43	31.6	20.7	34.0	28.3
Death-rate	11.34	10.70	15.1	13.9	19.5	13:3
Zymotic Death-rate	0.9	1.34	2.9	1.07	2.8	1.6

The above figures show a favourable comparison with other Authorities, in fact the zymotic death-rate is the lowest for your district of any of them.

The following Table represents the births and deaths, and also the respective birth and death-rates, together with the zymotic death-rate for the four quarters of the year.

	Births,	Deaths.	Birth-rate,	Death-rate.	Zymotic Death-rate.
First Quarter	284	145	23.42	11.95	0.98
Second Quarter	351	158	28.94	13.03	0.41
Third Quarter	384	179	31.67	14.76	2.22
Fourth Quarter	313	170	25.81	14.02	0.65

The vital statistics of the above Table are inclusive of the deaths in Public Institutions not belonging to your district.

The total number of deaths at the different ætal periods is summarised below.

d boron.					
		MALES.		FEMALES	TOTALS.
Under 1 year	***	103		68	 171
From 1 to 5 years		32		26	 58
,, 5 ,, 15 ,,		8		11	 19
,, 15 ,, 25 ,,		11		21	 32
,, 25 ,, 35 ,,		25		21	 46
,, 35 ,, 45 ,,		14		17	 31
,, 45 ,, 55 ,,		36		21	 57
,, 55 ,, 65 ,,	-111	39		24	 63
,, 65 ,, 75 ,,		45		48	 93
,, 75 ,, 85 ,,		23		45	 68
,, 85 and upwards		6	***	8	 14
m + 1		9.10		910	e=0
Totals	+++	342		310	652

These figures are set out minutely in Table III. of this Report.

As regards the birth rate, no doubt this is influenced to a very large extent by the prosperous state of trade or otherwise, as in times of greater presperity the marriage-rate is found to be increased. As regards your district this year the marriages are 344, as against 237 for last year, showing a very large increase.

The following Table gives the birth-rates and death-rates, together with the zymotic death-rate for the past 10 years.

	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.
Birth-rate	24.34	23.13	25.97	30.70	27 .90	25.34	29:59	27:04	26.9	27.46
Death-rate	10.61	12.01	12.36	12.52	15:35	10.87	12.27	11:51	12.1	11:34
Zymotic death- rate	0.7	0.73	0.77	0.7	1.03	0.6	0.8	1.1	1.4	0.9

The above comparisons of the death-rates for the past 10 years will be found most satisfactory and uniform and will compare most favourably with other districts, as will be seen on reference to a Table in this Report.

As regards the zymotic death-rate, it continues very low indeed, as will be seen on comparison with the figures of other Authorities. This fact is the more satisfactory on account of the great increase in the population of your district which continues, and also the greater density of the population, which naturally renders us more liable to diseases of this class, and, as a rule, with a more severe type of the malady

The foregoing figures show an increase in the number of deaths for this year of 9 only, the totals being 643 for 1897, and 652 for 1898, there is, however, a decrease in the zymotic class. The deaths of children under one year are favourable, while the deaths of children from one to five years are stationary. The figures representing the deaths of persons dying over eighty-five years are more than last year. The births are more than last year, being 1332, as compared with 1149 for 1897.

The following Table gives the percentages of the different mortality rates among children under one and five years—their relationship to the total births and the general mortality rate.

Annual Rate of Mortality.	Deaths of children under 1 year Percentage to total deaths.	Percentage of deaths of children under 1 year to the Registered Births.	Deaths of children under five years. Percentage to total deaths.
11:34	27.76	12.84	35:11

These death-rates will be found to compare most favourably with last year, and this in the face of an increased population.

#### ZYMOTIC DISEASES.

During the past year 52 deaths from this class of Disease, against 65, have been registered, as follows:—Small Pox, 0: Scarlet Fever, 5; Diphtheria, 6; Typhoid Fever, 2; Measles, 16; Whooping Cough, 4; Diarrhœa, 19; as compared with Small Pox, 0; Scarlet Fever, 11; Diphtheria, 12; Typhoid Fever, 1; Measles, 12; Whooping Cough, 13, Diarrhœa, 16.

The following Table shows the details of the Deaths, the Months in which they occurred, and the Localities.

Nature of Diseases.		Jan.	Feb.	Mar.	Apr.	May.	June	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Tota
Small Pox							***		***					
Scarlet Fever		*1	1	1		*1					1			5
Diphtheria		1		1		1				2			1	6
Measles		2	1	1		1		3	7	1				16
Whooping Cough				1	1						1	1		4
Typhoid Fever			*1								1		.4.	5
Diarrhœa & Dysent	ery			1			1		5	*9	3			19
Total for Months.		4	3	5	1	3	1	3	12	12	6	1	1	5

\* Deaths mentioned in Note.

Included in the above Table are four deaths of persons not belonging to the district, viz.:—2 from Scarlet Fever, 1 from Typhoid, and 1 from Diarrheea.

10

Localities in which the above Deaths took place :-

	Selly Oak	Bournbrook	King's Heath	Moseley	King's Norton	Stirchley	Northfield	The	Fever   Hospital	Selly Park	Rubery Asylum	Rednal	Totals.
Small Pox													
Scarlet Fever									5				5
Diphtheria	1	1	3				1						6
Measles	8	3	2	2			1						16
Whooping Cough	1	1	1		1								4
Typhoid Fever				***			1			***	1		2
Diarrhœa & Dysentery		1	6	2	4	2	1	1		2	***		19
Totals	10	6	12	4	5	2	4	1	5	2	1		52

In reference to this Table we have the satisfaction to record less deaths from this class of Diseases by 17, so far as our district is concerned, the reduction being due to the less number of deaths from Scarlet Fever and diphtheria—two of the most important diseases we have to deal with.

These facts are very gratifying to me, and I am sure they will be very satisfactory to you in face of the increased responsibilities resting upon us.

As regards the distribution of these deaths, they are as follows:—Selly Oak and Bournbrook 16, as against 18; King's Heath 12, as against 8; Moseley 4, as against 5; King's Norton 5, as against 5; Stirchley Street 2, as against 9; Northfield 4, as against 5; Selly Park 2, as against 2; The Workhouse 1, as against 2; Rubery Hill Asylum, 1; The Fever Hospital 5, as against 9. The death in the Workhouse arose from Measles, that at Rubery Hill Asylum from Typhoid Fever, while those in the Fever Hospital were due to Scarlet Fever.

The Deaths from Diarrhor are somewhat in excess of last year, being 19 as compared with 16.

Having given the statistics generally, I now propose, as in former

years, to give the details of each disease as it occurred, or not, in your district, giving them in the order of their importance.

The first disease I have to mention, although no case occurred during the year, is one of such importance that some remarks must be made regarding it, I mean

#### SMALL POX.

The District has, I am pleased to record, kept quite free from this disease during the whole of the year, and, moreover, no case has occurred for several years.

As regards the vaccination returns supplied to me by Mr. A. E. Fletcher, they show a fair comparison with former years, although there are more outstanding cases than usual. We have, however, to record a very large amount of vaccination done, and I consider it highly creditable to the Vaccination Officer to show such a record as is here given, considering that there has been such strenuous opposition to it, and so much agitation against it.

In reference to this question, the year to which this Report applies is a very memorable one, as it witnessed the consummation of an Act of Parliament having for its object the better administration of the late Vaccination Act by still making it compulsory, but endeavouring to remove the popular prejudices of the old Act. This Act has been passed as a result of the recommendations of the Royal Commission, after some seven years' deliberation. While not agreeing with all the provisions of the new Act, more particularly as regards the "conscience clause," I believe it to be an honest attempt to solve the question by the means I have stated. I, myself, have no sympathy with permissive legislation. It is either right to make it compulsory or not, and I would not allow the public to be judges of a thing they know so little about, as it is allowing them to exercise a privilege which is fraught with danger. I have, however, as a Public Vaccinator, to record my sense of the beneficence of this Act, and I am convinced that it will work (with the one exception mentioned) splendidly. I find already that the old prejudices having been cleared away, the public are more willing to have their children vaccinated, and already, I believe, there will be found at the close of the year quite 50% more children vaccinated than formerly—at least this is my experience.

In my last Annual Report I stated that the Calf-Lympth was not so reliable as the old method of arm to arm vaccination. I am pleased to record, however, that the Calf-Lymph which is being supplied by the Local Government Board is quite active, and very good results are being obtained.

Appended are the Vaccination Returns for your information and guidance.

## THE DISTRICT COUNCIL OF KING'S NORTON VACCINATION RETURNS

for the 12 months ended June 30th 1898.

Num- ber Born.	Success- fully Vaccin- ated.	In- suscept- ible to Vac- cination	Had Small Pox.	Dead Un- vaccin- ated.	Conscientious Certificates under Section 2 Vac. Act, 1838.		Removed where V.O apprised.	Re- moved, Not Known	Out stand- ing.
1289	803	5		120	24	13	7	108	209

#### ALBERT E. FLETCHER,

220, Bearwood Road,

SMETHWICK

Vaccination Officer.

King's Norton Union.

9th March, 1899.

I am quite prepared for these remarks to receive sharp criticism at the hands of those who do not agree with vaccination, but I feel I should be failing in my duty were I not to emphasise the importance of this subject in my Annual Report My observations are based on actual facts, and are the result of a very long experience in the treatment of Small Pox, and as a Public Vaccinator, and in making them, I do not wish to give offence to anyone.

#### SCARLET FEVER

Has caused 5 deaths only during the year, as compared with 11 for last year, and these all occurred at the West Heath Hospital, 2 of them not belonging to the District. The cases terminating fatally were admitted from Tenacres, Dog Pool, and Northfield respectively.

As regards the number of cases notified to me, I have to record 151, as compared with 312 for the previous year from the following localities:—Selly Oak, 15; Selly Park, 2; Tenacres, 1; California, 1; Dog Pool, 3; Northfield 20, for the Parish of Northfield; Moseley, 35;

Stirchley, 11; Cotteridge, 5; King's Norton, 13; King's Heath, 30; Longbridge, 1; Groveley Lane, 2; Holly Wood, 6; Wythall, 1; Headley Heath, 1; Rubery, 1, for the Parish of King's Norton; and Beoley, 1, for the Parish of Beoley; and the Workhouse, 2, as representing the Public Institutions of the district.

As regards this disease, it is the most important that we have to deal with, in consequence of the large number of cases occurring as compared with the other Zymotics. It is very gratifying, however, to notice that we have to record less by one half the cases we had last year, the mortality being correspondingly less.

The periods of the year when the disease was most prevalent was January, February, March, April, and May, but the cases were fairly distributed throughout the year, but began to decline at the end of the year.

The type of the disease on the whole was fairly favourable, but a good proportion of the cases were of a severe type, and had the complications incident to the malady. In Scarlet Fever it is an unfortunate fact also that many of the mild forms are very prone to these complications.

The distribution of the cases in the district were naturally confined to the more populous parts, the greater number occurring at Moseley and King's Heath, while Selly Oak, Northfield, King's Norton, and Stirchley Street come next. Only two cases occurred during the year in Public Institutions, viz.: the Workhouse.

Of the 151 cases notified, 106 were received into your Hospital at West Heath, with a mortality of 5, as compared with 284 for last year, with a mortality of 9. Of the 5 deaths 2 rightly belonged to the 284 cases of the previous year, as they were admitted during the year 1897, but died early in the year of 1898. Moreover, 2 out of the 5 cases belonged to other districts, so that we have only 3 to record against us, and 1 of these came in the previous year. I shall give the vital statistics of these cases under the Hospital Report.

It is worthy of notice that the districts in which the advantages of "isolation" in Hospital was least taken advantage of shows the largest number of cases notified, viz.: Moseley and King's Heath, for we find that 65 of the total number are recorded from these localities, 36 of these only being admitted. This is due to the people being for the most part in a good position and live in houses in which they can afford and manage to isolate

the cases in a far better manner than the people of the artisan class. Still the practice is not so successful as removing them to Hospital, as the disease more often spreads where cases are treated at home than when removed to Hospital. I am, therefore, pleased to be able to state that almost in every case among the working classes the patients are removed to Hospital with the very best possible results. Another important factor in the treatment and management of this disease is that there is a tendency to make the isolation of cases in private houses as brief as possible, owing to the severe strain on the resources of the house, and I am often asked to remove the quarantine before even six weeks has elapsed, whereas in Hospital no case is liberated under eight weeks, and more often a longer period than that is found necessary.

I have come to the conclusion after many years of anxious thought based on considerable experience, that the only effectual way of keeping this disease in check is by isolation in Hospital. This plan may have a few drawbacks, but these are trifling as compared with the untold blessings that it brings. I have no doubt that scores of cases, and I may almost say hundreds, are prevented yearly, and with, as a natural consequence, a corresponding number of lives saved. Of course isolation is practically impossible among the artisan class for want of accommodation and many other reasons.

I shall have something more to say about Hospital treatment later on in this Report in connection with the Hospital.

#### DIPHTHERIA.

From this disease 6 deaths, as compared with 12 for last year, are recorded. I have received 38 notifications, as compared with 92. The localities and number of cases are as follows:—Selly Oak, 16; Northfield, 6, for the Parish of Northfield; Moseley, 2; King's Heath, 6; King's Norton, 6, for the Parish of King's Norton; and Beoley, 2, for the Parish of Beoley.

The deaths occurred at the following localities:—Selly Oak, 2; King's Heath, 3; Northfield, 1. The periods of the year when the disease was most prevalent were January, March, May, September, and December.

I am pleased to note a considerable decrease in the number of cases notified during the year. They represent a reduction of more than 50%, and the deaths are less in proportion to the cases over last year. Selly Oak

still plays the most important part as regards this disease. King's Heath, Northfield, and King's Norton being the localities coming next. Moseley occupies a much better position this year.

As regards the origin and causation of this malady, we generally find it associated with some insanitary condition to account for it; dampness of dwellings, saturated subsoil around them, defective drainage, &c, is one cause, and another fruitful source of production and spread of the disease is by means of public schools. There is no doubt that many sore throats that are thought to be simple ones are of a Diphtheric nature, and people are allowed to go about without knowing or thinking there is anything the matter with them, and so spread the disease.

Diphtheria is a very serious and fatal disease, though fortunately it does not spread by infection in the same manner as Scarlet Fever, and is more amenable to control so far as infection is concerned; it nevertheless requires "isolation" as far as possible.

For several years past considerable advance has been made in the treatment and prevention of this serious malady, and one of the most important, as I stated in my last Annual Report, was the new treatment by the use of "Antitoxin," which is a remedy gaining in importance year by year, and, so far as my experience goes, is destined to do more for this disease than anything known up to the present time. During the present year I hope we shall be able to prove its power more than we have been hitherto.

#### TYPHOID FEVER

Has caused 2 deaths, as against 1 for last year. I have received 27 notifications, as compared with 15 as follows:—Selly Oak, 14; Selly Park, 1, for the Parish of Northfield; Moseley, 1; King's Heath, 7; King's Norton, 2; Rubery, 1, for the Parish of King's Norton; and Rubery Hill Asylum, 1. The deaths occurred at Northfield and the Asylum.

As regards this disease we have to record an increase both in the cases notified and also the deaths. The number is not, however, serious, when taken in connection with the size of your district. The cases have been fairly distributed throughout the year, with one exception, and in this instance the malady assumed the form of a local epidemic, and called for special action to be taken. The cases I allude to occurred in two semi-detached villas at Selly Oak, the facts being as follows:—

On March 25th a case of Enteric Fever was notified, the patient being an architect, and 42 years or age. On investigation and inspection of the premises, I found that in all probability the disease was contracted away. Every precaution was taken to prevent the well water being contaminated, as the drinking water was drawn from this source, and which was found on analysis to be a fair sample. Notwithstanding these precautions the well water became contaminated specificially, through the carelessness and ignorance of those in charge, for on May 2nd, suddenly, or within a few days, 11 cases more in the two houses occurred, and on May 20th another case occurred living on the opposite side of the road, but who had been visiting at one of the houses and seen to drink the water. As a result of this I at once stopped the use of the water from the well, which was found from the analysis of Professor Frankland, of Mason University College, Birmingham, to be seriously contaminated and quite unfit for use. I am glad to say no more cases occurred except in the two villas supplied by the same drinking water well, and only the one case outside. The well was immediately closed and water from the City mains laid on, the drainage overhauled, water closets substituted for the privy midden system, and up to this time nothing further has occurred.

This case is a striking illustration of the danger of using water from wells in the proximity of dwellings and how they may become contaminated, and how serious may be the result. Only I death occurred in connection with these cases, and this was the servant girl. I may add that Professor Frankland endeavoured to find the Typhoid Bacillus, but was not successful.

As regards the other cases mentioned in my Report, they call for no special comment, as they were sporadically distributed throughout the year.

#### MEASLES.

This disease has caused 16 deaths, as compared with 12. This is not notifiable in your district, but so far as I can ascertain about 351 cases have occurred.

The question of making Measles a notifiable disease has occupied my thoughts for a considerable time, and the matter has been fully discussed by the Medical Officers of Health's Society. Some are in favour of adopting the principle of notification, but the majority are distinctly against it. My own opinion is that it is useless to spend money to carry it out as very little good could come of it, unless you could provide means of effectually dealing

with the cases as they arise. When an outbreak occurs it usually assumes very large proportions, and that so rapidly that one is practically powerless to cope with it, and, moreover, the public are so careless and indifferent regarding it, that one's difficulty is further increased.

From my experience and my constant touch with the district, I am quickly informed of the early cases as they occur, and am able to keep a close watch over its development, and the only safe course open to me is to close the schools in the district affected as quickly as possible, and this course has been adopted in several instances during the past year, viz.:— January, July, and August.

I am not unmindful of the gravity of this disease, and if means could be devised for isolating the cases I should undoubtedly recommend the cases being reported, but until we can arrive at that stage I think we must content ourselves with dealing with it as we have done hitherto.

I have in my former Reports spoken in the same strain. I hope, however, as time goes on, we may be able to do more to cope with this malady in a more effectual manner than we can at the present time.

#### WHOOPING COUGH

Is responsible for 4 deaths only, as compared with 12 for last year.

This disease, like Measles, is not notifiable, and is treated by the public generally as nothing more than must naturally occur to children some time in their lives, and hence there is a good deal of indifference with regard to any precautions being taken to prevent its spread.

The chief danger in Whooping Cough is due to its complications, viz :—Bronchitis and Pneumonia. I am convinced many lives might be saved by greater care on the part of parents. The prevalent idea is that the malady must take its course and nothing can be done, and often medical aid is summoned too late to be of any service; children are, moreover, allowed to be exposed to the influences of cold and damp weather, when they ought to be kept indoors and properly nursed.

I have endeavoured for many years to educate the public on the importance of taking more care in such cases, and seek medical aid in all cases of this disease. Of course all children are kept away from school who are found suffering from it, and practically this is all one can do under the circumstances.

#### DIARRHŒA

Has caused 19 deaths, as against 16 for 1897. The rate of mortality for the past two years has been large, as compared with former years. This is attributable to the high temperature and small amount of rainfall. A very large number of the cases which occur are among young children, and these deaths arise, in my opinion, to a large extent to improper feeding, and not a few to insufficient care in regard to the common practice now so much in use of using feeding bottles with long India-rubber tubes, which are not always kept in that cleanly state which is absolutely necessary to keep the child free from the dangers of sour milk, thereby causing a condition of fermentative Diarrhœa to be set up. If children are to be kept free from this malady, the greatest possible care is necessary to keep the milk in a state of sterilization. The only way to improve this state of things is by educating mothers in this matter. No doubt much good might be done by voluntary lady visitors in various parts of the district.

#### CHOLERA.

We continue free from this dreadful disease, although examples of English Cholera come under notice occasionally.

#### INFLUENZA.

We have not had a severe visitation of this disease for some time. Cases of the malady continue to crop up each season, but they are of a milder type than they were on its first visitation to this country. We have during this winter seen this peculiar disease assume itself again in a rather more severe form, but the mortality has been slight.

#### COMPULSORY NOTIFICATION OF INFECTIOUS DISEASES.

During the year I have received 245 Notifications of Infectious Diseases, as compared with 463 for last year, and 412 for 1896. This return shows a considerable reduction, nearly one-half, which is very satisfactory considering that we are becoming so much more densely populated.

I am pleased to say the Notification Act has been kept well in force during the year, and there has not been any necessity to take any action against anyone. We have certainly some delay occasionally, but there is an explanation of a satisfactory nature to account for it, as cases are not always capable of being diagnosed in the early part of the illness, and it is, therefore, the duty of medical men not to notify until they are quite certain that the disease is one of an infectious nature.

The cases notified are as follows:—Scarlet Fever, 151, as against 312; Diphtheria, 38, as against 92; Typhoid Fever, 27, as against 15; Erysipelas, 27, as against 41; Puerperal Fever, 2, as against 0. The only increase we have to note is Typhoid Fever, but this not to any serious extent. Taken as a whole these returns are very satisfactory.

In reference to the Notification of Infectious Diseases, I am pleased to state that I have received every courtesy from the medical men of the district. I have from time to time visited and conferred with them in cases of a doubtful nature with very satisfactory results.

A perusal of the following Table will give you the details of the cases.

#### NOTIFICATION OF INFECTIOUS DISEASES TABLE

DISEASE.	Selly Oak.	Selly Park.	Moseley.	King's Heath.	Tenacres.	Stirchley.	Northfield.	King's Norton.	West Heath.	Beoley.	Holly Wood	Longbridge.	Rubery.	Rubery Asylum	Workhouse.	Dogpool.	Wythall.	Headley Heath.	Groveley Lane.	California.	Cotteridge.	TOTALS.
Scarlet Fever	15	2	35	30	1	11	20	13		1	6	1	1	***	2	3	1	1	2	1	5	151
Diphtheria	16		2	E	1.64		6	6		2	***						***		***	***		38
Typhoid Fever	14	1	1	7		***		2					1	1			****		***			27
Membranous Croup			***				***						,	144		***			***			
Erysipelas	12		5	3	1	3	1				1			1		***						27
Puerperal Fever							1	144	1				***	***						***	***	2
Small Pox		***																		***		***
TOTALS	57	3	43	46	2	14	28	21	1	3	7	1	2	2	2	3	1	1	2	1	5	24

#### INFECTIOUS DISEASES PREVENTION ACT.

We have not found it necessary to take any special proceedings, legal or otherwise, in reference to this Act. The work in connection with it has gone on as well as could be reasonably expected. We have the power by this act to adopt very stringent measures if necessary, but I believe in being reasonable with the public in the trying circumstances in which they are placed, when Infectious Disease visits their house.

#### SYNOPSIS OF THE MONTHLY REPORTS.

As in my former Reports, I consider it of value and interesting to quote briefly the statistics, and the chief points raised in my monthly Reports to you, so that you may be able to note and recall the various matters brought before you during the year. The following is a summary of them:—

For the Month of January.—The Birth-rate was 28.07, Death-rate 9.1, Zymotic Death-rate 1.2 Notifications 20: Scarlet Fever, 17; Diphtheria, 2; Erysipelas, 1. The Scarlet Fever cases occurred at Moseley, King's Heath, Northfield, and Selly Oak, and were all removed into your Hospital, with the exception of 4. The cases of Diphtheria occurred at Moseley and Northfield. Two deaths from Scarlet Fever occurred at the Hospital, 1 from Tardebigge, the other from Dogpool. Special attention was called to the defective drainage at the Hospital, and I met Mr. Cross, your Surveyor, to devise more adequate means of keeping the drains in order, and I further recommended that the adjoining land should be used for the purpose of facilitating the drainage. This matter is still under your serious consideration. The Public Water Supply of Bartley Green was under consideration at this time, and a sample taken and analysed by Mr Spilsbury, who found it a satisfactory supply. Hospital report—20 cases of Scarlet Fever admitted, 8 discharged cured, 2 died, leaving 39 under treatment 3 of the cases came from outside your district.

For the Month of February.—The Birth-rate was 25.26, Death-rate 12.4, Zymotic Death-rate 0.9. Notifications 9: Scarlet Fever, 5; Enteric Fever, 2; Diphtheria, 1; Erysipelas, 1. Two deaths occurred from Zymotic Diseases, viz.: 1 from Diphtheria, at Selly Oak, the other from Enteric Fever, at Rubery Hill Asylum. The Scarlet Fever cases occurred at King's Heath and Stirchley Street. I attended King's Heath Police Court in reference to the defective state of the drainage and domestic offices at Mr. J. R. Green's property at Tenacres, and he was fined. I also attended the conference at Stourbridge initiated by the Worcester County Council, on Acid Waste from the Metal Works in various parts of the district. I also made a report on the refuse "tip" at Mr Parton's Brickyard at King's Heath, and made certain suggestions. Hospital report—9 cases of Scarlet Fever admitted, 17 discharged cured, leaving 30 under treatment, 8 being outside cases. I met and conferred with Hospital Sub-Committee.

For the Month of March.—The Birth-rate was 30.4, Death-rate 12.7, Zymotic Death-rate 0.2. Notifications 45: Scarlet Fever, 33; Diphtheria, 7; Typhoid Fever, 3; Erysipelas, 2. The Scarlet Fever cases occurred at Moseley, King's Heath, Dogpool, Stirchley Street, Selly Oak, and Northfield; the Diphtheria at Selly Oak, Northfield, King's Heath, and King's Norton. In consequence of complaint from Mr. Watson, Middleton Hall Road, King's Norton, respecting his daughter's illness from Diphtheria, and claiming compensation, I made a special Report, and advised you not to entertain any claim made upon you as there was no evidence that the disease had been contracted by any fault of the Council. I also made a special report to you on a very serious nuisance at Moseley, caused by the City Corporation officials tipping slaughterhouse manure and offal on a field in the heart of the village. Hospital report—21 cases of Scarlet Fever admitted, 3 from Clent and Hagley, which are outside cases; 21 discharged cured, 1 death occurred, leaving 30 under treatment.

For the Month of April.—The Birth-rate was 38·3, Death-rate 9·4, Zymotic Death-rate 0·6 Notifications 39: Scarlet Fever, 16; Diphtheria, 5; Typhoid Fever, 11; Erysipelas, 7. The Scarlet Fever cases occurred at Moseley, King's Heath, Selly Oak, Northfield, and Bournville; the Diphtheria at Cotteridge and Northfield; the Typhoid Fever cases at Selly Oak. I made a special report on the Typhoid Fever Cases, and have specially mentioned them under the heading of this Disease. Hospital report—17 cases of Scarlet Fever admitted, 12 discharged cured, 1 died, leaving 34 under treatment. The child which died came in from Clent, and died a week after admission, having had the Disease in its worst possible form.

For the Month of May.—The Birth-rate was 30.6, Death-rate 10.6, no Zymotic Deaths for this month—Notifications 9: Scarlet Fever, 4; Diphtheria, 3; Erysipelas 2. The Scarlet Fever cases occurred at Northfield and Moseley; the Diphtheria at King's Heath and Beoley. Special mention was made respecting the cases of Typhoid Fever at Selly Oak, and the result of the analysis of the drinking water. I reported that there was no extension of the outbreak, and that the water had been condemned by Professor Frankland. Hospital report—4 cases of Scarlet Fever have been admitted, 16 discharged cured, leaving 22 under treatment.

- For the Month of June.—The Birth-rate was 27·1, Death-rate 8·2, Zymotic Death-rate, 0·3. Notifications 12: Scarlet Fever, 5; Diphtheria, 4; Typhoid Fever, 2; Erysipelas, 1. The Scarlet Fever cases occurred at Northfield, Stirchley Street, and King's Heath; the Diphtheria at Selly Oak; the Typhoid at Moseley and King's Norton. An outbreak of Measles at Selly Oak and Tenacres occurred; the Schools were closed. I made an inspection of the River Rea in company with your Surveyor, Mr. Cross, Mr. Spilsbury, Analytical Chemist, and Inspector Cottle. We spent several days over the inspection in order that we might be able to reply to a communication of the County Council of Stafford, and the Corporation of the City of Birmingham. Hospital report—4 Scarlet Fever cases admitted, 16 discharged cured, leaving only 10 under treatment.
- For the Month of July.—The Birth-rate was 31.9, Death-rate 12.4, Zymotic Death-rate 2.4. Notifications 6: Scarlet Fever, 3; Typhoid Fever, 1; Puerperal Fever, 1; Erysipelas, 1. A joint report was presented respecting the pollution of the River Rea, from Mr. Cross, Mr. Spilsbury, and myself, as a reply to the County Council of Stafford and the City of Birmingham. I made a representation under the Housing of the Working Classes Act, respecting a block of cottages at Holly Wood. Hospital report—3 cases of Scarlet Fever admitted, 5 discharged cured, leaving 8 in the Hospital.
- For the Month of August.—The Birth-rate was 35 31, Death-rate 14 6, Zymotic Death rate 3 3. Notifications 21: Scarlet Fever, 18; Diphtheria, 3. The Scarlet Fever cases occurred at Moselcy, King's Norton, King's Heath, and Selly Oak; the Diphtheria at Selly Oak, Northfield, and King's Heath; the outbreak of Measles previously reported had abated, and the Schools reopened. I mentioned the larger Zymotic Death-rate than usual as due to Diarrhea. Hospital report—14 cases of Scarlet Fever admitted, 6 discharged cured, leaving 16 in the Hospital. I mentioned that Miss Hewlett left the Hospital on August 27th, and Miss Pitchford, Sister-in-Charge, had resigned.
- For the Month of September.—The Birth-rate was 38.0, Death-rate 14.3, Zymotic Death-rate 2.5. Notifications 20: Scarlet Fever, 15; Diphtheria, 3; Typhoid Fever, 2. The Scarlet Fever cases

occurred at Northfield, King's Heath, Moseley, Holly Wood, King's Norton, The Cotteridge, and Selly Oak; the Diphtheria at The Cotteridge and Selly Oak; the Typhoid Fever at King's Heath and Northfield. Hospital report—14 cases admitted, 6 discharged, leaving 25 in the Hospital.

- For the Month of October.—The Birth-rate was 28.9, Death-rate 10.7,

  Zymotic Death-rate 0.4. Notifications 21: Scarlet Fever, 14;

  Diphtheria, 3; Typhoid Fever, 2; Erysipelas, 3. The Scarlet Fever cases occurred at Selly Oak, Groveley Lane, King's Heath, Moseley, King's Norton, and California; the Diphtheria at Moseley and Selly Oak; the Typhoid Fever cases at Walker's Heath and Selly Oak. The case at Selly Oak was a man brought home from the Soudan, and no doubt brought the disease with him. A special report was made respecting the "gipsy encampment" at Stirchley Street; also one on refuse collection and disposal. Hospital report—12 cases of Scarlet Fever admitted, 17 discharged cured, leaving 20 under treatment. A special report on the disinfecting apparatus was made and brought up at the meeting of the Hospital Sub-Committee.
- For the Month of November.—The Birth-rate was 19.4, Death-rate 12.5; no death from Zymotic Diseases. Notifications 6: Scarlet Fever, 4; Enteric Fever, 1; Erysipelas, 1. The Scarlet Fever cases occurred at Selly Oak, Moseley, and The Cotteridge. Hospital report—3 cases of Scarlet Fever have been admitted, 4 discharged cured, leaving 19 in the Hospital.
- For the month of December.—The Birth-rate was 26·3, Death-rate 12 0, Zymotic Death-rate 0 2. Notifications 15: Scarlet Fever, 4; Diphtheria, 4; Typhoid Fever, 2; Erysipelas, 5. The Scarlet Fever cases occurred at Selly Oak, Selly Park, and Moseley; the Diphtheria at King's Heath, Moseley, and Selly Oak. Inspected a block of Washhouses at Silver Street, King's Heath, and made a representation under the Housing of the Working Classes Act. Hospital report—2 cases of Scarlet Fever have been admitted, 1 from Quinton, an outside case; 9 have been discharged cured, leaving 10 under treatment.

#### HOUSING OF THE WORKING CLASSES ACT.

I have made two representations during the year, one in respect of a block of property at Holly Wood, the other a block of Washhouses at Silver Street, King's Heath. Action has also been taken to enforce the closing of the block of property near the Black Horse, Northfield, which was condemned last year, and these houses are now closed.

#### FACTORY AND WORKSHOPS ACT.

The Sanitary Inspectors keep a supervision over the various workshops in the district. No special action has been necessary during the year.

#### BAKEHOUSES.

These have been visited and kept in order.

#### SALE OF FOOD AND DRUGS ACT.

It has not been found necessary to take any samples during the year.

#### SANITARY STATE OF THE DISTRICT.

Continued progress is being made year by year in carrying out the work necessary to keep the district in as healthy a condition as possible Much good work has been done, and you have always been willing to carry out all measures which have been considered necessary for the benefit and health of the community at large. We have, however, many sanitary defects still requiring your earnest attention.

The great point to aim at in order to improve the sanitation of any district, is to make it as "clean" as possible, and this condition should be more particularly aimed at in connection with the dwellings of the people.

It is of the utmost importance that the dwellings of the people should be made as good as possible, not only from a structural point but from a sanitary point as well.

It is very necessary that the houses should be built up-to-date as far as the Bye-Laws will allow, that the drainage should be well done and answer the tests required, that no privy and midden system be allowed, and, moreover that no drain opening should have access to the interior of any dwelling.

The present sanitary state of the district is as good as could be expected, considering the rapid growth of it, but great care is needed to keep in check the tendency that prevails to build as rapidly as possible, regardless of the sanitary provisions necessary.

We possess, in a new district like ours, advantages to control to a large extent the way in which buildings shall be erected, and also the sanitary arrangements connected with them. I believe that every precaution is now being taken in this respect. I still feel, however, that much more might be done if we were armed with more powers as to the construction of buildings. No doubt your new Bye-Laws will help in this matter.

I find from the Surveyor's Returns of Buildings that no less than plans for 1,665 new houses have been passed, as compared with 1,136 for last year, and 1,399 for 1896. From these figures it can be readily understood at what a rapid rate the district grows, and how much the resources of the Authority are taxed to keep pace with such an enormous increase as is constantly going on. With this increase in building of course a corresponding increase in the population ensues, and as a matter of fact I estimate that the population of your district increases at the rate of quite 5,000 annually.

As a result of this large increase in the buildings there is a necessity for new roads and also extension of the drainage system, and this work has been going on very rapidly, and will continue to do so, as there are already new roads made capable of accommodation for some thousand or more houses, and these will no doubt be erected within a very short time. From these facts it follows that whatever work is done now as regards the buildings and drainage should be well done, as the future health of the district so much depends on it—I feel quite satisfied that strict supervision is being kept over the erection of houses, and the drains are tested. I cannot emphasise too much the great importance of continuing to keep up the very strictest supervision in this respect.

In connection with the construction of dwellings, I have mentioned in my previous two Reports the manner of construction which is being adopted and carried out by Mr. George Cadbury on his Bournville estate. He has decided to build a Model Village, not only as regards the construction of the dwellings but in the laying out of the estate. The main object Mr. Cadbury has in view is to provide good and healthy dwellings, and also to secure sufficient air space to ensure that his estate shall not be overcrowded.

I am quite delighted with the project I am also very pleased with the houses. I consider when this Village is completed that it will be a model of sanitation, and I consider myself fortunate to have such an example set in my Health District.

I shall take especial interest in this project. I also intend, as far as possible, to note specially the statistics of this particular locality.

I am pleased to see that most of the new houses are provided with water-closets, instead of the privy midden system, and I hope that this plan will continue to be adopted, as there is no doubt it is the more healthy plan, and as the buildings increase will become an absolute necessity. I know full well that the water carriage system increases your difficulties as regards the disposal of the sewage. Still it takes it away from the proximity of the dwellings, and that is a matter of the first importance.

I have in all my Annual Reports commented on what I consider the most "insanitary" conditions in your district. I allude to the old privy midden system. I know that this condition exists in all districts more or less, but that of course does not lessen the evils of it. I am glad to know that each year we continue to abolish a certain number and substitute water-closets in their stead. I want to see this practice continued as rapidly as possible, as I consider these contrivances nothing less than abominations. They are creators of nuisances and factors of disease, and I have no hesitation in condemning them entirely.

I know the value of the principle of "dry conservancy," and in some parts of the district, where there are no sewers, we must adopt it, and there is something to be said in favour of it when properly carried out, but it never is properly carried out, and in populous parts it is absolutely impossible to do so.

It is only necessary to reflect for one moment in coming to a conclusion on this subject. In the privy midden system all excrementitious matters are allowed to lie for weeks, and in some instances for months, close to the back doors of the houses and very often near the drinking water well. Some of these receptacles are deep, wet, and so large that there is no necessity to empty them for months. It may, therefore, be readily imagined what a manufactory these receptacles are for all kinds of deleterious emanations of a most offensive nature to be created. In addition to this, we have to bear in mind what a constant soakage of the ground is going on, rendering it so contaminated that bad gases are continuously being given off under varying conditions of the atmosphere.

We need no further proof of the condition of the soil than is found in the analysis of the water from the wells constructed near dwellings, for out of 29 samples submitted for analysis during the year, 22 were pronounced so polluted as to be unfit for drinking purposes.

With regard to the question of dramage, you have continued to extend your sewers in various directions as the buildings are erected and new roads made, and these extensions will continue even more rapidly in the coming year.

In my last Report I mentioned the matter of the Northfield sewers, of which there had been so many complaints. Some improvements have taken place in some parts of these sewers, but the remainder require your early attention. I mean chiefly the sewer in the main road. No doubt this will receive your attention in connection with the drainage of West Heath.

In further reference to the question of sewer extension I am glad to be able to congratulate you on the completion of the sewer which connects the Northfield Sewage Farm with the Works at Lifford, as this has done away with an important nuisance, and one which would be considerably augmented in the near future.

The question of sewage disposal has occupied the serious attention of us all during the year. I have visited your Sewage I arm at Lifford from time to time, and samples of the effluent have also been submitted to Mr. Spilsbury, your Analytical Chemist, for analysis.

This matter is a very serious one for you to face, as the amount of land at your disposal is so very limited, and, moreover, the amount of sewage to be dealt with continues to rapidly increase. With a view to meet this question before your difficulties further increase you are about seeking to obtain from the Local Government Board a Provisional Order, to compel Birmingham to take our sewage into their sewers. I hope this application will be successful, as it is only too manifest that we cannot properly deal with it at Lifford.

In concluding this subject I should like to mention the importance of endeavouring to arrange with the Corporation of Birmingham to remove the obstructions in the sewers at the points where we join them. I consider these barriers to the free circulation of the sewers to be fraught with a con-

siderable amount of risk and danger to the health of the inhabitants of your district.

I know some arrangements will be necessary to regulate the amount of sewage going through their sewers, but I certainly think this might be done in a more satisfactory and healthier manner than obtains now. I sincerely hope this point will not be lost sight of in any negotiations that may take place in the future.

#### REFUSE DISPOSAL.

I wish to repeat, with regard to this matter, the importance of keeping in mind the provision of a "Destructor," as I am convinced you will find it absolutely necessary to adopt this mode of dealing with the refuse of your district, sooner or later.

#### PUBLIC CEMETERIES.

The provision of your two Cemeteries, Lodge Hill and Bandwood End, will supply in this respect all you require for many years to come. I am bound to say in this respect you are far ahead of most Authorities, and are to be very much commended for so boldly dealing with this matter, and in so comprehensive a manner. Lodge Hill Cemetery is now in full working order, and Brandwood End will, I understand, be speedily opened.

#### POLLUTION OF THE RIVER REA.

This matter has been kept under my close observation during the whole of the year. In fact, I may say it has received special attention.

In consequence of a joint communication from the County Council of Stafford and the City of Birmingham, setting forth the various sources of pollution as applying to your district, I made a special inspection (occupying several days) in conjunction with Mr. Cross, C.E., your Engineer and Surveyor, Mr. Spilsbury, Analytical Chemist, and Inspector Cottle, and as a result of this inspection a joint Report was made and presented to you.

Under these circumstances I do not think it is necessary for me to enlarge on this matter any further, except to say that every source of pollution has been sought out, and so far as your own responsibility is concerned, removed as far as possible.

As regards your Sewage Farm, as I have previously said, samples of the effluent have been taken and submitted to analysis, and a watch has been kept over the Works from time to time.

#### WATER SUPPLY.

During the year 29 samples of drinking water have been analysed, 27 from wells, 1 from the Corporation, and 1 from a cellar at Bournbrook, to ascertain whether it was other than surface water. 20 of these samples have been analysed by myself, 9 by Mr. Spilsbury, who has been appointed by you to conduct the analysis of water in the future. Of the 29 samples 27 were taken from wells, and out of this total no less than 22 were condemned as unfit for drinking purposes, 3 were postponed for a short time for a second sample to be taken. 2 were reported as fair, and 2 only as good. These results show how important it is to discourage the use of well water, and also to abandon the construction of new wells.

In my last Report mention was made of the importance of occasionally analysing all public sources of supply, and to carry out that object, the water from the Public Well at Bartley Green was analysed, and found to be a good sample for domestic use. This is the only Public Supply under your control, and it is satisfactory to know that it is a good water.

#### HOSPITAL REPORT.

During the year 127 cases of Scarlet Fever have been admitted, as compared with 306 for last year. We have had no cases of Smallpox to deal with throughout the year.

Of the cases admitted, 21 came from outside your district, as follows: Clent 11, Halesowen 2, Lickey End 1, Stourbridge 3, Bromsgrove 1, Hagley 2, Redditch 1. We have to record 5 deaths as compared with 9 for last year. This number represents a percentage of 3.8, as compared with 3.3 for last year. Of these deaths 2 rightly belong to the 306 cases of the previous year, as they were admitted during that period, but died early in the year of this Report, so that the real number of deaths which apply to the 127 cases is 3 only, and this gives a percentage of 2.3, this number ought to be further reduced as 1 case did not belong to your district, so that if we take 2 deaths out of 106 cases admitted from your district, the percentage of deaths is further reduced to 1.8, which is a very remarkably low figure indeed, but which is actually the figure for the year.

These figures must be very satisfactory to you, and shows that the work of the Hospital is as good as could be in any way expected for the past year.

The particulars of the cases will be found in the following Table.

#### WEST HEATH HOSPITAL RETURNS.—1898.

Outside Districts.

1898	Selly Oak	Selly Park	Stirchley Street	Moseley	King's Heath	Tenacres	King's Norton	Northfield	Cotteridge	Dogpool	Workhouse	Wythall	Longbridge	Headley Heath	Groveley Lane	California	Lickey End	Clent	Halesowen	Stourbridge	Bromsgrove	Hagley	Redditch	TOTAL
Jan.	2	1	1		2		1	4											1					12
Feb.	2		1		2	1		1	5		***			200				4	***	***	***	***		16
Mar.	1		1	1	1					3						***		3	111	1	1			12
Apl.	1		5	5	1						2	1					- 1-1	2		1		1		19
May	2		1	1	3		****	2					1				1	2		1		1	1	16
June			1	1				3														***	***	5
July	***			1	1			1						***				-141		***	-+-		***	3
Aug.			1	2	3		4	1									***		***					11
Sep.	4			1	2			4		***								***						11
Oct.				2	4	***	3	***	***					1			***		1	***				11
Nov.	2	1		2	1								***		2	1							***	9
Dec.	1		***					***	1				***							*	***			2
Total	15	2	11	16	20	1	8	16	6	3	2	1	1	1	2	1	1	11	2	3	1	2	1	127

I have conferred with your Hospital Sub-Committee from time to time, and brought forward those matters which immediately concerned the Institution.

A matter of much importance has concerned me in connection with the Hospital. I allude to the drainage. Owing to the absence of a sewer near, the drainage has to be dealt with on the land belonging to the Hospital, and, as a result, great difficulty is consequently experienced in dealing with it, and on several occasions this year, the drains have been in a very unsatisfactory condition. In connection with this subject, I have impressed upon the Hospital Sub-Committee the importance of acquiring the adjoining land, so as to enable the sewage of the Hospital to be dealt with for the time being, and afterwards for the purpose of the extension of the Institution, as there is no doubt that before very long the Hospital will be quite inadequate for the increasing population.

#### TABLE III.

DEATHS REGISTERED FROM ALL CAUSES DURING THE YEAR 1898.

Note.—The Duths of Non-Residents occurring in Public Institutions situated in the District are included, and the Doaths of
Residents occurring in Public Institutions situated beyond the limits of the District are excluded.

Residents conserving an	Pari	was .	Dunn	21000	nos	aica e			AGI	1000					_
									1	1			85	Totale	55 to FI
	0.14		1.50 5	\$ to 1	5 15			-		-	65 60 75		and up-		
I. Specific Febrile, or Zymotic Diseases	M 11	121	4 7	3	F M	F 2	M F	M I	M I		M 1		M F	M F 33 29	M 1
II. Parasitic Diseases	8	1	7 5	1	5 4	11	1 12	5	512		8 6 3	1 6		61 58	
V. Developmental Discuses VI. Local Discuses	14.	25 1	0 11		4 6	6	1 7			7 26 1	5 35 31	9 22	2 4	35 47 163 154 15 3	-
VII. Deaths from Violence VIII. Deaths from Ill-Defined and not	34		1 1		1	1	3 1	2	3					35 19	
	103	1000	-	-	1111	-		16 1			4 45 45		-	342 310	
ISpecific Febrile, or Zymotic										1	1				
1.—MILLEMATIC DISEASES.															
Smallpox Vaccinatel									111	111					-
Measies Scarlet Fever	2	2	7 1		1									9 7	
Typhus Whaoping Cough	1		1 1									144		2 2	
Diphtheria Simple continued and Ill-defined Fever			2 :	2		-,		1	13	18				1 1	-
Enteric or Typhood Fever Inflorana Other Minimistic Diseases			1				1			1	1	-		3 3	
2.—Diaurmeal Diseases.	-			-				1					Na.		-
Simple Cholera			1					000	111	1		1		11 8	-
Diarrhora, Dysentery	8	-	-	-	-			100	-	100		1		-	
3.—MALARIAL DISEASES. Remittent Fever								100				***			
Ages								24				-	110		
4 Zoougeous Distants.  Compax and effects of Vaccination				100									1		-
Other Diseases (e.g., Hydrophobia, Glas- ders, Splenic Fever)	4														-
5VENERAL DISEASES.  Syphilis		- 2										-		3	
Gonorrhous, Stricture of Urethra					4		-		-	-		-	-		1
6.—Septic Diseases.									"			-			
Erysipelas			*					100			1			1 "	
	11	12	-	9 3	2	-	-	1 1		2	1 1	2 1		33 2	-
II.—Parasitic Diseases.  Thrush, and other Vegetable Parasit	sie														1
Worms, Hydatids, and other Anim Parasitic Diseases	43		344									-			1
	1	111	-						-		-	-			1
III Dietic Diseases. Want of Breast Milk, Starvation												1			1 -
Scurvy Chronic Alcoholism Delirium Tremens												311	411		15
				-									7	1	-
IVConstitutional Diseases. Rheamatic Fever, Rheamatism of	the													1.3	.l
Rheumatism				03	. 1		2	1	1				1	1	5
Ricarts Cancer, Malignant Disease Tabes Mescaterica			1.4						1 3	3 3	8 3	1	2	9 1	6 1
Tubercalar Meningitis, Hydrocephalu Pathisis	s	3	1 2	4 1			2 1 610	10 1	2 8	1 4	- 1			33 1	9
Other forms of Taberculosis, Scrofula Purpura, Hamorringic Diathesis Ausmia, Chlorosis, Leucocythomia					1								111	1	1 :
Glycounts, Dubetes Mellitus Other Coastitutional Diseases					1				1			2 1		1	4
		6 1	7	5 1	3	1 1	111	12 5	512	4 5	8 4	3 1	4	61 3	8
V.—Developmental Diseases.  Premature Earth Abelectaons		2 1													2
Congenital Malformations Old Age		i	1								. 5	1012	19 4	1	13
VILocal Diseases.		14	14								- 5	1012	19 4	4 35	7
1.—Diseases of Neuvous States Inflammation of Bosis of Membranes							1			1	1 2		2	2	7
Apoplexy, Softening of Brain, Hemiple												1			
Brain Paralysis Insanity, General Paralysis of the Inc Epilepsy	ia.tee			- 1		1	1	. 1	2 1	1 3	3 7	3 2	1	18 2 8	7
Larragismus Stridalus (Spassa of Glo	ttis)	8	7 1	2									-	9	9
Discuse of Spinal Cord, Parapirgia, P. Lyun Agirana Other Discusses of Nervous System	ACA-						2	- 1	1 1	1 2	1	2	1	4	6
2Diseases of Organs of Special Se		-			111									-	
e.g., of Ear, Eye, Nose)	. A SE		- 4								1			2	
3.—DISEASES OF CIRCULATORY SYST	CW.														
Pericaplitia															
Acute Eudocarditis Valvalar Discuses of Heart Other Discuses of Heart		1				1			1 1			11		1 2 30	2
Aneurism		1				2	1 3	1.3		3		. 1		2	
Other Discous of Blood Vessels						-									-
4 Deseases of Respiratory Stat	EM.									0					
Creep Empsysems, Asthma					1					***	1				1 1
Breachita Pacanonia Pountsy		9	3 1	1		1 2	1 2	1	1 1	2 1	2 8	5 2 3 1	8 1	1 17	24
Other Diseases of Respiratory Syste	m			***	***	1		. 1		100				1	
		19.9	16 4	2	41	41.6	6.50	201	6 15 33	13.11	1270	27 7	21.9	3 1 2 9 1	257

5.—Diseases of D	GENTIVE ST	STEM.	1	0 to 1	1 to 5	5 to 15	15 to 25	75 to 35	35 to 65	65 to 56	55 to 65	68 to 76	71 to 81	and up- wards.	Totals.	15104
	Brought	47		2 16	8 7	4 4	6 4	10 2	6 6	17 13	18 12	29 27	7 21		129115	-
Sentition				2 2	1		100	-						111	2 3	111
Assesses of Stomach							2		1			1	110		1 3	
Interitis Dutractive Diseases				6 7	2 2			1 1			111	1 1	111	1	2 2	
Peritonitia					1	100	***		1	111					2	
Licites Circlinais of Liver					-		***			1 1	3	1 1			5 3	
aundice and other	Diseases of	Liver		1		211			1						1 1	
Other Diseases of D	igestive Sys	tem			111		111	5111	111	111	***		***		-	000
	Same.			9 9	2 4	111	2	1 1	- 4	1 1	3	3 2			19 24	
Diseases of Ly																
e.g., of Lymphatic							.00		1111				***		10.00	
-DISEASES OF GO	LAND-LIKE	OHDAN	3													
e.g., Brouchocele,		(mane)	ш													
e.g., secondonic,		taran. y	7												100	
8 DISEASES OF U	SEINART ST	STEM.													2	
Nephritis								1	1	1	1 1	1 1	1		2 6	-
Bright's Dingane Al	baminaria						1000			2 1	3	1 1	2		6 2	111
Disease of Bladder of the Diseases of the	or of Prosts	System					100	100	m=1 m=1	1	1				i	,
Action and an arrangement of the	or or other year						-	-			5 .	3 2		-	13 8	-
-DISEASES OF REP	HODECTIVE	Steres		***				1	- 1	3 2	5 1	3 2	2 1		1	100
A. Of Organs																
Male Organa															1000	
Female Organa															1111	100
				140	111						in			-		
s. Of Pa	rturities.														1 8	
Abertion, Miscarria	24							110							111	-
Partperal Conveises	199							2			111				2	
Placenta previa, Fi Other Accidents of	Child Birth							1	1						2	
		100		1000		-	-	3	1	-			-		-	-
10 Diseases or I	loves and	Jainte														
Caries, Necrosia	Saninatitis													total .	111	111
Artherities Charles a																
Arthritis, Ostitis, I	lones and Jo	einte.		1						1					1 1	111
Arthritis, Ostitis, I Other Diseases of I	lones and Ju			1						1					1 1	
Arthritis, Ostitis, I Other Diseases of I	INTEGERS			1									Tank C	-	1 1	
Arthritis, Ostitis, I Other Diseases of I II —Diseases or Sur Carbancle, Phlorus	INTEGERS TEM.	STARY													-	
Arthritis, Ostitis, I Other Diseases of I	INTEGERS TEM.	STARY									- 11				1 2	
Arthritis, Ostotis, I Other Diseases of I 11 —Diseases or Str Carbuncle, Phlegu- Other Diseases of I	INTEGERS TEN. on ateguments	STARY oy Syst	en	1					***						-	
Arthritis, Ostoris, I Other Diseases of I 11 — Diseases or Sur Carbuncle, Phiggs Other Diseases of I VII.— Deaths:	INTERESE TEM.  on ateguments from Viole	DY Systemore.	en	1					***						1 2	
Arthritis, Ostotis, I Other Diseases of 1 11 — Diseases or Sur Carbunde, Phlogm Other Diseases of I VII.— Deaths i 1.— Accessor	INTEGERS TEN. SE atteguments from Viole SE NEGLIGE	DY Systemore.	en	1 33 21	10 1	4			6 11	21 12	26 11	35 31	9 21	2	1 2	
Arthritis, Ostotis, I Other Diseases of I 11 — Duscases or Sur Carbuncle, Phlogm Other Diseases of I  VII.— Deaths: 1. — Accident Fractures and Cost	INTERCENT TEM.  On altegumenta from Viole On NEGLECE tunions	DY Systemore.	en	1 33 21	10 1	-			***	21 12			9 21		1 2	
Arthritis, Ostotis, I Other Diseases of I II — Diseases of I See Carbuncle, Phlegmother Diseases of I VII.— Deaths: I.— Acceptant Fractures and Cost Guisshot Wounds: Cet, Stab	INTERCENT TEM.  On altegumenta from Viole On NEGLECE tunions	DY Systemore.	en	1 33 21	10 1	4	1	1	6 11	21 12	1 26 11	35 3)	9 23	2	1 2	
Arthritis, Ostotis, I Other Diseases of I 11 — Diseases of See Carbuncle, Phlogm Other Diseases of I VII.— Deaths: 1.— Accidence Gunshot Wounds Cot, Stab Born, Scald	INTERCENT TEM. On ateguments from Viole On NECLICE Unions	NYARY NY SYM NECE.	en	1 33 21	10 11		1	1	6 11	21 12	26 11 1	35 31	9 23	2	1 2	
Arthritis, Ostotis, I Other Diseases of I 11 — Diseases or Stre Carbuncle, Phlogmother Doesses of I WIL — Deaths: 1. — Accident Fractures and Coul Gunshot Would: Cut, Stab Burn, Scald Poisson Dyowning	INTEGERAL AND	NYARY NY SYN	en	1 33 21	10 1		1	1 2	6 11	21 12	26 11	35 37	9 23	2	1 2	
Arthrits, Ostins, I Other Diseases of I 11 — Diseases of S S Carbuncle, Phlogue Other Diseases of I . — Accident I. — Accident Fractures and Cost Gunshot Wounds Cut, Stab Burn, Scal Powning Sadication Drowning Sadication	Introduct Introd	NYARY NY SYM NECE.	en	1 33 21	10 1		1	1 2	6 11	21 12	26 11	35 33	9 22	9	1 2	
Arthrits, Ostins, I Other Diseases of I 11 — Diseases of S S Carbuncle, Phlogue Other Diseases of I . — Accident I. — Accident Fractures and Cost Gunshot Wounds Cut, Stab Burn, Scal Powning Sadication Drowning Sadication	INTEGERS INT	NYARY NY SYM NECE.	en	1 33 21	10 1	•	1	1 2	6 19	21 12	26 11 1	35 37	9 22	2	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Arthritis, Ostinis, O	INTERCENT TEM. TEM. TO THE TEM	NYARY NY SYM NECE.	en	1 33 21	10 1		1	1 2	6 11	21 12	26 11	35 37	9 22	2	1 2	
Arthritis, Ostinis, O	Introduct Introd	NYARY NY SYM NECE.	en	1 33 21	10 1	•	1	1 2	6 19	21 12	1 2	35 31	9 22	2	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Arthritis, Ostinis, O	Introduce and to Introduce and a step and to	START OF SYN	en	1 33 21	10 1	•	1	1 2 2 1 3	6 11	21 12	1 2	35 33	9 22	2	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Arthritis, Ostinis, Ostinis, Ostinis, Ostinis, Ostinis, Ostinis, Ostinis, Ostinis, Ostinis, Philogram Other Dosaws of 1.—Accinery - Fractures and Could Ganshot Wounds Cut, Stab Barra, Scald Pateon Drowning Saffocation Otherwise 2.—He Manulanghter Murder	INTERCES INT	NYARY NY SYM NECE.	lens	1 33 23 2 1	10 1	•	1	1 2 2 3	6 11	21 12	1 2	35 31	9 22	2	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Arthritis, Ostinis, Ostinis, Ostinis, Ostinis, Ostinis, Ostinis, Ostinis, Ostinis, Ostinis, Philogram Other Dosaws of 1.—Accinery - Fractures and Could Ganshot Wounds Cut, Stab Barra, Scald Pateon Drowning Saffocation Otherwise 2.—He Manulanghter Murder	Introduce and to Introduce and a step and to	START OF SYN	lens	1 33 23 2 1	10 1	•	1	1 2 2 1 3	6 11	21 12	1 2	35 33	9 22	2	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Arthritis, Ostinis, Ostinis, Ostinis, Ostinis, Ostinis, Ostinis, Ostinis, Ostinis, Ostinis, Philogram Other Dosaws of 1.—Accinery - Fractures and Could Ganshot Wounds Cut, Stab Barra, Scald Pateon Drowning Saffocation Otherwise 2.—He Manulanghter Murder	INTERCENT INTERC	STARY Systematics Society	lens	1 33 23 2 1	10 1	•	1	1 1 2 2 11 3	6 11	2 2	1 2 2	35 31	9 2	2	1 2 4 160154	
Arthritis, Ostinis, Ostinis, Ostinis, Ostinis, Ostinis, Ostinis, Ostinis, Ostinis, Ostinis, Phigman Other Doesars of 1  VII.—Deaths: 1.—Accesses of 1  VII.—Deaths: 1.—Accesses of 1  Sanshot Woulds Cut, Stab Barra, Said Paison Drowning Saffocation Otherwise  2.—Hill Manulanghier Murder  3.—S Gunshot Weunds Cut, Stab	Come and 14 INTROPES TEM.  On ategramenta from Viole On Nonze Cusions  OMICIDE.	DY Systemes	lens	1 33 23	10 1		1	1 1 2 2	6 11	2 2	1 2	35 30	9 21		1 2 (163156	
Arthritis, Ostinis, I Duber Diseases, I Duber Diseases of I H . — Diseases of E VII. — Deaths i 1. — Accident Accident Constant C	INTEGERS TEM.  BE STORY TO THE STORY T	START SYSTEMS	lens	1 33 25	10 1		1	1 1 2 2 11 3	6 11	2 2	1 2 2	335 33	9 2		1 2 4 160154	
Arthritis, Ostitis, I Other Diseases of 111 — Diseases or Carbande, Palegue Other Diseases of I  VII. — Deaths i 1. — Accident Gambiet Wounds Gambiet Wounds Gambiet Wounds Otherwise 2.— He Manalampher Murder 3.—55 Gambiet Weards Cut, Stab Prowning Saffectation Otherwise  2.— He Manalampher Murder  3.—5 Gambiet Weards Cut, Stab Prowning Baffectation Otherwise  1.—5 Gambiet Weards Cut, Stab Prowning Baffectation Drowning	Cours and 14 INTEGERS TEM.  BB ateguments ateguments trom Viole on Neutor unions  OMICTE.	DYART Systems of the control of the	lens	1 33 23	10 1		1 1 1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	6 11	21 12	2 2	35 37	9 2		1 2 4 163154	
Arthritis, Ostitis, I Other Diseases or Carbanele, Falegre Other Diseases of I  VII.—Deaths I  1.—Accusary Fracture and Car Gambie Wounds Cat, Stab Born, Said Prowning Saffection Otherwise  2.—H  Manslanghter Murder  2.—S  Gambie Weards Cut, Stab Prowning Drowning Saffection Otherwise  2.—H  Manslanghter Murder  2.—S  Gambie Weards Cut, Stab Prowning Drowning	Come and 14 INTROPES TEM.  On ategramenta from Viole On Notice Unions  OMICIDE.	DY Syst	lens	1 33 23	10 1	4	1 1	1 2	6 11	2 2 2	1 2 2	35 31	9 22		1 2 4 160154	
Arthritis, Ostitis, I Other Diseases or Carbancle, Thlegen Other Diseases of I  VII.—Deaths ! 1.—Accusesyr Fractures and Cost Ganshot Wounds Cut, Stab Presson Drowning Saffectains Otherwise 2.—Bi Mandamphter Murder 2.—S Ganshot Wounds Cut, Stab Protein Drowning Saffectains Otherwise Drowning Hampdig Language Drowning Hampdig Language Cut, Stab Protein Drowning Otherwise Otherwise Otherwise Otherwise	INTERCES TEM.  BB ateguments from Viole from Viole from Viole from Onlicities  OMICCIDE.	DYART Systems of the control of the	lens	1 33 23	10 1		1 1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	6 11	2 2 2 11 11	2 2	35 31	9 2		1 2 4 163154	
Arthrits, Ostins, I Other Diseases or Carbanele, Falege Other Diseases of I  VII.—Deaths ! 1.—Accusesy Fracture and Cost Ganshot Wounds Cut, Stab Born, Scald Powning Saffection University  2.—Bi Mandamphier Murder  2.—S Ganshot Wounds Cut, Stab Protein Diseases Di	Cours and 14 INTEGERS TEM.  BB ateguments ateguments trom Viole on Neutor unions  OMICTE.	DYART Systems of the control of the	lens	1 33 23	10 1	4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2	6 11	2 2 2	1 2 2	35 31	9 22	2	1 2 4 160154	
Arthritis, Ostitis, I Other Diseases or Carbancle, Thlegen Other Diseases of I  VII.—Deaths ! 1.—Accusesyr Fractures and Cost Ganshot Wounds Cut, Stab Presson Drowning Saffectains Otherwise 2.—Bi Mandamphter Murder 2.—S Ganshot Wounds Cut, Stab Protein Drowning Saffectains Otherwise Drowning Hampdig Language Drowning Hampdig Language Cut, Stab Protein Drowning Otherwise Otherwise Otherwise Otherwise	INTERCES TEM.  BB ateguments from Viole from Viole from Viole from Onlicities  OMICCIDE.	DYART Systems of the control of the	lens	1 33 23	10 1	4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2	6 11	2 2 2	1 2 2	35 31	9 22	2	1 2 4 160154	
Arthritis, Ostitis, I Diche Diseases, I Diche Diseases of I II — Diseases of Carbancle, Talegmother Diseases of I I. — Accuses Y. Fractures and Configuration Wounds Cut, Stab Born, Sand Posensing Saffection Otherwise 2.—Bt Masslanghler Murder 2.—S Ganshot Weands Cut, Stab Posens Drowning Saffection Otherwise 2.—Bt Masslanghler Murder 2.—S Ganshot Weands Cut, Stab Posens Drowning Hangung Otherwise 4.—Ex	INTERCES TEM.  BB ateguments from Viole from Viole from Viole from Onlicities  OMICCIDE.	NTARY Syst		1 33 22	10 1:	4	1 1 1	1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	6 11	2 2 2	1 2 2 3	35 3)	9 2	2	1 2 4 163154 4	
Arthrits, Ostinis, I Other Diseases or I II —Diseases or Carbanele, Falegm Other Diseases of I VII.—Deaths I I.—Accusesyr Fractures and Cost Ganshot Wounds Cut, Stab Born, Sand Prowning Saffection University  2.—Bi Mandamphier Murder  2.—S Ganshot Wounds Cut, Stab Proson Drowning Saffection Otherwise  4.—Ex Ganshot Wounds Cut, Stab Proson Drowning Otherwise  4.—Ex	CORT AND ALL A	STARY Syst	Jens I	1 33 23	10 1:	4	1 1 1	1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	6 11	2 2 2	1 2 2 3	35 3)	9 2	2	1 2 4 163154 4	
Arthrits, Ostinis, I Other Diseases, I Other Diseases Carbande, Falegm Other Diseases of I  VII.—Deaths I 1.—Accusesyr Fractures and Cost Ganshot Wounds Cut, Stab Born, Said Powning Saffection Otherwise  2.—H Mandanghter Murder  3.—S Ganshot Weands Cut, Stab Poisson Drowning Saffection Otherwise  4.—Ex Hanging VIII.—Deaths I	CORT AND ALL A	START OF START	Jens I	1 33 23	10 1:	4	1 1 1	1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	6 11	2 2 2	1 2 2 3	35 3)	9 2	2	1 2 4 163154 4	
Arthritis, Ostinis, I Ditche Diseases of I II —Diseases or Carbanele, Fhlegm Other Diseases of I VII.—Deaths: I.—Accusesyr Fractures and Cost Ganshot Wounds Cut, Stab Born, Sadd Poisson Investing Mandamphter Murder  2.—Be Mandamphter Murder  2.—S Ganshot Wounds Cut, Stab Poisson Ganshot Wounds Cut, Stab Poisson Ganshot Wounds Cut, Stab Poisson Hanging Gherwise  4.—Ex Hanging VIII.—Deaths: not S prosesy	INTERCENT INTERC	START OF START	Jens I	33 23	10 11		1 1 1	1 3	6 11	2 2 2	26 11 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	35 37	9 22	2	1 2 4 163154 4	
Arthrits, Ostinis, I Other Diseases of I II — Diseases or Carbande, Palegue Other Diseases of I VII.— Deaths I I.— Accident Gunder Diseases of I VII.— Deaths I I.— Accident Gunder Gund	INTEGERAL DESCRIPTION OF THE PROPERTY OF THE P	STARY TY System to the control of th	Jens I	33 29 2 2 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	10 11	4	1	1 2 1 3	6 11 1	21 12 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 2 2 3 3	35 37	9 22	2	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Arthrits, Ostinis, I Other Diseases of I II — Diseases or Carbancle, Thlegm Other Diseases of I VII. — Deaths : I. — Accuses. Tractures and Cost Gausshot Wounds Cut, Stab Born, Sadd Prisson Ibrowning Saffection Underwise 2.— He Mandamphter Murder 2.— S Ganshot Wounds Cut, Stab Protein Diseases Hanging VIII. — Deaths : not \$5 Dropoy Deathity, Atsopher Mortification	INTERCENT INTERC	STARY TY Syst  Moc.  Start  St	Jens I	33 29 2 3 3 3 3 3 3 3 3 4 3 4 3 4 3 4 3 4 3 4	10 1		1	1 3	6 11 1	2 2 2	26 11 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	35 30	9 22		1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Arthrits, Ostitis, I Other Diseases of the Diseases of the Diseases of I  VII.—Deaths ! 1.—Accuses: 1.—Accuses: Fractures and Configuration of the Diseases of I  VII.—Deaths ! 1.—Accuses: Fractures and Configuration Wounds Cut, Stab Born, Said Powning Saffection Otherwise  2.—H Mandamphter Murder  2.—S Gunshot Weunds Cut, Stab Poisson Drowning Hanging VIII.—Deaths ! not S Propey Deathity, Atsophy Mortification Tunner T	INTEGERAL DESCRIPTION OF THE PROPERTY OF THE P	STARY TY System to the control of th	Jens I	2 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	10 11		1 1	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	6 11	21 11 22 22 22 23 23 24 24 24 24 24 24 24 24 24 24 24 24 24	26 11 1 2 2	35 37	9 22	2 2	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Arthritis, Ostinis, I Other Diseases or Carbancle, Phlogram Other Diseases of I VII.—Deaths: 1.—Accident. Tractures and Conf Ganshot Wounds Cut, Stab Born, Scald Poisson Drowning Saffection Drowning Saffection Cut, Stab Manslamghter Munder 2.—H Manslamghter Munder 3.—S Gunshot Weunds Cut, Stab Poisson Drowning Hanging Otherwise 4.—Ex Hanging VIII.—Deaths: Drowny Martincation Tumour Tumour Tumour Tumour Tumour Tumour HE-marthage	CORRESPONDE SERVICES  ENTROPES  ENTR	STARY TY System The Control of the C	and	1 33 23 23 23 23 23 23 23 23 23 23 23 23	10 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		6 11	21 12 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	26 11 1 2 2	35 37	9 22	2 2	1 2 4 163154 4 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Arthrits, Ostinis, I Other Diseases of I II — Diseases or Carbuncle, Fhlogre Other Diseases of I VII.— Deaths: I.— Accidenty. Tractures and Coul Gasshot Wounds Cut, Stab Born, Soald Poisson Drowning Saffection Otherwise 2.— H. Manslanghter Murder 3.— S Ganshot Weunds Cut, Stab Drowning Hanging Otherwise 4.— Ex Hanging VIII.— Deaths: I not S; Dropoy Debility, Attophy Mortification Tuneous Tuneous Tuneous Tuneous Tuneous Tuneous Tuneous Casses us t Specific	INTERPRETARE INTERPRETARE BE DESCRIPTION BE DESCRIPTION DESCRIPTION DISTRICTOR DISTRICTO	STARY TO SYMPTON TO STARY STARY TO SYMPTON T	and	1 33 23 23 23 23 23 23 23 23 23 23 23 23	10 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 2 3 3 3 3 4 3 4 3 4 4 4 4 4 4 4 4 4 4	1 2 2	21 12	26 11 1 2 2	35 31	9 22		1 2 4 169154 4	
Arthritis, Ostinis, I Other Diseases of I II — Diseases or Carbande, Palegue Other Diseases of I VII. — Deaths i 1. — Accusers II. — Deaths i 1. — Accusers Fresters and Cort Ganshott Wounds Cut, Stab Born, Said Pression Drowning Saffectains Otherwise 2. — II. Manalampher Munder 2. — See Ganshot Weunds Cut, Stab Proise Drowning Hanging VIII. — Deaths i III. — Deaths VIII. — Deaths VIII. — Deaths VIII. — Deaths III. — De	INTEGERAL INTEGE	STARY System of the control of the c	and	33 23 23 23 23 23 23 23 23 23 23 23 23 2	10 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		6 111	21 12 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 2 3 3	35 31	9 22		1 2 4 163154 4 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Arthrits, Ostinis, I Other Diseases of I II — Diseases or Carbuncle, Fhlogre Other Diseases of I VII.— Deaths: I.— Accidenty. Tractures and Coul Gasshot Wounds Cut, Stab Born, Soald Poisson Drowning Saffection Otherwise 2.— H. Manslanghter Murder 3.— S Ganshot Weunds Cut, Stab Drowning Hanging Otherwise 4.— Ex Hanging VIII.— Deaths: I not S; Dropoy Debility, Attophy Mortification Tuneous Tuneous Tuneous Tuneous Tuneous Tuneous Tuneous Casses us t Specific	INTEGERAL DESCRIPTION AND ADDRESS OF THE PROPERTY OF THE PROPE	STARY TO SYMPTON TO STARY STARY TO SYMPTON T	and	1 33 23 23 23 23 23 23 23 23 23 23 23 23	10 1		1	1 2 2 3 3 3 3 4 3 4 3 4 4 4 4 4 4 4 4 4 4	1 2 2	21 12	1 2 2 3 3	335 33	9 2		1 2 4 163154 4 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

#### SUMMARY OF TABLE III

	No. of Deaths.			No. of Double
: Specific Febrile, or Zymotic Diseases.		Brought forward		507
1. Miasmatic Diseases	33	VILocal Diseasescontinued		
la. Influenza	6	5. Diseases of Digestive System		43
2 Diarrheal ,	19	6. Diseases of Lymphatic System		
3. Malarial	-	7. Diseases of Gland-like Organs of Uncertain Use		
4. Zoogenous		8. Diseases of Urmary Organs		21
5. Veneral	2	9. Diseases of Reproductive System		
6. Septie	2	(a). Discuses of Organs of Generation		
II Parasitic Diseases		(b). Diseases of Parturition		4
III.—Dietic Diseases.		10. Diseases of Bones and Joints		2
IV.—Constitutional Diseases.	119	11. Diseases of Integumentary System		3
V. Developmental Diseases.	82	VIIViolence.		
VI Local Diseases.		1. Accident or Negligence		16
1. Diseases of Nervous System	87	2. Besicide		
2. Discusses of Organs of Special Sense	2	3. Saicide		2
2. Diseases of Circulatory System	65	6. Execution		
	87	VIII Ill-defined and not Specified Causes		54
4. Diseases of Respiratory System	2	****		
Carried forward	507	Total	100	652

As regards the drainage of the Hospital, we are now, I am glad to say, nearing the end of our troubles, as you are now extending your main sewers to West Heath, and this will enable us to connect with it, and so get rid of our sewage, and I need scarcely say, how important this will be for the health of the Hospital, and furthermore save much time, labour and expense.

During the year, Miss Hewlett, your late Matron, resigned, and left the Institution on August 27th. You have appointed Miss Mary Cooper of the Selly Oak Workhouse Infirmary in her stead, and she entered on her work on October 1st, and up to the present time has discharged her duties to my entire satisfaction.

### SANITARY WORK.

From the Sanitary Inspector's Returns, and from the remarks and records generally in this Report, you will see that a great deal of work has been done, and that the health of the district has been steadily maintained during the past year.

Much still requires to be done to cope with all the sanitary defects which are constantly staring us in the face. I consider, however, that on the whole, as much has been done as could be expected.

## SURVEYOR'S DEPARTMENT.

In this Department an enormous amount of work is going on, and there is every probability that this will continue for some time to come. As I have before mentioned no fewer than 1,816 plans have been passed, and these represent no fewer than 1,665 new houses. A considerable number of new roads are being made, and land that only recently presented a scene of agricultural activity is now a network of streets.

In concluding this Report I wish to congratulate the Council on the work accomplished, also for their uniform courtesy and co-operation in the discharge of my responsible duties

I have the honour to be, Gentlemen,

Your obedient Servant,

FRANCIS HOLLINSHEAD, M.D.,

MEDICAL OFFICER OF HEALTH.

ANNUAL REPORT OF MEDICAL OFFICER OF HEALTH FOR 1898. TABLE I.

THE URBAN DISTRICT COUNCIL OF KING'S NORTON AND NORTHFIELD.

19,376.	28,300.	8,924.	48,500.	M.D.
:	:	:	1	FRANCIS HOLLINSHEAD, M.D.
:	:	:	:	HOLLI
6. Population, 1881	,, 1891	Increase 1881-91	Estimated Population, 1898	FRANCIS
21,63				:
				EDICAL OFFICER OF HEALTH.
Area in acres				MEDICAL O

MORTALITY FROM SUBJOINED CAUSES.

	Other Diseases	352										
	.səirntal	18										
	Heart Disease,	99										
	Bronchitis and Pleurisy.	54										
	Pneumonia.	30										
	52											
сапсет,												
	Ague.	:										
·	Puerperal Feve	-										
	Pyæmia,	-										
	Erysipelas,											
.19	-											
	:											
	19											
EVERS.	Other or Doubtful.	:										
CONTINUED FRVERS.	Enteric or Typhoid.	01										
CONT	.suidq\T	:										
·ų2	Whooping Coup	*										
*(,	Cronp (not	:										
	Diphtheria.	9										
	Scarlatina,	5										
	Measles	16										
	Smallpox.	:										

. 1		
ED AGES	65 and upwards.	175
SUBJOINE	25 and under 65.	197
USES AT	15 and under 25.	32
M ALL CA	5 and under 15.	19
MORTALITY FROM ALL CAUSES AT SUBJOINED AGES.	Jand under 5.	58
MORTAI	Under 1 year,	171
ATHS.	Total.	652
REGISTERED DEATHS.	Females.	310
REGIST	Males.	342
RTHS.	Total.	1332
REGISTERED BIRTHS.	Females.	633
REGIST	Males.	669

TABLE VII.

TABLE OF DEATHS during the Year 1898, in the Urban District Council of KING'S NORTON & NORTHFIED, classified according to Diseases, Ages, and Localities.

Naves of Locatrine about the first the purpose of these Maintenance of the Maintenance of	5,		MORTALITY FROM SUBSCINED CAUSES, DEFINIOUSHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																											
		1	under	under 15	and	25 and under 65	65 and up- wards.	(6)	1 Smallpox.	se Scarlatina,	e Diphtheria.	Membranous A Croup,	o Typhus	Enteric o or Typhoid.	Leating ned.	*Relapsing	# Puerperal	0 Cholera.	# Erysipelan	5 Measles.	Whosping Cough.	Distribera 51 and Dynestery.	g Rheumatic Fever.	Phthisis	Broschitts, L Paraments, and Picuriay.	Heart Disease.	19 Influenza	20 Injuries.	MI Other	Tota 22
NORTHFIELD PARISH	216	77	99	6	14	53	44	Under 5 5 upwds.			1 2			ï			ï			11	2	3		12	12 22	17		2 3	68 56	99 117
GING'S NORTON PARISH	290	85	31	5	14	72	83	Under 5 5 upwds.			3			***						4	2	14	 1	14	14 30	3 22	1 2	1 10	74 95	116 174
BEOLEY PARISH	5	1				2	2	Under 5 5 upwds.			2.2										10.				ï		1		1 2	1
KING'S NORTON UNION WORKHOUSE	87	8		1	1	41	36	Under 5 5 upwds.						141										14	1 4	ii		1	6 49	8 79
RUBERY HILL ASYLUM	39			1	3	26	9	Under 5 5 upwds.						1								ï		10		8	1		18	39
ST. PAUL'S CONVENT	4		111		31.01	3	1	Under 5 5 upwds.			1.00															ï			3	- 4
WEST HEATH FEVER HOSPITAL Rural District Connect of King's Norton)	5		3	2			1.1	Under 5 5 upwds.		3					100		35 36	***												
MOSELEY HALL CONVALESCENT HOME	6		2	4				Under 5 5 upwds						111							111			2	***	4				
								Under 5 5 upwds																						
								Under 5 5 upwds.																						
Totals	652	171	58	19	32	197	175	Under 5 5 upwds.	***	3 2	4 2			2			ï			15	4	17 2	ï	2 50	27 57	3 63	1 5	4 14	149 223	22 42
		110000	1,24				The sub	joined num	bers ha	ve also t	to be tal	en into	accoun	t in jud;	ging of	the abo	ve recor	ds of	morta	lity.										
Deaths occurring outside the district among persons belonging thereto.								Under 5 5 upwds		111	199	1 :::							441		-									
Deaths occurring within the district among persons not belonging thereto								Under 5 5 upwds															***			***	***	***		

TABLE VIII.

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 Urban District Council of KING'S NORTON & NORTHFIELD, classified according to Diseases, Ages and Localities.

| Population at all | New Cases OF SICKNESS IN Each Locality Coming to the Knowledge of the Medical Officer of Health, during the Year North Removed From The Homes in the several Localities for Thealth Medical Officer of Health.

	Ac						Man	DICAL OF	FICER O	F HEALT	IK.								FOR T	BEATMES	ST IN Iso	LATION	HOSPITAL				
NAMES OF LOCALITIES adopted for the purpose of these Statistics; Public		d to 1898	stered ths.	Aged	OX.	ina.	rria.	Dom:	-	1	FEVERS	1 10		1	lav.	OK.	10	100	nous P.			FRUEES	60	-	yá.	198	
Institutions being shown as separate localities.	Census 1891.	Estimated to middle of 1898	Register Barths	under 5 or over 5.	sodllens 1	s Scarlatina	e Diphth	A Membras	P Typhus	Enteric Typhoid	-Continue	se Relapsin	e Puerper	Chole	11 Erysipela	Smallp	a Scarlat	e Diplette	Membrane Croup.	Typhus.	Enteric Typhoid	Continue	m Relapsin	# Puerpera	Choler Othor	Erysipa 11	
	337		- 10	-	-	-		-	-	-		-	-	-		-	-	-	-	-		- 1		- 3	10	-11	
NORTHFIELD PARISH	9,907	17,342	630	Under 5 5 upwds.		14 31	6 15			2 13			ï		16	***	13 27						***				
KING'S NORTON PARISH	17,750	30,432	694	Under 5 5 upwds.	11-	29 74	5 10			2 8			ï	100	11		22 41			111							
BEOLEY PARISH	643	726	8	Under 5 5 upwds.	///	ï	2																				
KING'S NORTON UNION WORKHOUSE				Under 5 5 upwds.		2		***		***						***	2		***							***	
RUBERY HILL ASYLUM				Under 5 5 upwds.	/A.					2					···i								77			***	
ST. PAUL'S CONVENT				Under 5 5 upwds.					::	111							1111								***		
WEST HEATH FEVER HOSPITAL. (Rural District Council of King's Norton)				Under 5 5 upwds.																						***	
SHENLEY FIELDS COTTAGE HOMES.				Under 5 5 upwds.		100					***							***						****	***		
MOSELEY HALL CONVALESCENT HOME.				Under 5 5 upwds.																				:::	****		
				Under 5 5 upwds																							
				Under 5 5 upwds.																							
Totals	28,300	48,500	1332	Under 5 5 upwds.		43 108	11 27			4 23	1		2		28		35 71										

# TENER OF TOPBLATTON, HIRTHY, TANK

			1-11
			Sound I don't a remain of war age of
	-		
			PETALE GREETING
		1000	TOTAL PROPERTY.
			. Balana anthon and .
E I I I			
			Hauter values
			Kulett kontor many
			a tomalien " "
water al.			
			I DAYER ALID TORRE
			Thirties armed a
Geball .			
1 7			
			THE TWO BELLET Y BEEN
			24.500

Mortality per 1,000 of Population living during same period.

Whooping Cough Death Rate 0.08 (c) Fever Death Rate 0.02 Diarrhoea Death Rate 0.39 Phthisis Death Rate 1.07 Scarlatina Death Rate 0.10 (b) Inf. Mortal 128 Smallpox Death Rate, 0.0 Measles Death Rate 0.33 Cancer Death Rate 0.51 Birth Rate 27.46 Death Rate 11.34 (a) Zymotic Death Rate '98 Resp. Death Rate 1.73 Diphtheria Death Rate 0.12

(a) Includes Smallpox, Measles, Scarlatina, Diphtheria, Whooping Cough, Fever and Diarrhea
(b) Estimated by measuring the proportion of deaths of infants under 1 year per 1,000 of the births registered during the same period.
(c) Including Typhus, Enteric Fever, and indefinite forms of continued Fever.

	T		_	***************************************
Растрета Гечег	62	1	:	:
Erysipelas.	27	:	:	:
Typnoid Fever.	27	1	:	:
Membraneous Croup.		:	:	:
Diphtheria,	88	9	;	:
Scarlatina.	146	20	127	70
Measles,	351	16	:	:
Smallpox.	:	:	:	:
	:	:	:	:
	:	:	:	:
	:	:	Cases*	Deaths
	Cases	Deaths	Hospital	33

\*Twenty-one cases admitted from outside district.

Diseases prevalent—Scarlet Fever, Diphtheria, Measles, Whooping Cough and Typhoid Fever. Period—January, February, March, April, May, July, August, September, October, November and December.

Schools closed-January, July, and August.

Measles not notified, but cases recorded came to my knowledge.

TABLE IA.

Showing the Population, Inhabited Houses, Marriages, Births and Deaths for the Year 1898, and 10 years preceding.

#### GROSS NUMBERS.

m.		No. of		Desisters à	Correc	eted No. of	Deaths.	Deaths in Public
The Year.	Population.	Inhabited Houses.	Marriages.	Registered Births.	Total All Ages.	Under One Year,	Under Five Years	Institu-
1898	48,500	12,165	344	1,332	652	171	229	141
1897	42,700	11,055	237	1,149	643	170	228	163
1896	38,117	9,919	259	1,031	541	122	178	102
1895	34,127	8,520	172	1,010	499	107	153	120
1894	30,977	8,070	173	785	442	90	124	141
1893	29,884	7,537	151	834	537	114	141	117
1892	28,562	7,262	168	837	474	91	121	117
1891	28,300	7,009	147	735	427	81	104	107
1890	28,396	6,442	157	657	419	79	116	93
1889	26,367	6,030		642	358	57	89	102
1888	25,392	5,698		649	365	70	105	92
Average of 10 years, 1888-97	36,132.2	7,754-2		960.1	535·7	115.2	158.8	129.5

#### NOTES.

- Population at Census, 1891.—28,300.
- 2. Average No. of Persons in each house at Census, 1891.-4.03.
- Area of District in acres.—21,636.

## TABLE II.

## ANNUAL REPORT OF MEDICAL OFFICER OF HEALTH FOR 1898.

Systematic Inspection		Regularly carried out.
House accommodation		Quite sufficient.
Overcrowding		Eight cases abated.
Drainage	***	Continues to be extended in various parts of the district. The village of King's Norton is now completed, also the Cotteridge.
Water supply	•••	Provided for Bartley Green, and the Lickey 29 samples have been analysed, and tap water laid on in all cases where the supply can be obtained and the wells proved to be polluted. Water Mains continue to be extended in the district.
Excrement disposal		To Board's tips.
Scavenging		Carried out by the District Council for greater part of District.
Burial Grounds and Mortu	aries	Two new Burial Grounds provided, and Mortuary to be built.
Canal Boats		Sanitary Inspectors appointed.
Bakehouses		Visited and kept in order.
Slaughter-houses		Inspected.
Common Lodging Houses		None.
Tenement Lodging Houses	8	None.
Dairies, Cowsheds and Mill	kshops	Surveyor appointed, and Inspectors as assistants
Offensive Trades		No complaints, except as to Smoke, and pollution of River Rea.
Sale of Food and Drugs A	cts	None.
Food unfit for Human Con		
tion		
Bye-Laws		For new Streets and Buildings, Common Lodging Houses, Slaughter-houses, Hackney Carriages, Nuisances, Footpaths and Pavements, Scaveng- ing, &c.
River Pollution		The River Rea; receiving due consideration; L. G. B. enquiry held, and Injunction obtained.
Industries		Two Paper Works, Cocoa Manufactory, Brewery, several Metal Works, small Tannery, one Enamel Works, and Cycle Components Works, and one Tin Printing.
Vans and Tents		Inspected when in district.
Fruit Pickers		None.
Dept. of Insp. of Nuisance	es	No. of Notices served and Letters written—3157. ,, Legal Proceedings taken—9.
Special Reports of M. C during the year		7. 1 on Diphtheria, 1 on Enteric Fever, 1 on Pollution of Rivers Rea and Tame, 1 on Bartley Green Water Supply, 1 on Refuses Collection and Disposal, 1 on Nuisances at Moseley, 1 on Gipsy Encampments.
Vaccination Acts		Carried out as well as possible; statistics given,
Other points		

TABLE IIA.

Table showing the Annual Birth and Death Rates, Death Rates of Children, and Proportion of Deaths in Public Institutions in a Thousand Deaths for the year 1898, and 10 Years preceding.

In the Year.	Birth Rate per 1000 of the Population.	Corrected Death Rate per 1000 of the Population.	Deaths of Children under 1 year; per 1000 of Registered Births.	Deaths of Children under 1 year; per 1000 of Total Deaths.	Deaths of Children under 5 years; per 1000 of Total Deaths.	Deaths in Public Institutions per 1000 of Total Deaths.
1898.	27 46	11:34	128:55	260.73	351.22	216:25
1897.	26.90	12.17	147.95	248.83	354.58	253.49
1896.	27:04	11.51	118:33	225.50	326.03	188:53
1895.	29.59	12.27	105.9	214 4	306.6	240:5
1894.	25:34	10:87	114.0	203 .61	280:54	319.0
1893.	27 .90	15:35	136.0	212.29	263.1	217.85
1892.	30.70	12:52	108.72	192:00	257:23	246.79
1891.	25:97	12:36	110.50	189.69	243:53	250.53
1890.	23.13	12.04	120.24	188 54	253:00	221:95
1889.	24.34	10.61	88.7	159.2	270.90	284.91
1888.	25:18	10.23	107.8	194.5	295.9	252.05
Average of 10 years, 1888—1:97,	26.61	11.99	117.78	202.85	285.14	247 56

TABLE IIIA.—VITAL STATISTICS.

1889	24.34	10.61	2-0	88.7
1890.	23.13	12.04	0.73	120-24
1881.	25.97	12.36	22.0	198-72 110-20 120-24
1892	30.70	12.52	2.0	108-72
1873,	27-90	15.35	26.0	136
1894.	25.34	16.87	9.0	114.0
1805.	29.26	12.27	8.0	105-9
1896.	57.04	11:51	Ξ	118.33
1897.	26.90	12.17	1 +	147.95
1808	27.46	11.34	86.0	128.00
Average for the Years 1889 to 1898 in- clusive.	26.83	11.34	0.87	117.80 128.00 147.95 118.33 105.9
	Birth Rate per 1,600 of the population	Total Death Rate per 1,000 of the population	Death Rate from the Seven Principal Zymotic Diseases per 1,000 of the population	Rate of Infant Mortality estimated by measuring the proportion of Children who died before Attaining 1 Year per 1,000 of the Births Registered during the same period

#### TABLE IV.

Showing the Number of Deaths at all ages in 1898, from certain groups of Diseases, and proportions to 1000 population, and to 1000 Deaths from all causes; also the Number of Deaths of Infants under one year of age from other groups of Diseases, and proportions to 1000 Births and to 1000 Deaths from all causes under one year.

	DIVISION I. (Adults).	Total Deaths.	Deaths per 1000 of Population, at all ages.	Deaths per 1000 of Total Death: at all ages.
1.	Principal Zymotic Diseases	. 52	0.98	79.75
2.	Pulmonary Diseases	. 85	1.75	139:35
3.	Principal Tubercular Diseases	. 64	1.31	98.15
	DIVISION II (Infants under One Year).	Total Deaths.	Deaths per 1000 of Births.	Deaths per 1000 of Total Death under One Year.
4.			per 1000 of	1000 of Total Death under

The Zymotic Rate in this Table is calculated with Public Institutions

#### NOTICE.

- Includes Small Pox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Typhus, Enteric (or Typhoid), and Simple Continued Fevers, and Diarrhea.
- 3. Includes Phthisis, Scrofula, Tuberculosis, Rickets, and Tabes.
- 4. Includes Marasmus, Atrophy, Debility, Want of Breast Milk, and Premature Birth.
- 5. Includes Hydrocephalus, Infantile Meningitis, Convulsions, and Teething.

TABLE V.

Showing the Number of Deaths from the principal Zymotic Diseases in the 10 Years 1889 to 1898, and in the Year 1898.

Proportion of Deaths to 1000 Deaths in 1898.		0.0	24 54	2.66	6.6	6.13	-	3.06	:	29.14	79-73
Total Deaths in 1898.		:	16	ıc	9	4	:	ତା	:	19	55
Proportion of Deaths to 1000 Deaths in 10 years, 1889—1898.		0.63	10.08	8.28	11.20	14.18	:	3.54	1	11.01	29.22
Annual Aver. Proportion of nge of Deaths to 10 vears, 1000 Deaths 1889—1898. in 10 years, 1889—1898.		0.2	5.4	5.4	0.9	9 1	:	1.9	. :	6-9	32 0
1898.	-	:	16	10	9	4	-	01	:	19	55
1897.	,	:	12	11	12	13	:	-	:	16	65
1896, 1897.	1	1	1-	20	16	13	:	00		:	#
	1	11	-	20	10	12	:	1	:	67	30
1894.		#	6	5	Ç1	10	:	;	;	-	67
1889, 1890, 1891, 1892, 1893, 1894, 1895,			-	ి	Ç1	1-	1	4	1	1.5	6.5
1892.		:	-	-	01	133	:	0.1		0.1	20
1891.		-	C4	00	-	9	1	-	1	9	53
1890.	1	:	00	9	0.1	67		67	3	1	15
1889.	-	:	60	4	+	00	:	4	:	-	61
		:		:	:	:	:	1	-100	:	:
Disease.		xo	:	Fever	ria	ng Cong	Typhus	Enteric	Simple con-	в	:
Disc	100	Small Pox	Mensles	Scarlet Fever	Diphtheria	Whooping Cough	[]	Fever (	02	Diarrhœa	Totals

TABLE VI.

Samples of Water analysed during 1898, with Results.

NO.	DATE.	LOCALITY.	RESULTS.
1	Feb. 8	Jiggins Lane, Bartley Green, Public Well	Bad
2	,, 8	The Row, Woodgate, Mr. Perry's	Bad
3	,, 21	Middleton Road, King's Heath, Mr. Reeves'	Bad
4	,, 22	New Houses, West Heath, Messrs. Roberts & Son	Bad
5	Mar. 30	Bristol Road, Selly Oak, Mrs. Meere's	Fair
6	Apl. 18	Daylesford, Selly Park Road, Mrs. Jones's	
		(Hot Water Apparatus)	Bad
7	,, 28	Moseley Village, Mr. Kynnesley's	Bad
8	May 2	Myrtle Place, King's Road, Agent, Mr. Chinn	Bad
9	,, 26	Albert Place, Alcester Road, King's Heath	Bad
10	,, 26	Middleton Road, King's Heath (2nd sample), Mr. Reeves'	Bad
11	,, 26	King's Heath Place, Alcester Road (2nd Sample	Required)
12	,, 27	Myrtle Place, King's Road, (2nd Sample) Agent, Mr. Chinn	Postponed
13	,, 28	New Houses, West Heath (2nd Sample), Messrs.	Fair
		Roberts & Son	
14	,, 28	Enville, Congreve Road, Mr. Dunn's	Bad
15	June 7	Lilly Green Farm, Beoley, Mr. Richardson's	Bad
16	,, 10	Lottie Road, Selly Oak, Mr. Cooper's	Bad
17	,, 24	Jesmondene, Park Hill, Mr. Arundel's	Bad
18	July 1	Hazelwell Lane, Stirchley, Mr. Rignold's	Bad
19	,, 7	Middleton Road, King's Heath (3rd Sample), Mr. Reeves'	Postponed
		• • • • • • • • • • • • • • • • • • • •	for
			2 months
20	,, 13	Cottages by Holly Wood Post Office, Mr. Geo. Gregory's	Bad
21	Oct. 21	Two Cottages, Church Lane, Northfield, Mrs. Heves'	Bad
22	,, 21	Halls' Cottages, Church Lane, Northfield	Bad
23	,, 21	Mitchell's Property, Heely Road, Selly Oak	Bad
24	Nov. 17	Tap Water from The Briars, Park Hill, Moseley	Good
25	,, 19	Water from Cellar, Beaumont's, Bournbrook	Fair
26	,, 21	Water from Bushill's, Walker's Heath	Good
27	Dec. 6	Reeves' Property, South Side, Poplar Road, King's Heath	Bad
28	,, 6	North Side.	Bad
29	,, 17	Glover's Property, Silver Street, King's Heath	Bad

## SURVEYOR'S REPORT ON BUILDINGS, &c.

Year Ending 31st December, 1898.

Ward.	Year.	No. of Plans.	Houses.	Public Buildings.	Factories, Workshops, Warehouses,&c.	Alterations. Additions, & Various.	Total.
Moseley	1898	70	172	1	1	25	199
King's Heath	,,	105	441	2	1	14	458
Stirchley	,,	52	211	1	1	15	228
Selly Oak	,,	53	555	2	1	20	578
Northfield	21	56	144	3	1	14	162
King's Norton	,,	48	142		1	46	189
Beoley	,,	2				2	2
		386	1665	9	6	136	1816

AMBROSE W. CROSS, C.E.

Engineer and Surveyor.

### URBAN DISTRICT COUNCIL OF KING'S NORTON AND NORTHFIELD.

## INSPECTOR'S REPORT OF THE SANITARY WORK COMPLETED

During the Year ending December 31st, 1898.

Prevention of Infectious	Number of cases reported	107
Diseases (under	Number of houses disinfected and cleansed	86
Medical Officer)	Number of patients removed to Hospital	61
Houses	Number made fit for habitation	1
	Number cleansed and lime-washed	46
Overcrowding	Number of cases abated	1
House Drains	Number laid or re-laid	52
	Number cleansed, trapped, ventilated	200
	Number of defective waste pipes rectified	69
Water-closets	Number repaired and ventilated	18
Privies and Ash pits	Number converted to w.c 's or slop closets	103
	Number converted to pail closets	. 0
	Number repaired	12
Dust Bins (portable)	Number of new bins provided	130
Scavenging	Portable receptacles cleared (about)	9500
Smoke Nuisances	Number under observation (about)	30
	Number abated	4
Water Supply	Number of wells cleansed and repaired	2
	Number of wells closed as polluted	3
	Number of houses supplied from waterworks	
	during the year	23
	Number of samples taken	18
Slaughter Houses	Number registered or licensed	12
Dairies and Cowsheds	Number of registered cowkeepers, dairymen,	134
XII. 1 1	aud purveyors	
Workshops	Number subject to supervision (about)	80
Canal Boats	Visits made to canal	42
	Number of boats inspected	3
Animals kept so as to be a Nuisance	Number of nuisances abated	13
Clerical Work	Official letters and notices written	1300
Complaints	Number received and attended to	302
Game Dealers	Number licensed	7
Petroleum Stores	Number licensed	. 2
Hackney Carriages	Under supervision	40

## JOHN HOUGHTON,

Certificated Engineer and Surveyor, Member Sanitary Institute,

## KING'S NORTON AND NORTHFIELD URBAN DISTRICT COUNCIL. No. 2 DISTRICT.

## Report of Sanitary Work completed in the Year ending 31st December, 1898.

	December, 1898.			
NT 1	of cases of Infectious Disease enquired into			66
Number	Houses Disinfected and Cleansed			40
2.2	Patients removed to Hospital			44
2.7	Houses or Premises visited for special purposes		5	2740
,,		ection		1076
- ,,	Houses Cleansed and Lime-washed			172
2.2	cases of overcrowding abated			7
,,	Drains tested		4.0.0	31
,,	House Drains laid or re-laid			65
,,	House Drains cleansed, trapped and ventilated			246
37	defective Waste-pipes remedied			80
,,	Dumb-wells rectified			1
,,	Dumb-wells rectified additional Water Closets provided			2
**	Water Closets repaired, ventilated, and supplie	d with fl	ush-	
,,	cisterns	111		179
	Privies converted into Water-closets or Slop-closet	s		47
,,	Converted to Pail Closets			8
11	Privies and Ash-pits repaired		***	35
,,	new portable Dust Receptacles provided		***	112
"	Applications to Empty Ash-pits received and atte	nded to		1044
- 11	Privies and Ash-pits Cleansed		***	7051
,,	Portable Receptacles Cleansed		:	34527
,,	Loads of Ashes and Excrement removed			2251
,,,	Loads of Ashes and Dry Refuse removed			2371
,,	Smoke Nuisances under observation			40
,,	Wells cleansed and repaired			2
"	Wells closed as polluted			1
,,	Houses supplied from Water-works during the year	r		34
,,	Samples of Drinking Water taken for Analysis	***	***	15
	Workshops visited			12
,,	Dairies, Cow-sheds and Milk-shops visited, 24; re	gistered,	7	
,,	Canal Boats inspected		***	45
,,	Slaughter-houses visited, 22; licenses issued, 5	***		
,,	Food and Drug Shops visited	***		21
,,	Seizures of Unsound Food		1.4.4	3
11	Piggeries, Stables, &c., inspected			39 .
,,	removals of accumulations of offensive refuse			495
,,	Pollution of Rivers inspection			18
,,	Samples of Effluent, Mud, &c., taken			61
,,	Hackney Carriages, Licenses issued, 1; Drivers i	icenses,		
,,	Game Dealers' Licenses issued	***		2
17	Pawnbrokers' ,, ,,			1 3
.,,	Petroleum Stores ,, ,,	9	***	0
,,	Legal Proceedings; Summonses, 6; Convictions	, 5		
,,	Consultations with Clerk, 41; M.O.H., 62; Surv	eyor, 23	t of	
,,	,, Builders and others, Ke			341
	Nuisances, &c	***		83
,,	Official Reports written		***	40
,,	Complaints received and attended to		***	1624
,,	Letters, &c., written	***	***	233
,,	Notices served			224
11	Notices complied with	fees coll	lected	LLT
,,	Deaf or Blind Children attending school,	ices con		4
	fortnightly from Parents	***		10
,,	Refuse Tips Inspected	***		10
CONTRACT OF A STATE OF THE PARTY OF THE PART	ADMILID TO C	OTTI	COT	

SELLY OAK,

ARTHUR T. COTTLE, C.S.I.

January, 1899.

INSPECTOR OF NUISANCES.

