#### [Report of the Medical Officer of Health for Barking].

#### **Contributors**

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# URBAN DISTRICT OF BARKING TOWN.

# ANNUAL REPORT

OF THE

# MEDICAL OFFICER OF HEALTH

AND

# SANITARY INSPECTOR

FOR THE YEAR 1898.

C. F. FENTON,

Medical Officer of Health.

F. MARTIN,
Sanitary Inspector.

Barking :

WILSON & WHITWORTH LIMITED, STEAM PRINTERS.



# BARKING TOWN

# URBAN DISTRICT COUNCIL.

# MEDICAL OFFICER'S ANNUAL REPORT FOR 1898.

## GENTLEMEN,

I beg to submit my Report for the Urban District of Barking Town for the year ended December 31st, 1898.

The population estimated up to the middle of the year was 20,000. Population as per census of 1891, 14,301.

Area in acres, 3,813.

Persons per acre, average for the whole district, 5.2.

		]	ESTIMATED		PERSONS
		P	OPULATION.	ACRES.	PER ACRE.
North Ward	-	-	4,855.8	61	79.6
South Ward	-	-	4,763.8	95	50.1
East Ward	_	-	5,166.3	2,916	1.7
West Ward		-	6,241.6	741	8.4

Number of houses in the Town, 3,687, viz.:-

North	Ward	-	-	-	852
South	Ward	-	-	-	836
East	Ward	-	-	-	906
West	Ward	-	-	-	1,093

This, compared with the figures for 1897, gives the following result:—

North Ward	-	-	increase	26
South Ward	-	-	"	93
East Ward	-	-	,,	90
West Ward	-	-	"	40
		Total	increase	249

Number of houses in June, 1895 (when a house to house inspection was made), was 3,161. This gives an increase of 425 houses during that period.

Number of persons per inhabited house, 5.5 (on the basis of the census of 1891), but in the above figures I have reckoned 5.75, as in my opinion, this is a more correct computation at the present time.

In 1898 there were 321 deaths and 724 births. The figures for 1897 were 393 and 771 respectively. The natural increase of the population, by excess of births over deaths, was therefore 403, as against 378 in 1897.

## WATER SUPPLY.

The water supply to the Town is constant, but the Water Company now insist on a storage cistern being provided.

Some difficulty has arisen of late in connection with cleansing of these cisterns, and a Clause has been inserted in the Barking Town Improvement Bill, which it is intended to promote in the next session of Parliament, enabling the Council to make Bye-laws with reference to this question. The Clause is numbered 137, and reads as follows:—

Cleansing of Cisterns.

"137. The Council may from time to time make Bye-laws for securing the cleanliness and freedom from pollution of tanks, cisterns, and other receptacles used for storing water, used or likely to be used for drinking or domestic purposes, or for manufacturing drink of any sort."

The quality of the water remains good, but the Chlorides have increased since last year. The actual figures in grains, per gallon, are as below:—

	No	v., 1897.	June, 1898.	Nov., 1898.
Chlorides -		16.2	30.5	24.2
Total Solid Resid	lue		91	79.2

COMPLETE ANALYSIS OF SAMPLE OF WATER TAKEN IN THE TOWN,
BOTH CHEMICAL AND BACTERIOLOGICAL.

#### CHEMICAL.

Colour in 2ft. tube, colourless; Turbidity, none; Odour, none.

Consti	tutents in—						Grains per Gallon.	Parts per Million.
1.	Residue left or	evapor	ration,	dried	l at 1	10°	79.2	_
	Loss of residue	180			-	-	8.0	-
2.	*Chlorine pres	ent as (	Chlorid	les	-	-	24.2	
3.	Ammonia, free	-	-	-	-	-	-	0.01
	Do. albu	uminoid	-	-	-	-	-	0.03
4.	Nitric Acid (H	NO3) pr	resent	as nit	rates	-	0.77	_
5.	Nitrites -	-	-	-	-	-	None	_
6.	Oxygen Absor	bed -	-	-	-	-	0.016	0.238
7.	Hardness Total	l -	-	-	-	-	23.4	_
8.	*Metals -	-	-	-	-	-	No Pb.	Cu Fe.

<sup>\*</sup>Remarks: =39.9 grains Salt; Lead, Copper, Iron, absent.

The Chlorides, Hardness, and Total Residue are high; but the water as regards Organic matter is of a high degree of purity, and in my opinion is quite safe for use for drinking.

Frederic Jas. M. Page, B.Sc., F.I.C.

November 23rd, 1898.

Report on the Examination of a Sample of Water taken by R. Blewitt, from Dr. Fenton's house, constant supply, November 10th, 1898, by W. Bulloch, M.D.—

The water was examined in plate cultivations on gelatine, agar, and special media for Pathogenic bacteria. At the end of four days the number of colonies per cubic centimetre was estimated at 200. These bacterial colonies were of the ordinary water bacterium type. No organisms resembling any of the known pathogenic bacteria were found. In conjunction with the chemical examination made by Mr. Page, I consider that the bacteriological examination shows the water to be hygienically safe and good.

W. BULLOCH.

I visited the Reservoir at Aveley, from which the Town derives or partly derives its supply, and I found there was apparently no possible means by which any pollution could reach the water there. It is a covered reservoir.

Several samples have been taken during the year from localities supplied by the South Essex Water Works Company, and in each case the supply has been pronounced wholesome, both by Chemical Analysis and Bacteriological Examination.

Samples have been taken during the year from the following districts:—

February 9th.—Ilford.

May 4th.—Aveley.

June 7th. - Romford.

November 10th .- Barking.

Besides these full analyses, I have partially analysed the water, myself, at frequent intervals.

#### OTHER SUPPLIES IN DISTRICT.

CREEKSMOUTH.—A full analysis of this water was given in my last Annual Report, and, therefore, need not be repeated here. The Water Company have been approached, and are prepared to lay down a main for the supply of this District, on the condition that they shall be guaranteed 10% on the total outlay, for a term of years (yet to be agreed upon) as Water Rate.

The District Council are now negotiating with owners along the proposed route of main, with a view of inducing them to agree to this, and some, the most influential, have already done so.

Section 140 of the Barking Town Improvement Bill is framed with the object of giving more powers to the Council in dealing with cases of this description.

I have analysed the water supplies to other houses in the district, and in those cases where the analysis proved that the water was not wholesome, the matter has been referred to the Surveyor, to deal with under Section 62 of the Public Health Act, 1875.

## FOOD AND MILK SUPPLY.

These important items have received a great deal of attention during the past year. Large quantities of meat of inferior sorts are brought into the town, at the end of the week, though none was found to necessitate seizure. In the summer months this matter needs much vigilance. One parcel of putrid rabbits was seized, condemned, and destroyed.

As many complaints with regard to the quality of Milk sold in the Town came to hand in the early months of the year, it was resolved by the Council to exercise what powers were open to them, under the Sale of Food and Drugs Act, and since September 9th samples have been taken by the Sanitary Inspector, and analysed by the County Analyst.

The result of this action has been that one vendor was convicted at Stratford Police Court of selling adulterated milk, and heavily fined, and several others in the town have been cautioned by the Council, the result of analysis in these cases not having been sufficiently serious to make conviction certain. Up to date several more samples of Milk, and Butter also, have been under examination, but the results have not yet come to hand.

The Dairies, Cow Sheds, and Milk Shops, have been inspected regularly, and the usual cleansing carried out. Number, 38.

It is very much to be desired, that in my next Annual Report I shall be able to state that "the powers now exercised by the Metropolitan Committee of the Essex County Council, are being carried out by the District Council; the expenses connected with analysis falling on the County rate." At a Conference of Delegates of Local Authorities in Metropolitan Essex, recently called by the Chairman of the Metropolitan Committee of the County Council, this recommendation to the Essex County Council was unanimously adopted.

Bakehouses.—Number in District, 18.

One old bakehouse in the Town was condemned during the year.

SLAUGHTER HOUSES .-

Registered 3 Licensed 1

4

The usual inspections have been made.

## BURIAL GROUNDS.

CEMETERY.—The condition of this burying ground leaves little to be desired.

Churchyard.—I much regret that nothing has yet been done to render this spot more attractive than formerly. I hope that during the present year steps will be taken to render the main walks suitable for recreation purposes.

I have inspected several graves previous to interment, but have not been able to report adversely upon the condition of the soil.

Number of interments during 1898-15.

The other Burying Grounds remain in much the same condition as when I last reported.

### INSPECTION OF DISTRICT.

This may be divided into 2 parts:-

- The Town.
- Country Districts. 2.

#### THE TOWN. 1.

Table of various Courts and Alleys in the Town of Barking, shewing their present condition and requirements :-

	Sanitary Improvements Required.
Holly Square, Tanner Street	Paving at rear of houses. Drains need examining and ventilating. Some of the roofs to be rendered water-tight.
Tanner Square, ,, ,,	Paving required round the houses. More convenience for slop-water, and better water supply. Drains should be examined and ventilated.
St. John's Retreat, North Street	The main drains have been re-laid and ventilated.
Braintree Terrace	Drains re-constructed and ventilated.
Red Lion Place	
Northbury Cottages	Drains should be examined and ventilated
Alma Place	Main drains found defective, have been
	re-laid and ventilated.
Back Reform Place	The drains have been examined and
	found in order.
(	The drains have been recently examined.
Nelson Street	The pipes are without any jointing
Trafalgar Street	material, unventilated, and in many
Trafalgar Square	parts nearly filled with soil. The
Trafalgar Place	re-construction of the drains belong-
(	ing to this area is now in hand.
Crooke's Court, East Street	These houses have been reported as unfit for habitation, and have been volun- tarily closed, but no order has been
Marangrap tant afford 2	obtained from the Court to this effect.
Morgan's Court, East Street	This court has been partly paved, the drains have been re-laid and ventilated, and most of the houses put into habitable repair. It would be well if the court were completely paved.
Broadway Avenue	Drains having been examined and found
	defective, need re-laying and venti-
	7

lating.

	Sanitary Improvements Required.
Barking Place	Several cases of Typhoid Fever have recently occurred here. The drains having been examined and found defective, need re-laying and ventilating.
Back Lane	The main sewer needs ventilating. The defects in some of this property have been rectified, but much yet remains to be done.
White's Court	All the houses here except one have been re-constructed so as to form a Mission Room. The drains have been re-laid and ventilated.
Bifron's Square	More and suitable w. c. accommodation.  Paving round the houses. Drains having been examined and found defective, need re-laying and ventilating.
Garden Place Suffolk Place Wellington Buildings Parson's Buildings Padnell Place	The drains to these properties have been re-laid and ventilated. Extra w.c. accommodation has been provided, and flushing cisterns attached. The yards still urgently need to be properly paved.
Lindsell's Court	This has been voluntarily closed for some months; the houses are not fit for human habitation in their present state.
Altoft's (formerly Orchard) Avenue	
Gas Yard	Instructions given to make up, &c. under 150th section, Public Health Act, 1875.
Morgan's Yard	Drain having been examined, needs re- laying and ventilating, and the
Morgan's Quay	surface of the court paving.  The private drains of this property need attention.

Sanitary	Improvements	Required

Factory	Road	and	Emily
Cottag	es		

Arthur Cottages, East Street

Drains having been examined, need relaying and ventilating. The back yards to this property should be concreted.

Drain needs re-laying and ventilating.

;; ;; ;; ;;

Drains belonging to this property have been re-constructed and ventilated.

Drains belonging to this property have been re-constructed and ventilated.

#### RIVER RODING.

The polluted condition of this stream first came under my notice during the summer of 1895, and from that date onwards its state has been gradually getting worse. The enormous growth of the population of so many districts through which it flows, changing small country hamlets and villages into large suburban communities, is mainly responsible for the condition of things which caused so much annoyance, and I fear disease and death to the inhabitants of Barking during the summer that has just passed. The reasons why these Districts have acted so disastrously, are I think, clearly divisible into 2 heads:—

1st.—The foul condition of effluent which was allowed to pass from the several sewage works into the River, and combined with this, the small bulk of river water there can be at the best of times to sufficiently dilute the large quantities of sewage matter, which is continually finding its way into the stream. Of course in times of drought, such as prevailed during the summer of 1895, the river's channel is converted into a stinking sewer, not much to the credit of modern sanitary science or sanitary authorities.

2nd.—The peculiar conditions which exist at the portion of of the river which receives all the sewage prior to its flowing into the Thames itself. The part of the river I refer to, is situated between Barking and the point just above Ilford, where the tidal wave ceases to be felt. This portion of the river is dammed at the Barking Town Quay, by the Barking Flour Mill, so that the quantity of the water which is allowed to flow down at every ebb tide, is regulated by the owner of the mill. If he requires the water (it may be all sewage, it is all the same) to work his mill he must have it. But supposing he does not want the water, then another claimant steps in, viz: the owner of Navigation Rights on the river. This one must have sufficient water (or liquid) to carry his barges up and down to Ilford, no matter

how much effluvium there is. Now what does this mean? Suppose on a given day the miller does not want his mill to work, and there are no barges to go up to or come down from Ilford, then the gates are thrown wide open, and the river above the great dam is emptied of everything and is almost dry. With the flowing tide comparatively pure water (how pure, is very questionable,) is allowed to pass up through the gates into the upper river, and when the tide has almost ceased to flow the gates are locked behind it to prevent its return in bulk. Now, these gates are provided with a sort of sliding panel, called "slackers," which, when the water is required for any of the purposes specified, let a little of this compound of salt water and sewage of all kinds flow into Barking Creek.

This backing up of the water into a sort of tank, may go on for several days, five or six or more, the sewage from thousands of houses flowing into it night and day during that period.

The condition of things which is then brought about, it is more easy to imagine than to attempt to describe.

With a view to attempt some amelioration in the matter (after inspecting the river myself throughout its whole length,) I wrote to the County Medical Officer, requesting his co-operation in seeking to bring about a better state of affairs. He entered very heartily into the work, and we together made an inspection of the river from Barking to Abridge. His reports to the Essex County Council fully corroborated my views, as to the disgusting condition the river was in (See E.C.C. Minutes). The remedies I proposed are as follows, and were adopted also by him.

- 1. Temporary.
- 2. PERMANENT.
- 1. (a) Effluents of Local Authorities above Ilford to be improved. I believe the Essex C. C. is bringing pressure to bear on these defaulters. Ilford with its new scheme will not, I trust, cause us so much annoyance during the ensuing year as in the past.
- (b) The more frequent opening of the gates at the mill, not only the miller's gates, but the gates owned by the Essex Sewers Commission, so that the dammed up sewage may get away with every tide, and not as now be kept behind to decompose and send forth the most abominable emanations.
  - (c) The working of the disused water-wheels at the mill.

## 2. PERMANENT.

Several schemes have been proposed all having the same end in view, viz:—The construction of an intercepting sewer of sufficient size to allow the sewage to be received from most, if not all of the districts now draining into the Roding, carrying it by this means to an outfall station situated on the banks of the River Thames. One of these

schemes is to form part of the Lea and Roding Valley scheme, promoted by the Lea Conservancy Board; another which would be confined to the Roding Valley alone. The Barking Urban District Council have expressed their disapprobation of any plan having its outfall within their jurisdiction. Neither of these, in my opinion, have much chance of success.

#### THE PRESENT CONDITION OF THE RIVER.

Of course the reduction of temperature and the heavy gales, accompanied by rain, have all combined to improve matters considerably; in spite of these modifying factors however, on several dates during November and December I found the water in as bad a condition, if not worse, than during the summer months.

I do most earnestly hope that the measures that are now being taken by the Essex County Council and the Barking District Council, may result in a better state of things above the Town Quay. The vigilance of the Thames Conservancy Board should guarantee a pure river wherever that river comes within their sphere.

### EAST HAM SEWERAGE WORKS-OUTFALL.

I am distinctly of opinion that the present condition of things at the point where this effluent is discharged, needs attention. Several times during the past year I visited this locality, and the emanations arising from the mud exposed at low water were feetid in the extreme.

The watercourses on the marshes over the gates during the summer months were very foul, and I repeat what I have already stated in former years, that milk derived from cattle partaking of this liquid, cannot be wholesome.

In connection with the outlying district special attention has been paid during the year to the water supply of houses not supplied by the Water Company, and where possible the public supply has been laid on. Wherever infectious diseases have broken out the premises have been visited and the necessary alterations (if any) ordered to be made. Other inspections have been made at intervals by the request of the Council or individual ratepayers.

The insanitary condition of the Kennedy Estate has been a source of great trouble and anxiety during the year. The condition of things at the present moment is most serious. As soon as a cesspool is dry it is at once almost filled by the drainage into it of surrounding subsoil water so that every week or two they need emptying. In my judgment these cesspools should be impervious to sub-soil water and large enough to take a sufficient amount of slop water so as to only need emptying at long intervals. Particulars of the scheme as sanctioned by the Local Government Board will be found under the head of Sewerage System.

#### OVER-THE-GATES.

The drainage of this part of the town now passes into the river without any treatment. Under the present condition the sewers get tide-locked and are apt to overflow.

A new scheme has been sanctioned for this district also.

## HOUSING OF THE WORKING CLASSES.

Several schemes have been before the Council during the year with a view to improve the housing of the working classes in the town. Two descriptions of dwelling houses were under discussion, viz:—the two or three tenement houses and the single cottage system. The latter type has been decided upon and plans have been drawn up by the district surveyor which have received the provisional sanction of the architect to the Local Government Board. The contractor having failed to satisfy the Council as to his suitability, permission has been requested of that Board for the Council to put the work in hand at once on their own account.

It is hoped that by this action of the Council, a four-roomed cottage will be provided at a rent of about 6s. or 6s. 6d. per week inclusive. An excellent site has been purchased, at a reasonable cost, on the Ripple Road, and it seems probable that the work will be put in

hand during the present year.

My opinion is that it would be a great boon to the town if more double tenement houses, having separate front and back entrances, and separate back yards, were erected. It seems to me that by this means the average size of living and sleeping rooms could be increased, without adding proportionately to the rental.

# SEWERAGE SYSTEMS.

No alteration has been made in the treatment of the town sewage during the year. I am glad to say that the offensive gases from the sewers, which have so long been a nuisance in the town, have been greatly lessened. I am of opinion that many more ventilating shafts might be added to the existing ones with advantage. About a dozen have been erected by the surveyor's department during the past year.

## KENNEDY ESTATE SEWERAGE SCHEME.

Owing to the low level of this Estate, it was found that it was impracticable to drain it by gravitation with the existing main outfall sewer in the Ripple Road. In order therefore, to bring the sewage matter to the required level, some method of lifting it has to be adopted. After thoroughly discussing the various methods by which this could be done, it was finally decided to adopt Shone's ejectors. The same difficulty was met with in dealing with the drainage of "Over the Gates." Here, not only was the district situated at a low level, but the "Creek" had to be crossed before the Over-the-Gates system could discharge into the general sewerage system of the town. These difficulties have also been surmounted by the adoption of the system mentioned above.

By this means it is hoped that not only these districts but other parts of the locality still undrained, may be easily connected with the outfall works when occasion requires.

During the past year flushing cisterns have been added to w.c.s in

the town.

I think the efforts of the Sanitary Committee on this point have been most successful.

# SANITARY IMPROVEMENTS EFFECTED IN 1898.

The following properties have been re-sewered and the sewers wentilated :-

1. Wellington Buildings (w.c. accommodation increased also).

Parson's Buildings

Garden Place

4. Arthur's Cottages, East Street.

5. Collier Place. Fisher Street.

6. Alma Place, North Street. 7. Part of Back Lane, Broadway.

Westbury Terrace, Ripple Road. 8.

9. St. John's Retreat. 10. Braintree Terrace.

Alma Place.

The following improvements have also be effected:-

Making up of Glenny Road.

Making up of part of Morley Road. 13.

Closing of White's Court. 14.

# CHIEF INDUSTRIES OF DISTRICT.

Beckton Gas Works -- This includes all kinds of labour; coal (1) porters, general labourers, stokers, engineers, &c.

Lawes' Chemical Manure Works-There are several departments (2)

here also.

(a) Manufacture of Manures and Disinfectants.

Manufacture of Sheep Dip. In connection with which I have received no further complaints since my last report.

The manufacture of Strong Acids.

(d) Brick manufacture.

(3) Agriculture gives employment to many.

(4) Warne's India Rubber Factory-Many more hands yet to be added.

Tar Works and several Factories of a similar nature. (5)

According to the last census return some 70 hands were employed (6) in the Deep Sea Fishery.

A large and increasing number of the population are workers (7)

from the Metropolis.

# INFECTIOUS DISEASE.

No. of Infectious cases during the year, 209. In 1897, 167. ln 1896, 165. In 1895, 117.

ACTION TAKEN TO PREVENT THE SPREAD OF INFECTIOUS DISEASE, GENERAL:

(1) House visited by Sanitary Official as soon as practicable after the receipt of notification.

(2) Isolation of Patient.

(3) Disinfectants supplied gratis.

(4) Bedding, &c., disinfected by steam (Washington Lyon's patent) wherever necessary, or in certain cases, burnt.

(5) Houses examined with a view of detecting defects in drainage, or any other sanitary imperfection.

(6) Printed precautions circulated, and verbal instruction given,

(7) Fumigating, whitewashing, re-papering, and cleansing of premises, whenever considered necessary.

(8) List of notified cases sent weekly to the managers of schools, laundries, pawnshops, etc.

(9) Notice at once sent to head masters and managers of schools.

(Form of notice in preparation).

#### SCARLET FEVER DURING 1898.

	No. of Cases.			Deaths.	No. Treated. in Hospital.		Per Centage treated in Hospital.	
1898		69		none		44		63.7
1897		39		none		26		66.6
1896		59		2		48		81-3

Causation and Distribution.—Several minor outbreaks of this disease have taken place during the past year. The cases have been strictly isolated, for the most part at the hospital, and the remainder in their own homes, as will be seen by the preceding table.

Several cases were discovered in a peeling state at school. On one occasion, by the courtesy of the Chairman of the School Board, I was permitted to examine the rest of the class, to discover, if possible, any others in a similar condition.

The cases have throughout been of a very mild character, and frequently the greatest difficulty has been experienced in diagnosis

# ENTERIC FEVER DURING 1898.

No. of cases notified during the year, 31.

Treated in Hospital, 23.

No. of deaths, 2. Mortality °/, 6.2.

Causation and Distribution.—From the subjoined list it will be seen in what locality the disease occurred and its probable cause. 17 cases were associated with defective drains; 1 was connected with the eating of shell fish, and in 12 cases no cause was discovered. One case was probably due to working at cleansing ditches.

## 91

# Notified Cases of Enteric Fever for the Year 1898,

SHOWING CAUSATION AND DISTRIBUTION.

No.	Date.	Address.	Where treated.	Result.	Supposed Cause.	Remarks.
1	March 23	14 Heath Street	At Home	Recovered	Drains defective	Employed at fish shop in East Street, drains defective
2	April 26	69 St. Margarets Road	Upney Hospital	,,	11- 11	East Street, drams defective
3	,, 26	., ,,	,, ,,	,,	"	
4	2, 28	8 Barking Place	A + TT ''	. ,,	,, ,,	Diana & 1:11 00 St
5	May 4	10 Cobham Road	At Home	"	·, ,,	Friend of children, 69 St. Margarets Road
6	June 6	69 St. Margarets Road	Upney Hospital	,,	,, ,,	The state of the s
7	July 18	1 Emily Cottages	,, ,,		N'' 12'	D
8	,, 27	73 St. Margarets Road 10 Church Road	,, ,,		No cause discovered	Drains tested & found perfect
9 10	Sept. 6 ,, 7	13 Nelson Street	At Home	Died	Drains defective	Complained of bad smells when going to work
11	,, 7	. ,,	,,		,, ,,	
12	,, 21	72 Ripple Road	Upney Hospital	Recovered	37" "	
13	Oct. 5	108 East Street 18 Romford Street	At Home Upney Hospital	"	No cause discovered	
14	,, 8 ., 10	59 Wakering Road	opiney Hospital		" "	
16	,, 10	10 Gas Yard				
17	,, 20	Broadway	At Home	Recovered	No cause discovered	Drains tested & found perfect
18	,, 25	129 Glenny Road	Upney Hospital	",	Drains defective and house damp	,, ,, ,,
19 20	,, 25 ,, 26	2 Smith's Cottages 4 St. Johns Retreat	" "	"	Drains defective and house damp	
21	90	2 Eldred Road	London Hospital	"	Drains found blocked	
22	,, 29	3 Braintree Terrace	Upney Hospital	311	No cause discovered	
23	,, 31	3 Bifron Street	,, ,,	. ,,	Eating shell fish	Defective drains in addition
24	,, 31 Nov. 1	16 Battery Terrace 101 Glenny Road	, ,, ,,	"	No cause discovered	
25 26	- 1	3 Braintree Terrace	St. Bartholomew's		" "	
27	,, 7	4 St. Johns Road	Upney Hospital		Drains blocked, cesspool full	
28	,, 14	24 Boundary Road	At Home	Recovered	Defective connection under w.c.	
29	,, 29	1 West Bank	,,	"	Works at cleaning ditches Defective connection under w.c.	
30	Dec. 10	38 Boundary Road 28 Back Lane	Upney Hospital	Died"		
31	,, 19	28 Back Lane	Upney Hospital	Died"	Drains defective	

### DIPHTHERIA AND MEMBRANOUS CROUP.

	No. of cases.	Deaths.	Death rate per	cent.
1898	74	7	9.4	
1897	91	9	9.1	
1896	48	6	12.5	

Of these deaths 3 were due to Membranous Croup.

Out of this number 39 were treated at the Upney Isolation Hospital, which is 52.7 per cent. of the total number.

I have again to remark after another year's treatment of the disease with the Anti-Diphtheritic Serum, I am convinced of its specific value. The death rate at the Hospital 12 per cent. of total number of cases treated including Croup cases.

The monthly returns for the disease are as follows:-

	No. of	f cases.	Dea	ths.
	1897.	1898.	1897.	1898.
January	6	5	_	1
February	5	9	_	3
March	7	- 4	2	1
April	2	5	_	_
May	3	1	_	_
June	16	1		-
July	15	5	_	
August	5	3	_	1
September	11	13	_	
October	11	11	2	
November	6	6	1	2
December	4	11	1	_
	-	_	_	
	91	74	6	8
	_	_	_ **	-

## DIPHTHERIA & SCHOOL ATTENDANCE.

(The numbers refer to children between 4 and 14 years of age.)
No. of Cases.

No. of Cas	ses.	
January 3		Schools opened, January
February 7		
March 3		
April —		Part Holiday.
May 1		
June —		Part Holiday.
July 9th 3		
August 1		All Holiday.
September 6		
October 3		
November 3		
December 4		

In 1897, June was the heaviest month with 13. In 1898 there were no cases at all at that age. The heaviest months in the year (1898), were, February, 7; September, 6; and December 4; as against July, 9, and October, 7, in the preceding year. I am therefore unable to detect any definite connection between School Attendance and Diphtheria.

I regret to say that I am unable to add a spot map, shewing the distribution of infectious diseases in the town, as there is no such map at present available.

# DIPHTHERIA, 1898.

2.	Grace Cottages, Hart Stree	at.	mul	
100	Ripple Road	, ,		
	Hardwicke Street (2 cases)			No serven to sistem in
	(			No cover to cistern in Wash-house.
62,	North Street			Defective drains
	Westbury Road			Defective drains
43,	St. Margaret's Road (2 case	es)		Ventilating pipe defec-
				tive
58,	North Street (5 cases)			Defective drains and
				bell trap
20,	Roden Cottage			Defective drains
	Church Road			
12,	Glenny Road			
01	Upney Hospital (3 cases)			
-	Ripple Road			Defective drains
	Glenny Road Hardwick Street			
25	George Street (2 cases)			
6.	Cohham Road		The state of	
	Ripple Terrace, Eldred Ros	d (2 000		Defective drains
126,	Howard Road	id (o cas	es)	
	Eldred Road			
	St. Margaret's Road			
69,	St. Anns Road			
50,	Linton Road (4 cases)			
6,	St. John's Retreat (2 cases)			
55,	Morley Road			
198,	Gascoigne Road			Bad smells from man-
01	0 1 0			hole in yard
	Cooke Street			
	New Street			
90,	Wakering Road			
22,	New Road			

# Diphtheria - Continued.

7, Maybells Cottages 100, Linton Road 10, Kings Road	
	Drains defective
	Drains defective
North Street, Leftley, (3 cases)	Dampness and open drain
13, New Road 6, Park Terrace	
11, Battery Terrace 73, St. Margaret's Road	
	Drain defective
	Drain defective, &c.
209, North Street 85A Axe Street	Drain defective
14, King's Road	Cistern in a very dirty condition
17. St. Ann's Road, (2 cases) 78, Glenny Road	Condition

## MEMBRANOUS CROUP.

4, New Street

8, Over-the-Gates

6, Coverdale Road

79 cases.

26 cases to Sanitary Defects = 33%.

# WHOOPING COUGH.

No death has occurred from this disease during the past year. The notifications given to the District Council through the courtesy of the School-Board of cases occurring amongst school children, have proved of the greatest utility in arresting the spread of this disease.

#### MEASLES.

There have been eight deaths from this disease in all, six out of this number were the result of the epidemic of 1897, the remaining two were imported from a neighbouring district.

A rather smart epidemic took place in the early summer at Rippleside. Forty cases were reported to me by the School Board.

Caution papers were distributed to each house wherein infection was said to be, and instructions given as to isolation and disinfection.

The remaining children, if any, in the house, were prevented from attendance at school, and in most cases not allowed to return until any possible infection was unlikely.

These measures were exceedingly successful, as without the closing of the Rippleside School the epidemic passed away. There were no deaths.

#### SMALL POX.

No case has occurred in the District since 1894.

It is satisfactory to note that the Dagenham Hospital is fast approaching completion, and will be probably opened for patients in the early Spring.

## ERYSIPELAS.

	Cases.	Deaths.	
1898	 21		1
1897	 20		1

# TYPHUS FEVER.

One case of this disease occurred, the cause was not discovered. The patient was isolated at the Hospital, and made a good recovery.

## PUERPERAL FEVER.

	Cases.	Deaths.	
1898	 1		1
1897	 4		1

In the fatal case, I was unable to discover any cause in the house or surroundings to account for it.

#### PHTHISIS.

		Deaths.
1898	 	11
1897	 	20
1896	 	18

The sudden drop in the number of deaths from this disease is remarkable. Possibly the lessened hours of labour and the increased facilities for exercise in the fresh air, may have had some influence in producing this result.

#### INFLUENZA.

		Deaths.
1898	 	5
1897	 	4
1896	 	5 .

The annual Roll of deaths resulting from Influenza is remarkably constant.

#### CANCER.

a label		Deaths.
1898	 	7
1897	 	7
1896	 	8

# FURTHER SANITARY REQUIREMENTS OF DISTRICT.

- 1. Much still remains to be done in re-laying and ventilation of drains and sewers in many parts of the town, in rendering many houses more habitable by paving around them, &c.
- 2. More ventilation to the public sewers and more stringent regulations as to the efficient ventilation of private house drains and construction of manholes. Revision of Bye-laws on these matters.
  - 3. Sanitary houses at a moderate rent for the labouring classes.
  - 4. Fresh Water Supply for Creeksmouth.
- 5. The question of a Permanent Isolation Hospital has been discussed during the year. My own opinion is that as many additions are urgently needed in the present building, it would be wise to make these additions in connection with a Permanent Scheme.

- 6. The Baths, shortly to be opened, are urgently required.
- 7. Public Sanitary Conveniences for both sexes are urgently needed in the centre of the town.
- 8. Arrangements should be made so that suspected cases of Diphtheria may be examined, and Anti-diphtheritic Serum supplied by the Local Authority.

## GENERAL STATISTICS.

## GENERAL DEATH RATE:-

1898	 16 per	1,000 of	estimated	population.
1897	 21.2	,,	.,	1 1
1896	 17.1	.,	,,	
1895	 19.5	,,	,,	
		11	2.7	

These rates include persons belonging to the District who died elsewhere, viz.: at the Romford Union Infirmary and the London Hospitals.

# INFANTILE MORTALITY-Rate per 1,000 Births registered:

		Barking.	England and Wales.
1898		178	 161
1897		. 178	 156
1896	. 1	148.99	 148

From the Reports on the various Infectious Diseases it will be seen that most of the Infantile Deaths were due to

1. 2. 3. 4.	Diarrhœa Whooping Cough Measles Bronchitis, etc	 1898. 52 0 8 18	 1897. 50 20 45 31
	Totals	 78	 154

# THE BIRTH RATE per 1,000 of the Estimated Population: -

1898	 	Barking.	 England and Wales.
1897	 	41.6	 29.7
1896	 	43.3	 29.7

ZYMOTIC DISEASE:-

Deaths.		Case	es Notified.
52			-
. 8			_
roup 7			74
3			34
1 . 0			0
0			69
0			0
1			21
	52 8 Froup 7 3 0	52 8 Froup 7 3 0	52 8 Froup 7 3 0

Annual Rate Per 1,000 persons, 1898, 3.55; 1897, 6.8.

Pauperism during the year 1898.—For the half-year ending September 29th, 1898, there has been 243 persons receiving in-door, and 243 receiving out-door relief, or 24 per 1,000 of estimated population.

MARRIAGE RATE per 1,000 of Estimated Population .-

	1898.	1897.
Barking	6.75	 _
England & Wales		 16

That for 1898 is not yet available

Note.—This being the first time this return has been made out. I have no comparative figures to give.

RAINFALL FOR THE YEAR, 16.08 inches; 1897, 21.53 inches.

## HOSPITAL REPORT.

The following cases have been treated in the Upney Hospital during the past year —

	Cases.
Scarlet Fever	46
Diphtheria and Membranous Croup	43
Enteric Fever	21
Typhus ,,	1
	111
G 8 1 11 11 11	
Cases from outside the district	25
Giving a total of	136

Average time each patient was under treatment 5 weeks 2 days. Number of deaths, 7, which is equal to a death rate of 5 per cent. of cases admitted.

No. of Deaths were as follows -

Scarlet Fever		 nil.
Enteric ,,		 1
Diphtheria and	Croup	 6

The anti-Toxin treatment of Diphtheria has been adopted as the routine treatment in all cases of Diphtheria admitted.

I am convinced that both from clinical observation and the statistics given, that, in it we have a remedy of the greatest efficacy in dealing with this disease.

LASTLY,—I am glad to be able to testify to the courtesy I have received from the various officers of this Council and other Authorities, in compiling these returns, without which, I should have been unable to arrive at many of the results given in the foregoing Report.

I am, Gentlemen,

Your obedient servant,

C. F. FENTON.

March, 1899

Table of DEATHS during the year 1898, in the Barking Town Urban District, Classified according to Diseases, Ages, and Localities.

At all ages 
$$\left.\begin{array}{c|c} \text{At all ages} \end{array}\right\}$$
 288  $\left|\begin{array}{c} \text{Under} \\ 1 \text{ year} \end{array}\right\}$  129  $\left|\begin{array}{c} 1 \text{ and} \\ \text{under} \\ 5 \end{array}\right\}$  64  $\left|\begin{array}{c} 5 \text{ and} \\ \text{under} \\ 15 \end{array}\right\}$  13  $\left(\begin{array}{c} 15 \text{ and} \\ \text{under} \\ 25 \end{array}\right)$  6  $\left|\begin{array}{c} 25 \text{ and} \\ \text{under} \\ 65 \end{array}\right\}$  53

MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.

	ia.	Croup.	FEV	ERS.	1	1	and y.	Fever.		neu- urisy.	186.			Diseases.	
	Diphtheria	Membranous	Enteric or Typhoid.	Puerperal.	Errsipelas	Measles.	Diarrhœa ar Dysentery.	Rheumatic F	Phthisis.	Bronchitis, Pneu- monia, and Pleurisy.	Heart Disease.	Influenza	Injuries,	All other Dise	TOTAL.
Under 5 5 Upwards	3	3	2	1	1	7 1	52	1	11	21	1 10	1	6	99   47	193 95

NEW CASES OF INFECTIOUS SICKNESS IN EACH LOCALITY, COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.

		3.	sn			1	100	K		d to Iso Hospita		
	Scarlatina	Diphtheria	Membranou Croup.	Typhus.	Enteric or Typhoid.	Puerperal	Erysipelas.	Scarlatina.	Diphtheria.	Membran- ous Croup.	Typhus.	Enteric or Tvohoid
Under 5	21	12	1 4		1		111	12	9	3		1
5 Upwards	48	57	1	1	31	1	20	32	30	1	1	20

Annual Death-Rates per 1,000 from all Causes, and from several Zymotic Diseases, during the year 1898.

	All Causes.	Principal Zymotic Diseases (Cols, 3-9)	Small- pox.	Measles.	Scarlet Fever.	Diph- theria.	Whoop- ing cough.	Fever.	Diar- rhœa.	Deaths under 1 year per 1,000 Births.
Cols.	1.	2	3.	4.	5.	6.	7.	8.	9.	10.
England and Wales	17.6	2-22	0.01	0.41	0.11	0.24	0.31	0.18	0.96	161
33 Great Towns	19.0	2.85	0.00	0.56	0.14	0.31	0.42	0.20	1.22	178
67 Other Large Towns	17.2	2.41	0.05	0.41	0.10	0.58	0 27	0.21	1.09	173
England and Wales less the 100 Towns	16:7	1.75	0.(0	0.31	0.09	0.18	0.25	0.17	0.75	145
Barking	16:0	3.55	0.00	.4	0.00	0.2	0.00	0.12	2.65	178

Number of inquests, 20.

SANITARY INSPECTOR'S OFFICE,

BARKING, March 7th, 1899.

To the CHAIRMAN and MEMBERS of the BARKING TOWN URBAN DISTRICT COUNCIL.

GENTLEMEN,

# ANNUAL REPORT.

I have pleasure in submitting my Annual Report for the year 1898. During the year, I have served 1,146 notices for the abatement of nuisances, the major part being preliminary; the number of compliances was 954; the number of complaints which I received was 162, which were attended to forthwith; 9 cases of overcrowding were dealt with and the nuisance abated; 105 cases of infectious disease were removed to the Isolation Hospitals at Upney. In 53 cases, beds, bedding, and articles likely to retain infection have been taken from private houses, and disinfected in one of Washington Lyon's Steam Disinfectors. During the year 201 houses were disinfected; notices have been served to whitewash and cleanse such houses, and compliance therewith insisted upon. Special disinfectants have been prepared and supplied in cases of Typhoid Fever, and ordinary disinfectants in other cases twice weekly, according to instructions. 591 flushing cisterns were fixed in w.c.'s attached to old properties. Printed forms cautioning persons suffering with, or having charge of persons suffering with an infectious disease were served. Lists of cases of persons suffering with an infectious disease were supplied to the Head Teachers of the various Public, Elementary, and Sunday Schools, and the Pawnbrokers, Laundresses, Ministers, and House Agents, in the town. The whole of the Slaughter Houses, Chopping Houses, Cooking Houses, &c., in the district, were limewhited four times during the year, and the Bakehouses, Cow Sheds, Dairies, and one Common Lodging House, twice. Blockages of drains and sewers were reported to the Surveyor's department for attention. The drains in connection with 191 houses were tested, and 102 found defective.

I am, Gentlemen,

Your obedient servant,

F. MARTIN,

Inspector of Nuisances

# Summary of Work done through the Sanitary Inspector in the Urban Sanitary District of Barking,

During the year ending December 31st, 1898.

		Total Number for Year.	Results of Inspection, &c.
1.	Complaints received	160	
2.	Nuisances detected	1,146	
3.	Nuisances abated	954	
4.	Notices served	1,146	
5.	Summonses taken out	1	
6.	Convictions	1	
7.	Cottages inspected	1,072	
8.	Lodging-houses inspected	1	
9.	Slaughter-houses inspected	4	
10.	Bakehouses inspected	18	
11.	Dairies and Milk Shops in-		
	spected	38	
12.	Cowsheds inspected	5	
13.	Workshops inspected		
14.	Filthy houses cleansed, sec.		
	46 Public Health Act, 1875	38	
15.	Houses disinfected	203	
16.	Overcrowding abated	9	
17.	Houses placed in habitable		
	repair		
18.	Houses closed	4	
19.	Houses erected or re-built, for		
	which "Certificates" were applied		
20.	"Certificates" granted		
21.	" deferred		
22.	Wells sunk or improved		
	supplies of water afforded	4	
23.	Wells cleansed or repaired		
	Wells closed	*	
25.	Houses connected with sewers	125	
26.	,, ,, with water		
	mains	152	
27.	Earth, pail, or improved Privies		
	constructed or existing		
	Privies altered		
28.	Privies and W.C.'s repaired;		
		649	
	W.C.'s supplied with water	649	

# Summary of Work - Continued.

	December that there.	Total Number for Year.	Results of Inspection, &c.
29.	Cisterns cleansed, repaired, or	100000000000000000000000000000000000000	
30.	Animals improperly kept removed	52	
31.	Samples of water taken for Analysis		See M.O.H.'s Report.
32	Compensation paid for destruc-	14/6	же ж
33.	Seizures of unsound Meat, &c.	2	

(Signed) F. MARTIN.