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Borough of Chatham

ANNUAL REPORT

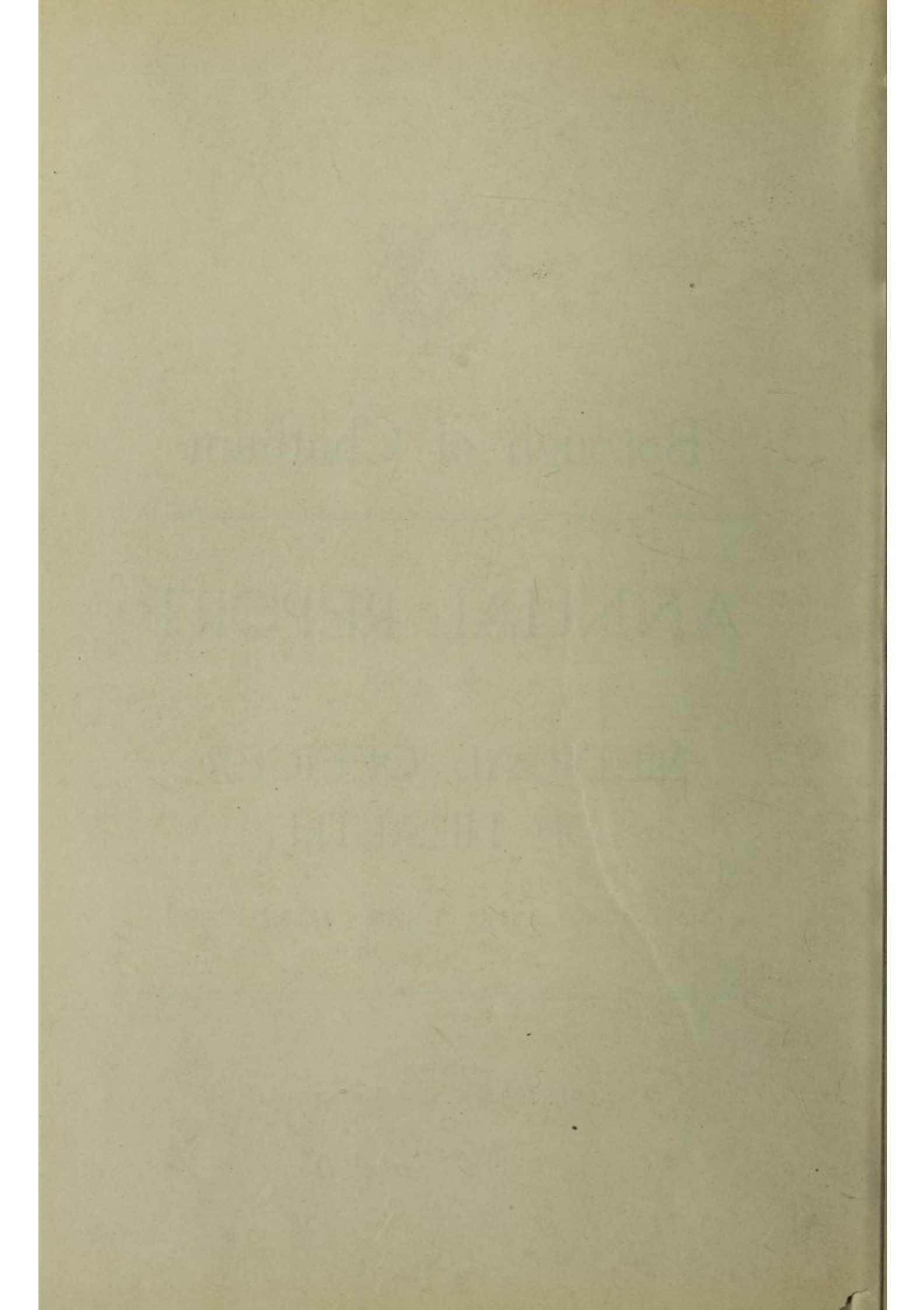
OF THE

MEDICAL OFFICER
OF HEALTH

FOR THE YEAR 1915

CHATHAM :

CLEMENTS BROS., Meeting House Lane



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Borough of Chatham



TO THE MAYOR AND CORPORATION.

GENTLEMEN,

I have the honour to present to you my Twenty-fifth Annual Report. It deals with the Sickness and Mortality, and the Sanitary Conditions of the Borough during the year ending December 31, 1915.

The Local Government Board have intimated that various details usually required in an Annual Report, such as a description of the District, the Water Supply, Sewerage disposal, etc., may be omitted this year, and the Report deals mainly with work already accomplished or in progress.

The War has affected conditions of labour and prices of materials to such an extent that the work of the Sanitary Department has been retarded, and especially so in regard to the housing question. In fact, all matters entailing the expenditure of large sums of money and involving the employment of labour are postponed unless they are matters of urgency. Discretion is necessary, but it is obvious that the preservation of health is more than ever a paramount consideration, and with the exception of new works, in my judgment, the Sanitary Authority should in no way relax its vigilance, and should get done whatever is possible..

BIRTH AND DEATH RATES.

The Birth Rate has further declined and is the lowest recorded for many years, whilst the Death Rate is rather higher than in 1914. This increase has not been due to any epidemic, nor to any special insanitary conditions; but to the climatic conditions prevalent during the first quarter of the year, when a large number of deaths occurred from respiratory diseases.

CEREBRO-SPINAL FEVER.

This disease, an unfamiliar one, made its appearance during the year and as is usual with all unknown terrors there was much unnecessary panic. The measures adopted for the control of the disease are fully detailed.

CIVIL AND MILITARY CO-OPERATION.

By the agency of the Local Government Board this has been effectively arranged, and the Health Department has been in a position to give valuable information with regard to the sanitary condition of premises acquired for the troops, in the supervision of food supplies, and in reciprocal arrangements respecting infectious diseases.

CONSERVANCY WORK.

The system of emptying privies and cesspools has been the subject of careful investigation, and certain alterations have been made, which will have the effect of securing greater promptitude in emptying, a more thorough clearing of the pits, and will, I trust, be more economical.

Other subjects receiving special attention in the Report are Infant Mortality and Child Welfare, the Control of Measles, Tuberculosis, and Housing.

The tendency of the day appears to be in the direction of leaning too much on the help of Sanitary Authorities, and it is quite time that many people learnt the lesson of individual responsibility in regard to the tidiness and order of their premises. Sanitary Authorities do a great deal in the present day, and this appears to have induced many people to do less than they ought to do. In every household there are many duties which can only be performed satisfactorily by the occupants, but which are systematically neglected. Attention to these duties would result in cleaner and healthier homes, and less cost to the ratepayers.

To all the measures I have recommended to the Council fair consideration has been given, and my thanks are also due to all the members of the staff for their loyal co-operation. I am indebted to Mr. Coles Finch for statistics of rainfall during 1915.

I am, Gentlemen,

Your obedient servant,

J. HOLROYDE, F.R.C.S., D.P.H.,

Medical Officer of Health.

Chatham,

February, 1916.

TABLE I.

CHATHAM DISTRICT.

Vital Statistics of Whole District during 1915 and previous Years.

YEAR.	Popu- lation estimated to Middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.						
		Un- corrected Number.	Nett.	Number.	Rate.	of Non- residents in the District.	of Resi- dents not registered in the District.	Under 1 year of age.		At all ages.				
		3	4	5	6	7	8	9	Number.	Rate per 1,000 Nett Births.	10	11	12	13
1	2													
1910	41731	1052	1052	26.2	522	13.2	83	41	96	92	510	12.2	510	12.2
1911	42250	1066	1114	26.3	668	15.8	76	78	142	127	670	15.8	670	15.8
1912	42940	1027	1066	24.8	576	13.4	91	78	123	115	563	13.1	563	13.1
1913	43450	1109	1138	26.0	591	13.6	82	65	117	103	574	13.2	574	13.2
1914	44100	1079	1099	25.0	679	15.4	101	32	107	97	610	13.8	610	13.8
1915	44878	940	944	21.0	755	16.8	97	81	115	122	739	16.4	739	16.4

Area of District in acres (land and inland water). } 4356

Total Population at all ages, 42,250 }
Total families or separate occupiers, 9,251 } At Census of 1911.

TABLE II.

CHATHAM DISTRICT.

Cases of Infectious Disease notified during the Year 1915.

Notifiable Disease	Number of Cases Notified.								Total Cases Notified in each Locality.			Total Cases removed to Hospital.
	At all ages.	At Ages—Years.							St. Mary's Ward.	Luton Ward.	St. John's Ward.	
		Under 1.	1 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 & upwards.				
Small-pox									16	61	21	57
Cholera (C) Plague (P)									6	13	8	
Diphtheria (including Membranous croup)	98	23	63	6	6				6	13	8	
Erysipelas	27	26	83	13	7				19	57	54	101
Scarlet Fever	130											
Typhus Fever									1	2	1	4
Enteric Fever	4											
Relapsing Fever (R). Continued Fever (C).....												
Puerperal Fever	1									1		
Cerebro-spinal Meningitis	12	2	5						5	4	3	4
Poliomyelitis.....												
Ophthalmia Neonatorum	9								4	2	3	
Pulmonary Tuberculosis	71	1	8	7	32	22			24	33	14	
Other forms of Tuberculosis	9	2	3	1	1	1			1	3	5	
Totals	361	11	165	31	60	33	7		76	176	109	166

ISOLATION HOSPITALS.—St. William's Hospital, Rochester; Alexandra Hospital, Wigmore.

TABLE III.

CHATHAM DISTRICT.*Causes of, and Ages at Death during the Year 1915.*

Causes of Death.	Nett deaths at the Subjoined Ages of Residents whether occurring within or without the district.									Total Deaths whether of Residents or Non-Residents in Institutions in the District.
	All Ages	Under 1.	1 and under 2.	2 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and upwards	
All Causes	Certified 713									
	Uncertified .. 26	7		1	2		2	6	8	
Enteric Fever	1						1			1
Small Pox										1
Measles	16	1	6	5	3	1				1
Scarlet Fever	4				2		2			
Whooping Cough	11	6	2	3						
Diphtheria and Croup	13		1	7	5					
Influenza	3						1	1	1	
Erysipelas	1								1	1
Phthisis (Pulmonary Tuberculosis)	67				4	10	29	24		17
Tuberculous Meningitis ..	7	1	2	1	3					1
Other Tuberculous Diseases	10	3	2	1		1	2			2
Cancer, malignant disease	59				1		10	21	27	18
Rheumatic Fever										
Meningitis	9	4	4		1					
Organic Heart Disease	99			1	2	1	14	25	56	51
Bronchitis	80	14	5	1	3	1	3	12	41	28
Pneumonia (all forms)	53	14	10	5		3	4	12	5	6
Other diseases of Respiratory organs	5						1	4		4
Diarrhœa and Enteritis	20	14	2	2	1				1	2
Appendicitis and Typhlitis	2					1		1		1
Cirrhosis of Liver	7						1	6		2
Alcoholism	1							1		
Nephritis and Bright's Disease	19					1	5	7	6	8
Puerperal Fever										
Other Accidents and diseases of Pregnancy and Parturition	6	1				1	4			1
Congenital Debility and Malformation, including Premature Birth	43	42	1							4
Violent Deaths, excluding Suicide	34	4		2	5	3	11	4	5	6
Suicides	9					2	4	2	1	2
Other defined Diseases	87	11	2	1	4		13	20	26	38
Diseases ill-defined or unknown	61				2			7	52	39
	727	115	37	29	37	25	105	157	222	233
Cerebro-spinal Meningitis	12			1	5	2	4			
Poliomyelitis										
Pneumonia	21		2	1		3	3	10	2	

TABLE IV.

CHATHAM, KENT.*Infantile Mortality during the Year 1915.*

Nett Deaths from stated Causes at various Ages under One Year of Age.

Cause of Death.	Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 4 weeks.	4 weeks and under 3 months.	3 months and under 6 months.	6 months and under 9 months.	9 months and under 12 months.	Total Deaths under 1 year.
All Causes { Certified	2		1	1	4			3	1	8
{ Uncertified. ...										
Small-pox.....										
Chicken-pox										
Measles									1	1
Scarlet Fever										
Whooping Cough						2		2	2	6
Diphtheria and Croup.....										
Erysipelas										
Tuberculous Meningitis							1			1
Abdominal Tuberculosis				1	1		1			2
Other Tuberculous Diseases								1		1
Meningitis (not Tuberculous)							1	1	1	3
Convulsions			2	1	3	1	1	2		7
Laryngitis.....										
Bronchitis.....			1	1	2	3	3	4	2	14
Pneumonia (all forms)						2	3	4	4	13
Diarrhœa									2	2
Enteritis			1		1	3	2	3	2	11
Gastritis				1	1		1		1	3
Syphilis				1	1	1				2
Rickets										
Suffocation, overlying	2				2	1				3
Injury at Birth										
Atelectasis	1				1					1
Congenital Malformations	2	1	1		4	2			1	7
Prema'ure Birth	14	1	3		18	2				20
Atrophy, Debility, and Marasmus	1		2		3	5	4		1	13
Other causes	2				2			3		5
	22	2	10	5	39	21	18	20	17	115

Nett Births in the year :—Legitimate, 897 ; Illegitimate, 47.

Nett Deaths in the year :—Legitimate Infants, 104 ; Illegitimate, 11.

SUMMARY OF VITAL STATISTICS.

Area in Acres (inclusive of water)	4,443,298
" " (inland water only)	4,356
Population (Census 1911)	42,250
" (Estimated)	44,878
Births registered	944
Birth Rate per 1,000	21
Net Deaths registered	739
Death Rate per 1,000	16.4
Zymotic Death Rate (7 principal zymotic diseases)	1.3
Mortality from all forms of Tuberculosis, including Phthisis	1.8
Phthisis Death Rate	1.8
Infantile Mortality per 1,000 Births	122
Number of Occupied Houses	9,677
Total Rates in the £	9s. 1d.
A 1d. Rate produces	£633

It is particularly difficult to estimate the population at the present time. There is hardly an empty house in the district. Many families have come to reside here because the husband is stationed or occupied here, so that the population probably exceeds the normal increase. The above estimate is based on the number of occupants per house found at the last census.

LOCAL GOVERNMENT BOARD CIRCULARS, MEMORANDA
AND ORDERS ISSUED DURING 1915.

Circular and Regulations prohibiting the sale of shell fish likely to cause danger to public health.

Circular and Memorandum on Cerebro-Spinal Fever.

Circular respecting Scavenging.

Circular respecting Sanitary Conveniences in Shops.

Circulars re Treatment of Tuberculosis.

Circular re Notification of Births (Extension) Act, 1915.

Circular and General order re Notification and Treatment of Measles and German Measles.

Circular and Memorandum re Maternity and Child Welfare.

W.-C.'S WITH FLUSH ADDED :—

New Buildings	25
Old Buildings	37
	—
	62
	—

W.-C.'S WITHOUT FLUSH ADDED :—

Old Buildings	49
---------------------	----

HOUSEHOLD REFUSE AND ITS REMOVAL.

This very important matter needs constant attention and consideration, because by the regular, prompt and efficient removal of refuse and garbage from the vicinity of dwellings a large amount of disease is prevented. One has only to imagine the result in a large town if the scavenging service was suspended for a short period.

The present system secures the removal of refuse at frequent intervals. In the principal thoroughfares removal takes place daily, in other parts of the town twice weekly. The only obligation on the part of the householder is to store the refuse in a suitable portable receptacle, and to place it outside his premises in such a position that it is easily accessible to the scavengers.

The number of houses from which refuse is removed is about 10,000.

It seems almost hopeless to enter an annual protest against the use of receptacles of an unsuitable type. In the case of existing property various difficulties present themselves, but there is no reason why every new house should not be provided with a properly covered bin.

Administrative powers are contained in the following sections of the Public Health Acts, and local Byelaws :—

Public Health Act, 1875.

Section 35—Compulsory provision of ashpits.

Section 26—Defines position of owners and occupiers.

Section 45—Powers of Sanitary Authorities to provide temporary receptacles.

Public Health Amendment Act, 1890 :—

Section II.—Enlarges definition of "ashpit" to include other receptacles.

Local Byelaws :—

No. 80—Defines size and kind of receptacle.

This byelaw only applies to new buildings.

In pursuance of my recommendation to your Council, application was made to the Local Government Board for their sanction to a new byelaw, which was finally confirmed on June 8th, 1915, and which defines the character of a receptacle, but does not specify the material of which it should be constructed. Providing that the requirements of this byelaw are carried out, it ought gradually to secure an improvement in the type of receptacle.

Section 2.

“Where the Council themselves undertake to contract for the removal of house refuse from premises not less frequently than once a week, and by a notice duly served upon the occupier of any premises specify the days on which, and the hour at which the contractor will remove house refuse from the premises, the occupier shall on every such day and before every such hour cause all house refuse on the premises as is not intended to be removed for sale or for his own use to be placed in one or more movable receptacles, and shall cause the receptacle or receptacles containing the house refuse to be placed in such a position on the premises as for the purpose of removing the contents will be most conveniently accessible from the nearest street used as a means of access to the premises for the removal of house refuse otherwise than through any dwelling house.

Every such receptacle shall be a suitable movable receptacle.

(a) So constructed and covered as to enable it to be removed conveniently and without leakage, spilling or absorption of any of its contents, and

(b) Of a capacity not exceeding four feet.”

For proved non-compliance the person offending is liable to a penalty of forty shillings for each offence.

The above Byelaw gives the Council power to enforce a much more satisfactory type of receptacle than the motley kinds now in use, and I am convinced that if every house was provided with a bin of suitable capacity and covered, the expense of collection would be materially reduced. Given bins of this character, there is no reason why a daily collection should take place in one part of the Borough, and a biweekly one in other parts. The collection could be quite well effected by an alternate day service, which would save time, money and labour. A further economy of

labour would ensue by the use of receptacles which did not permit of leakage, spilling or overturning, thus lessening the labour of sweeping up after the dustman's visit, and diminishing the risks of disease. There can be no doubt that organisms are distributed by the blowing about of foul refuse, and that many children die from the contamination of milk by such organisms.

The difficulties, delays and expenses of securing a general compliance on the part of owners and occupiers are very great. A partial success will be obtained in time, but some day I think Councils will take the bull by the horns and will themselves provide receptacles for the storing of house refuse on premises within their district, as part of their scavenging plant. The full bin would be removed twice or three times a week throughout the whole district.

DISPOSAL OF REFUSE.

A year ago there seemed to be a probability that a Destructor would be provided for this purpose, but the difficulties are for the present so great that the project must be deferred.

Refuse is carted to a tip on land known as the Pickle Valley, situate on the outskirts of Luton. An alternative site was under consideration some months ago, but this would have led to great nuisance, and was abandoned. The storage of refuse in large masses is not a good method. It takes a long time to completely disintegrate, and the size of the heap is materially regulated by the activity of the building trade and the demand for bricks.

The present site is well away from dwelling houses and public roads, and there has been no complaint of nuisance.

MANURE.

The storage and removal of manure from the vicinity of dwelling houses are matters of great importance. As regards storage—the large open pit is not satisfactory, and covered pits should always be provided. A door or opening in the front facilitates emptying.

Respecting removal, Sections 49 and 50 of the Public Health Act, 1875, give the necessary powers to compel removal of manure at fixed intervals. Notices were issued during the summer, and an Inspector was charged with the duty of seeing that the work was carried out. Owing to the difficulty of securing men and horses for the labour, considerable latitude had to be allowed.

HOUSE FLIES.

A consideration of the connection between the prevalence of flies and disease naturally follows the previous heading, because manure heaps form the favourite breeding grounds of flies, and therefore the more these heaps are reduced and protected, the fewer will be the number of flies. The fly loves filth, it is found in large numbers wherever filth abounds, and from foul accumulations it carries polluted and diseased matter into the houses and on to the food.

The most common diseases propagated by the agency of flies are Epidemic Diarrhœa, Typhoid Fever and Tuberculosis.

Posters and leaflets embodying advice on the subject were distributed at intervals during the summer months. The points emphasised are the restriction of numbers by :—

The cleansing out at regular short intervals of all manure heaps and stable refuse, the removal of all garbage and litter from the vicinity of dwellings, all collections of waste food, of dustbins, ash-boxes, and all filthy places. Burn rags, paper and decaying vegetable rubbish, keep the interiors of houses clean, and secure proper ventilation of all apartments by through currents of air.

Protect all food, especially milk and meal, and last but not least, kill every fly.

There are certain shops where food and food stuffs are exposed in the windows. Very often they swarm with flies. The proprietor should take steps to protect the food from contamination, and the public would be wise to avoid food exposed for sale without proper protection from flies.

HOUSING.

Good houses are an indispensable necessity if families are to be kept healthy, but probably more depends on the housekeeper than the house. It is possible by the exercise of judicious cleanliness to make a structurally defective building healthy, and absence of cleanliness, on the other hand, will in a less degree nullify the hygienic advantages of well designed structures.

The worst cases, and unfortunately the most common ones are those where the houses are bad, and the occupiers share the same failing.

There is no phase of sanitary work likely to produce so much benefit to the public health as work directed to the improvement

of the dwellings and habits of the people. During recent years great strides have been made in this direction, and many houses unfit for habitation have been demolished or made fit.

The effect of the War has been to seriously check the housing movement, chiefly for three reasons, viz. : the shortage of men, materials and money. On the other hand, housing accommodation is severely taxed, and at no time has the necessity for vigilance in regard to housing been so paramount as at present. The real difficulty exists in the shortage of houses, and when accommodation cannot be found for dispossessed tenants, they cannot be turned out of dwellings which under other circumstances would be closed.

The necessary legal powers for dealing with defective housing conditions are found in the Public Health Act, 1875, the Public Health Amendment Acts, 1890 and 1907, and especially in the Housing and Town Planning Act of 1909, which amended many of the provisions of previous housing Acts, simplified procedure, and increased the powers of Local Authorities.

The sections chiefly used are 15 and 17, the former restricted to houses of a certain rental, the latter applying to all houses.

Statutory notices to repair can be served under Section 15, and in the case of default the Council can step in and do the necessary repairs themselves at the cost of the owner. Under this Section it is obligatory on owners to keep their property in a reasonably habitable condition.

Under Section 14 of the same Act, in any contract made for letting a house there is implied a condition that the same is in all respects reasonably fit for human habitation.

Owing to the decreased amount of accommodation, houses are being dealt with under Section 15 whenever possible.

Section 17 applies to the more extreme cases. Under its provisions a closing order may be issued, and tenants may be removed from the houses within fourteen days of the confirmation of the Order. After or before the receipt of a Closing Order the owner has the opportunity of endeavouring to render the house fit for human habitation, but if he fails to do this after a definite period, he is cited to appear before the Council to show cause why demolition should not follow.

The Regulations issued under this Section state :—

1. That inspection is compulsory.
2. That it must be carried out on definite lines.
3. That systematic records of the inspections shall be kept, and
4. That the Medical Officer of Health shall include in his Annual Report information and particulars in tabular form in regard to the work done under this Section.

The points to be attended to when making an inspection comprise :—

1. The arrangements for preventing the contamination of the water supply.
2. Closet accommodation.
3. Drainage.
4. The condition of the dwelling house in regard to light, the free circulation of air, dampness, and cleanliness.
5. The paving, drainage and sanitary condition of any yard or house.
6. The arrangements for the deposit of refuse and ashes.
7. The existence of any room which would in pursuance of Sub Section (7) of Section 17 of the Act of 1909 be a dwelling house so dangerous or injurious to health as to be unfit for human habitation.
8. Any defects in other matters which may render the dwelling house dangerous or injurious to the health of an inhabitant.

The inspection of houses is the main duty of one of your Inspectors. All houses scheduled and reported under the above Sections have been personally inspected by myself. By this means I accept the responsibility of deciding whether a dwelling is or is not fit for habitation.

In many cases houses have been remedied after a written or personal communication with the owners, so avoiding the issue of Statutory Notices.

The legal obligation of the owner is recognised, and as a rule acted upon, but the moral obligation of the tenant to keep his house "decent and in order" is too often avoided.

The conditions above mentioned form a general summary of the requirements of a healthy dwelling, but in the construction of houses there are many points of detail in which improvement is urgently needed, and which would materially influence the health and comfort of the occupiers. For instance, there should be :—

- Ample cupboard room and food storage.
- Good natural lighting and ventilation of every part of the house.
- A supply of water for each house.
- A deep sink with plug.
- Provision for a hot water supply.
- Suitable bedroom accommodation, and if the walls are papered there should not be more than one layer.
- A suitable small kitchener instead of the inefficient and wasteful open grates often found.

Every practical housekeeper will appreciate the necessity of the above, and yet how constantly the need is ignored by the builder. When suitable houses of this character are provided, there will be less excuse for the want of personal cleanliness, and domestic insanitation could be included as a nuisance.

One result of the want of storage for food in poor class houses is the development of a Sunday morning trade in meat. In one shop alone as much as £20 has been received on Sunday.

OVERCROWDING.

Number of cases reported	10
Number of Notices sent	5

The standard of overcrowding is that adopted by the Registrar General—by more than two persons per room. At present, owing to the following reasons, many houses, without being actually overcrowded, contain an excess of inmates.

- Few new houses are being erected.
- Increase of Dockyard establishment.
- Increase of military and naval establishments.

In other words, an increase of population over the normal, with no corresponding increase of accommodation.

These facts make it difficult to deal with cases of overcrowding, and to turn a family out of one house may accentuate overcrowding in another.

The question of overcrowding brings up the subject of cubic space and ventilation, which are often confused. From the point of view of health there is a wide difference between existence in an ample supply of still air, and air which is in movement and frequently renewed. The beneficial effect of the latter is very marked.

The following figures are taken from the census report of 1911. They are confined to houses with less than six rooms.

	Total	Total Population	Overcrowded	Percentage
1 Room Tenement	184	295	21	11.4
2 " "	478	1,185	31	6.5
3 " "	728	2,570	70	9.6
4 " "	1,650	6,542	41	2.5
5 " "	3,001	13,254	13	.4

Total of tenements with more than 2 occupants per room, 176.
Population, 1314.

Proportion per cent. to population in private families, 3.4.

The following Tables, drawn up in accordance with Article V. of the Housing (Inspection of District) Regulations, give particulars of the work carried out in respect of housing during 1915 :

Tabular statement showing :—

Number of dwelling houses inspected under Section 17 (1909)	25
Number of houses which were considered unfit for habitation	25
Number of Representations made with a view to a Closing Order being made	25
Number of Closing Orders made	25
Number of houses in which defects were remedied without Closing Orders.....	0
The number of houses made fit after service of Closing Orders	8
Number demolished	0
Owners of houses cited to appear	4

GENERAL CHARACTER OF DEFECTS.

1. Back to back.
2. Want of through ventilation.
3. Insufficient W.C. accommodation.
4. No sinks.
5. No water inside houses.
6. Dampness.
7. Dilapidated and dirty.
8. Unpaved yards.

SECTION 17, HOUSING AND TOWN PLANNING ACT.

The following houses were reported under Section 17 :—

3 Clover Street	Renovated
1 Clover Alley	Renovated
16, 16a Old Road	Renovated, and made one house
18, 18a Old Road	Renovated, and made one house
240 High Street (rear)	Renovated
1 Rhode Street	Closed
4, 4a Hards Town	Owner will demolish
11, 12, 13 Slicketts Hill	Decision temporarily postponed
14, 16 Jenkins Dale	Owners cited to appear
56, 58, 60, 60a Brook	To be closed and demolished
4, 5, 6, 7, 8, 9 Ruby's Court	Are being converted into through dwellings

In addition there are 5 other houses respecting which the owner has offered to demolish 3 and to convert 2 back to back dwellings into one house.

No. in which work is not completed, 16.

Of the houses standing on the books, December 31, 1914, the undermentioned were dealt with during 1915.

Demolition ordered :—

23 (rear) Charles Street.

Renovated :—

12 and 14 Old Road—Converted into one house.

37, 39 Brook—Through ventilation provided.

45—Renovated and structurally altered.

279, 281 High Street—

Under Section 15 :—

45 houses were dealt with

Statutory Notices were issued in 38 cases.

Owners did work voluntarily in 7 cases.

Inspected at Tenant's request, 2.

The following statement shows the total number of houses inspected and reported upon during 1915.

Number of houses inspected.....	241
Number of houses reported under Section	
17	25
Number of houses reported under Section	
15	38

Number put into a fit state, Section 15..	23
Number outstanding, Section 15.....	15
Number voluntarily demolished, Section 15	0
Number dealt with under the provisions of the Public Health Acts, 1875 and 1890	91

Many houses in which the defects were of a slight character and where sinks were required were dealt with under the last named Acts.

NEW BUILDINGS, 1915.

Plans were approved for the erection of 22 new houses and 3 shops.

Plans for alterations to existing premises, stables, garages, etc., 30.

BROOK AREA.

I regret that the much needed clearance of insanitary dwellings in this area cannot be now carried out as a comprehensive scheme which possesses many advantages in comparison with the method of dealing with individual insanitary houses..

PREMISES AND OCCUPATIONS WHICH CAN BE CONTROLLED BY BYE LAWS OR REGULATIONS

REGISTERED COMMON LODGING HOUSES.

Number on Register, December, 1915	15
„ of Notices served	14
„ of cases of Infectious Disease	0
Total number of beds provided, single	392
double	15
Minimum cubic space per head	300 cub. ft.

The majority of these houses are on or in the immediate vicinity of the Brook. Most of them have been occupied for many years, and by providing cheap beds and the use of a common kitchen they attract to the Borough a very undesirable type of individual. Of late years there has been a diminution in some of the older tenements, owing to the competition of larger and better equipped buildings, but there are still a few who keep a numerous and regular clientele.

Regular inspections are made, and surprise visits are paid in order to secure compliance with the Bye Laws. The defects discovered are mostly of a minor character, and have been remedied.

A stringent application of the Bye Laws is very necessary for the effective control of these places, and the following circular letter was recently addressed to all keepers :—

“ Dear Sir (or Madam).—I beg to draw your attention to the provisions of the Bye Laws for REGISTERED COMMON LODGING HOUSES, of which a copy has been supplied to you, and especially to the necessity of adequate ventilation, to the cleanliness of walls and floors, and to the condition of the bed-clothes, bedding and bedsteads.

“ All bedding which has become unfit for use must be replaced. The Bye Laws must be affixed in a suitable and conspicuous position, and kept in such a manner that the contents may be clearly and distinctly visible and legible.”

HOUSES LET IN LODGINGS.

Number on Register	32
„ removed from Register in 1915	2
„ added to Register in 1915	0

Standard of cubic space :—

Adults, in rooms occupied both day and night	400 c.f.
Children ditto	200 c.f.
Adults, in rooms occupied by day or night only	300 c.f.
Children ditto	150 c.f.

Quarterly inspections are made, to see that the provisions of the Bye Laws are observed.

At one house—No. 5 Cannon Street—the rooms are of good size and well lighted and ventilated, but breaches of various Bye Laws have occurred, including overcrowding in the case of one family. The necessary alterations have been carried out, and arrangements have been made for the weekly inspection of this house.

This form of dwelling is one replete with many evils. It meets the want of a certain class who have families and low wages, but no other effects. Constant supervision is required to secure compliance with the Bye Laws.

SLAUGHTER-HOUSES AND MEAT INSPECTIONS.

Number on Register, including 3 Licensed Slaughterhouses	14
Number in use	13

Notices and Intimations served	
For Cleanliness	21
„ Repairs	3

The majority of the Slaughterhouses being in the immediate vicinity of other buildings necessitates constant supervision in order to avoid nuisance.

There are two Horse Slaughtering establishments, both situated in the rural part of the Borough, and well away from dwellings.

Provision is made in the Bye Laws for the control of slaughtering on Sundays and during night hours. In all such cases notice must be given to the Inspector of Nuisances. For various reasons this is a very useful Bye Law.

The number of Notices received was 15, and in each case a visit was made at the time of slaughtering.

One of your Inspectors is a certificated Meat Inspector, and visits all Slaughterhouses every week. He is also instructed to attend the weekly Cattle Market at Rochester, to note the character of the animals purchased, their destination, and to pay particular attention to the following up of poor and inferior priced animals.

Many butchers now give notice of any suspicious animal, and all show an increasing desire to surrender if disease be present. The effect is that compulsory seizure is seldom necessary, and that the quantity of diseased meat destroyed is greater than it used to be.

A summary of the meat seized or surrendered will be found in the statement of the Inspector of Nuisances.

In connection with this subject, the Butchers' Insurance Association have a working scheme, which goes far towards relieving its members of any financial loss. It checks the sale of inferior animals in the open market, and removes the tendency to conceal diseased meat.

CONTAGIOUS DISEASES OF ANIMALS ACT.

During the year 1915 two suspected cases of Swine Fever were reported to the Board of Agriculture and Fisheries, one of which was confirmed by the Board as being Swine Fever.

Notices served in connection with the Swine Fever Order, 1908.

Form A. Articles 2 & 19.....	2
Form B. Articles 4 & 19.....	3
Article 8 (5), Notice to cleanse and disinfect or burn or destroy	1
	—
Total	6

PARASITIC MANGE ORDER, 1911.

One case of Parasitic Mange was notified affecting four horses on one farm. A Notice Form Article 5 of the Parasitic Mange Order, 1911, was served on the Owner by the Veterinary Inspector, Mr. Elmer Ebbetts.

A notice under Article 6 was subsequently served for the cleansing and disinfection.

TUBERCULOSIS ORDER, 1914

This is now in abeyance.

FOOD AND DRUGS ACT.

The administration of this Act is in the hands of the County Police. Samples are taken by the Superintendent or by an Officer deputed by him, and are sent to the County Analyst at Maidstone for examination.

Return of samples taken in Chatham under the Food and Drugs Act during 1915 :—

Milk	72
Butter	27
Margarine	21
Lard	17
Flour	3
Tea	1
Whisky	16
Brandy.....	6
Gin	7
Oatmeal	2
Demarara Sugar	5
Ground Rice	1
Coffee	1
Cocoa	2
Jam	5

Pepper	2
Ground Ginger	1
Cream.....	2
Olive Oil	1
Corn Flour.....	1
Pearl Barley	1
Tincture of Iodine	1
Mercurial Ointment	1
Boric Acid Ointment	1
Vinegar	1
Mustard	3
Liniment of Camphor	1
Sago	1
Tapioca	2
Rum	2
Arrowroot	1
Total	208

Proceedings were taken in 3 cases, all being convicted.

Sample 1. Milk with added water	Fined £2 and costs.
„ 2. „ deficient in fat	„ £1 „ „
„ 3. „ „ „	„ £1 „ „

MILK AND CREAM REGULATIONS, 1912.

There have been no prosecutions under these regulations during 1915.

DAIRIES, COWSHEDS AND MILKSHOPS.

Number of Registered Cowkeepers	10
Number of Registered Dairymen and Purveyors of Milk	40
Number of Cowsheds in use	15
„ „ not in use	4
Number of Dairies	12
Number of Milkshops	30

All Cowsheds, Milkshops and Dairies are frequently inspected, both by myself and by Inspectors. By this means a certain standard of cleanliness is secured. The results of inspections are marked on score sheets, which show the direction in which improvement is needed.

The shortage of labour and the extra cost of materials and food render it undesirable at the present juncture to insist on any expensive structural alterations or additions to Cowsheds. Cleanliness, however, is very necessary, and the following circular letter was recently addressed to all Cowkeepers :—

“ I beg to draw your attention to the Regulations issued with respect to Dairies, Cowsheds and Milkshops, of which you have a copy, and especially to Regulations 5, 12 and 17, relating to the regular and adequate cleansing of Cowsheds and Dairies, and to the cleanliness of the animals, and of persons employed as milkers.

These Regulations are not difficult to carry out ; they do not entail any great expense ; but they are of vital importance to the purity of the milk, which forms the principal diet of infants and invalids, and which is particularly liable to contamination.

Your co-operation in this important matter is earnestly requested.”

VETERINARY INSPECTION.

The Veterinary Inspector (Mr. E. Ebbetts, M.R.V.C.S.) visits all Cowsheds every three months, and examines the cows. He reports on a special form for each Cowshed, the points noted being :

1. Signs or symptoms of Tuberculosis.
2. Disease of udder or teats.
3. Any other illness.
4. Cleanliness of animals.

Should any cow be found suffering from illness, the supply of milk is prohibited.

An inquiry has been made respecting the quantity of milk produced and imported into the Borough. The daily average is as follows :—

From Cowsheds in the Borough	450 gallons
Imported supplies	500 „

making a total daily supply of some 950 gallons, or an average per head of population about $\frac{1}{4}$ th of a pint daily. This is an extremely small amount, and inquiries made in connection with Infectious Diseases show that in many families fresh milk is never used, and that its place is taken by various brands of condensed milk. This

is a practice to be deprecated. Many of the brands are of an inferior character, and their nourishing properties as compared with fresh milk are of low value.

The operation of the Milk and Dairies Bill, passed in 1914, is suspended during the duration of the War.

OFFENSIVE TRADES.

There are only two offensive trades carried on in the Borough :

Gut Scraper	1
Fish Frying	14

In the case of the Gut Scraper the premises are on the confines of the District. Great care is necessary to avoid nuisance, and during the year notices have been issued with respect to alterations on the premises, and to the observance of the Bye Laws, which will have the effect of diminishing the tendency to nuisance.

Fish frying is treated as an offensive trade, and frequent inspections of the premises are made. No complaints have been received, and generally speaking the business is well conducted, and the premises clean.

Notices were issued in 12 instances.

ICE CREAM MAKERS AND VENDORS.

This industry has not flourished during the past year.

The premises are regularly inspected during the summer months.

There is no considerable quantity made on any premises, and the quantity sold by each vendor is small, and a fresh supply is manufactured daily.

PREMISES WHERE FOOD IS MANUFACTURED OR STORED.

Attention is given to all premises on which there is food liable to pollution, such as beef and ham stores, potted meats, fish, sausage making, etc.

Kitchens in which food is prepared for sale are also inspected, and improved cleanliness and better storage has been secured.

STATEMENT OF INSPECTOR OF NUISANCES.

SUMMARY OF WORK.

DRAINAGE IN CONNECTION WITH PLANS PASSED.

(1) New buildings (Private houses).....	25
(2) New buildings (other)	9
(3) Old buildings (a) Additions	5
(b) Drainage only	1
(c) Rebuilt after fire.....	1

CESSPOOL WORK.

Number of applications.....	3,848
Number of Sewage Loads (Liquid) removed	9,608
Number of Night Soil Loads removed	2,932

MORTUARY.

BODIES REMOVED TO MORTUARY.

Men	14
Women	7
Children	7
Post Mortem examinations.....	12
Bodies buried at expense of Parish	1

COWSHEDS.

In use	15
Not in use	4
Demolished	0
Dairies	
Milkshops	30
Number of Registered Cowkeepers	10
Number of Registered Dairy-men and Purveyors of Milk	40
Number of Stat. Notices served	9

FISH OFFAL COLLECTION.

Number of Shops collected from	
(1) Fried Fish Shops	12
(2) Ordinary Fish Shops	4

INFECTIOUS DISEASES.

Number of Loads of Bedding disinfected.....	278
Number of Library Books disinfected	
Work prohibited in homes of Outworkers (Temporary)	8

OVERCROWDING.

Notices served for overcrowding 5

OBNOXIOUS TRADES.

(1) Gut Scraper 1
 (2) Fried Fish Business (Fryers) 14
 Notices served (a) Repairs..... 2
 (b) Cleanliness 10

ASHBINS.

Number of Notices issued 32
 Number of Bins provided 14

REGISTERED COMMON LODGING HOUSES.

Number on Register, 1915 15
 Number on Register, December 1914 16
 Number of Notices served 14
 Number of cases of Infectious Disease 0
 Paving and Drainage..... 2
 Further ventilation 1
 Repairs 1
 Cleanliness of rooms and bedding 10

HOUSES LET IN LODGINGS.

Number on Register 32

NOTICES AND INTIMATIONS SERVED.

For Cleanliness 2
 For repairs 4
 Number removed from Register in 1915 2
 Number added to Register in 1915 0
 Number provided with through ventilation ... 0

SLAUGHTER HOUSES.

Number on Register 14
 Number in use 13

NOTICES AND INTIMATIONS SERVED.

For cleanliness 21
 For repairs 3

BAKEHOUSES.

Number of Bakehouses
 Workshop bakehouses 23
 Factory bakehouses 5
 Underground..... 4
 Number of bakehouses in use 23
 Notices served 10

UNSOOUND FOOD, 1915.

Beef Quarters	12
Beef Carcasses	13
Sheep Carcasses	3
Pig Carcasses	6
Calves.....	1
Edible organs	23
Tripe, Argentine	500lb.
Saveloys.....	1700
Foreign Rabbits	30

FISH.

Mackerel, trunks	1
Whiting, trunks	8
Condensed Milk	36 doz.
Bananas, crates	22
Tomatoes, boxes.....	4

VISITS.

Common Lodging Houses	74
Cesspool work	140
Complaints and General Nuisances	98
Drainage Work	210
Factory and Workshop Act	45
Housing and Town Planning Act	340
Houses let in Lodgings	90
Homes of Outworkers	984
House to House Inspection	211

NOTICES SERVED.

Preliminary Notices	
Public Health Act '75. Section 91.....	98
" " " 41.....	2
" " " 36.....	
(a) Dust Bins	32
(b) Sufficient w.c.'s	64
Public Health Act, '75, Section 49 & 50 ..	0
P.H.A. Amendment Act, 1890, Section 22....	0
Public Health Act, 1890, Section 22	0
Public Health Act, '75, Section 49 & 50 ..	0

P.H.A. Amendment Act, 1890, Section	22....	0
" " 1907, "	25 ..	12
" " "	35....	4
" " "	37....	0
" " "	43....	0
" " "	45....	0
" " "	45....	0
Housing and Town Planning Act, "	17....	25
" " "	15....	38

SUMMARY OF NUISANCES ABATED.

Accumulation of manure removed	20
Bell Traps removed	18
Broken w.c. pans renewed	4
Brick drains removed	2
Concrete yards repaired	18
Concrete yards provided	35
Cesspools constructed	68
Cesspools ventilated.....	68
Cesspools enlarged or repaired	49
Closer structure built or rebuilt	39
Drains repaired.....	15
Drainage to new buildings inspected	34
Drainage to old buildings inspected	90
Further water supply provided	17
Flushing cisterns provided	62
Houses with old drains replaced with new.....	40
Houses with privies supplied with drainage....	80
New sink waste drains	47
Overcrowding abated	5
Keeping of animals in unfit state	4
Privies repaired	12
Privies filled in	80
Panned and trapped closets provided.....	80
Sinks provided	17
Stables undrained	1
Urinals rebuilt or repaired	2
Choked drains cleared	295
Wash houses provided.....	7
Ventilation provided under floors	0
Manure pits provided	2
Manure pits renewed	1
Roofs and guttering repaired	32
Interior of houses cleansed and repaired	90

SANITARY ADMINISTRATION OF THE DISTRICT.

The following staff is employed in carrying out the duties under the above head :—

- 1 Medical Officer of Health.
- 1 Chief Inspector of Nuisances.
- 2 Assistant do.
- 1 Clerk.
- 1 Disinfector and Mortuary Attendant.
- 2 Foremen for Cesspool Work.
- 2 Nurses for work in connection with Infant Welfare.

The Inspector of Nuisances and the Nurses work under the supervision of the Medical Officer of Health. Each Inspector is charged with certain routine duties in addition to special matters, which constantly require attention. The duties have to be varied from time to time, especially if there is any undue prevalence of infectious disease. Each Inspector reports daily to the Medical Officer of Health.

Their work often entails extra hours, especially in connection with the removal of infectious cases, meat inspection, and lodging house supervision.

During the present year the work of the Nurses or Health Visitors will be largely extended, and therefore of greater utility.

ADOPTIVE ACTS IN FORCE IN THE BOROUGH.

The Infectious Diseases Prevention Act, 1890.

Public Health Amendment Act, 1890.

Public Health Amendment Act, 1907.

Notification of Births Act, 1907.

Included in the statement of the Inspector of Nuisances, which is incorporated in this Report, is a list of notices served under Section 22, Public Health Amendment Act, 1890, and Sections 35, 37, 43, Public Health Amendment Act, 1907.

BYE LAWS.

The following Bye Laws and Regulations are in use.

- 1. New streets and buildings.
- 2. Drainage of existing buildings.
- 3. The cleansing of footways and pavements, the removal of house refuse, the cleansing of earth closets, privies, ashpits and cesspools.

4. Nuisances.
5. The removal of offensive matter through the streets.
6. The duties of the occupier in respect of house refuse.
7. Offensive trades.
8. Slaughter-houses.
9. Common Lodging houses.
10. Houses let in lodgings.
11. Tents, vans, sheds and similar structures used for human habitation.
12. Mortuary Regulations.
13. Dairies, Cowsheds, and Milkshops regulations.

CHEMICAL AND BACTERIOLOGICAL WORK.

Chemical analyses of Food, Drugs, etc., are carried out by the County Analyst, and in this District the administration is in the hands of the County Police.

Bacteriological work is performed at the County Council Laboratory at Maidstone. The arrangements for the forwarding of specimens, and the results of the examinations are most satisfactory.

With regard to the examination of material obtained from the throats of contacts with Cerebro-Spinal Fever cases, an arrangement has been effected with the Bacteriological Laboratory at Fort Pitt Military Hospital. With the permission of the Medical Officer in Charge, the Bacteriologist has very kindly conducted all the necessary examinations. It is a great advantage to secure the the necessary examinations. It is a great advantage to secure this co-operation, as it is extremely important to place the specimens on a suitable culture medium directly it is taken from the throat. The vitality of the organism is so low, that a delay of a few hours invalidates the result.

The following table shows the number of specimens sent during 1915, and the results of examination :—

	Total No. forwarded	No. giving Positive Results	No giving Negative Results
Diphtheria	103	46	57
Enteric Fever	10	1	9
Pulmonary Tuberculosis	94	32	62
Ringworm	29	18	11
Cerebro-Spinal Fluid	5	1	4
Well water	1	1	
Total	242	99	143

Of the Diphtheria specimens, 14 were sent by myself. All the Ringworm cases were sent by the School Medical Officer.

PREVALENCE AND CONTROL OVER ACUTE INFECTIOUS DISEASES.

Infectious Diseases are NOTIFIABLE and NON-NOTIFIABLE.

The Notifiable Diseases are :—

Scarlet Fever.	Small Pox.
Diphtheria and Membranous Croup.	Pulmonary Tuberculosis.
Enteric Fever.	Non-Pulmonary Tuberculosis.
Relapsing and Continued Fever.	Cholera.
Typhus Fever.	Cerebro-Spinal Meningitis.
Puerperal Fever.	Acute Anterior Poliomyelitis.
Erysipelas.	Ophthalmia Neonatorum.

and from January 1, 1916, Measles and German Measles.

Table II. appended to the Report shows the number of cases of Infectious Disease notified during 1915 in each division of the Borough.

Including Pulmonary and Non-Pulmonary Tuberculosis the total number of cases notified was 361.

The following Table shows the monthly notifications of Infectious Disease during 1915 :—

Month	Scarlet Fever	Diphtheria	Enteric Fever	Erysipelas	Ophthalmic Neonatorum	Cerebro-Spinal Meningitis	Pulmonary Tuberculosis	Non-Pulmonary Tuberculosis	Puerperal Fever
January	14	20	1	4	1		4	1	
February	18	13	1	3		3	6		
March	9	14		2		4	11		
April	8	9		3	6	1	9	1	
May	7	5			1	1	13		
June	6	5	1				5	3	1
July	13	5	1			1	1	2	
August	6	4		2		1	2		
Sept.	11	4		4			5	1	
October	12	8		2			4	4	1
Nov.	9	6	1	4	1		4		
Dec.	17	5		3		1	7		
Totals	130	98	5	27	9	12	71	9	1

The mortality from acute Infectious Diseases, including Diarrhœa and Enteritis during 1915 is as follows :—

Scarlet Fever	4
Diphtheria	13
Enteric Fever	1
Measles	16
Whooping Cough	11
Diarrhœa and Enteritis (under 1 year of age)..	14

The general administrative measures for dealing with Infectious Diseases have undergone no change.

A Return of all cases is sent every week to the Local Government Board and the County Council, and a weekly circular is received from the Local Government Board showing the number of cases of infectious disease notified in all districts of England and Wales.

A Return of cases is also sent weekly to the Principal Naval and Military Medical Officers, and special notifications are sent should infectious disease occur where soldiers are billeted.

HOSPITAL ACCOMMODATION.

The Hospital for the isolation of infectious cases is situated in Rochester, and is used jointly by the two Boroughs. It has accommodation for 80 patients, and observation wards for doubtful cases. The diseases treated are Scarlet Fever, Diphtheria and Enteric Fever.

There is a separate building for the isolation of Small Pox.

During 1915 a temporary building was erected by the War Office on the existing site, and a fixed rate of contribution has been agreed upon. This building gives 22 beds, but so far there has been no necessity to use it.

The number of cases available for admission during the year was 233.

The number of admissions was 152.

Percentage admitted, 65.

DISINFECTION.

Clothing, bedding, etc., is disinfected by current steam in a Thresh's Steam Disinfecting apparatus.

Rooms are fumigated by Formalin Vapour or Sulphurous Acid Gas,

Enteric Fever excreta are treated with a solution of Perchloride of Mercury, and Izal is supplied on application for use with the sputum of Pulmonary Tuberculosis.

Efficient disinfection implies destruction of infective organisms. For this purpose steam disinfection is necessary and gives excellent results. As regards the fumigation of rooms, I attach little importance to it, and believe that much better results would be obtained by free currents of air, soap, water and scrubbing.

Too often disinfection is used as a substitute for cleanliness, and a check has been put upon the indiscriminate supply of disinfectants for this purpose. They are now only supplied on a written order signed by myself or an Inspector who is satisfied by actual observation that they are required.

SCHOOLS AND INFECTIOUS DISEASE.

There has been no necessity to resort to School Closure during 1915.

This procedure is rarely required, and the general rule is to exclude from School attendance all known cases of infectious disease, all children from infected houses, and to search for contacts and exclude them also.

The Head Teachers of the schools attended are informed of all notifiable diseases occurring amongst children in attendance, and also of the period of exclusion.

Teachers are supplied with a printed schedule of the various infectious diseases. This shows the early symptoms and appearances presented by children recently attacked, the period of incubation, the mode of onset, the day and appearance of the rash, and the period of isolation for (1) those attacked (2) those who have been in contact with the patient.

As regards non-notifiable diseases, a return is made once a week by Head Teachers of the names and addresses of children absent from school on account of Measles, Whooping Cough, Chicken Pox, and Mumps.

Schools are periodically inspected for sanitary defects. This subject is more fully dealt with in the report of the School Medical Officer.

NOTIFIABLE INFECTIOUS DISEASES.
SCARLET FEVER.

Notifications received, 130.

St. Mary's Ward, 19 ; Luton Ward, 57 ; St. John's Ward, 54.

Of the above, 4 cases were found after admission to Hospital to be wrongly diagnosed. Nett total, 126.

Households affected	100
Removed to Hospital	92
Deaths	4

In the following Table are particulars of Scarlet Fever during the past ten years.

Year.	Total No. of cases notified.	No. under 5 years.	Deaths registered.	Treated in Hospital.	Attack rate per 1000 of population.	Mortality per 1000.	Percentage removed to Hospital.
1906 ..	200	54	1	149	4.8	.002	75
1907 ..	81	33	4	67	1.9	.009	83
1908 ..	81	29	—	56	1.8		69
1909 ..	87	31	4	63	1.9	.009	70
1910 ..	34	5	—	30	0.8		81
1911 ..	145	35	3	88	3.4	.007	60
1912 ..	207	36	—	131	4.8		63
1913 ..	96	22	1	65	2.2	.002	68
1914 ..	107	17		74	2.5		65
1915 ..	126	26	4	92	2.8	.008	70

DIPHTHERIA AND MEMBRANOUS CROUP.

Notifications received, 98. Actual cases, 96. St. Mary's Ward, 16 ; Luton Ward, 61 ; St. John's Ward, 21.

Households affected	86
Removed to Hospital	56
Deaths	

There were 2 cases of mistaken diagnosis admitted.

Age incidence :—

Under 5 years	23
5 and under 15 years	63
15 „ „ 25 „	6
25 „ „ 45 „	6

Antitoxic Serum was supplied and administered in 51 cases,

The following Table shows the number of cases notified and the deaths from Diphtheria during the past ten years.

Year.	Cases Notified.	Deaths.	Death-Rate per cent. of cases attacked.
1906	29	3	10
1907	30	4	13
1908	34	7	20
1909	65	16	23
1910	77	8	10
1911	74	5	6
1911	74	5	6
1912	269	15	5
1913	139	8	5
1914	202	23	11
1915	96	13	13.5

The quarterly notifications during 1915 were :—

First Quarter	47
Second	„	19
Third	„	13
Fourth	„	19

The precautionary measures taken have been detailed in previous reports.

Bacteriological examinations have proved of the utmost value in diagnosis.

The chief weapon in combating Diphtheria Mortality is Antitoxin, and I regret that it is not more freely used, both for cases treated at home, and before being sent to Hospital. It is always administered on admission to this institution, and perhaps the knowledge of this procedure prevents its use before the case is sent in. Its timely administration shortens the duration and diminishes the severity of the attack.

Antitoxin is supplied free of charge to medical practitioners. It is stocked at the Town Hall and the Fire Station, and can be obtained at any hour of the day or night. The minimum dose to be administered is 4,000 units, and it should invariably be injected, and not given by the mouth. This latter method, sometimes adopted, is almost valueless.

ENTERIC FEVER.

Notifications received	5
Removed to Hospital	5
Deaths	1
Wrongly diagnosed	1

In one case mussels, imperfectly cooked, had been consumed nearly three weeks before the onset of illness. In one case the patient was infected outside the District, and one case was returned as Paratyphoid Fever.

New regulations prohibiting the sale of shell fish likely to cause danger to public health were issued by the Local Government Board in February, 1915. Fishmongers may be required to furnish the Medical Officer of Health with a list of layings from which their shell fish are derived, and the Local Authority in which any suspected laying is situated may after due inquiry and notice prohibit the sale of shell fish from such laying.

It is certain that Enteric Fever is at times contracted by the consumption of polluted shell fish, and the Regulations supply a much needed means of dealing with this danger.

Table showing number of cases notified, and deaths from Enteric Fever during the past ten years :—

Year	No. of Cases	No. of Deaths
1906	51	6
1907	78	14
1908	51	8
1909	18	3
1910	25	1
1911	15	2
1912	18	Nil
1913	8	2
1914	8	1
1915	5	1

Of suspected cases, 10 were subjected to Bacteriological tests. The results were :—

Positive	1
Negative	9

The value of protective inoculation against Enteric Fever has been amply proved. The protection is not absolute in all cases, but sufficiently so to render an attack much less dangerous.

Should there be any epidemic prevalence of this disease amongst the civil population, inoculation would probably be largely used as an additional defence.

ERYSIPELAS.

Twenty-seven cases were notified, and 1 death was registered.

CEREBRO-SPINAL MENINGITIS.

Civil cases :—

Notifications received	12
Deaths	10
Treated in Hospital	4
Mortality	83 per cent.

The occurrence of this disease, about which little was known in England until the present year, has excited much public interest and apprehension.

The following facts respecting the onset and progress of the disease in Chatham will be of interest. The incidence of the disease has to be considered in connection with its incidence on the Naval and Military population.

For the following figures I am indebted to the courtesy of the Principal Medical Officers at the Royal Naval Hospital and at Fort Pitt Military Hospital.

It should be noted that the above particulars refer only to cases actually notified in the Borough. The total deaths shown in Table IV. include cases contracted and dying elsewhere, but belonging to Chatham.

List of cases admitted to the Royal Naval Hospital during 1915.

January	4
February	10
March	5
April	1
May	3
May	3
June	1
July	1
September	1
November	1
December	4
	—
Total	31

Twenty-six died, 1 was invalided, and 4 discharged to duty. Mortality, 84 per cent.

List of cases admitted to Fort Pitt Military Hospital during 1915.

January	1
February	3
March	3
April	4
June	1
July	2
December	3

Total 17

Died in Hospital..... 7

The Civil cases occurred as follows :—

February	1
March	5
April	1
May	1
June	1
July	1
July	1
August	1
December	1

Total 12

Males, 6 ; Females, 6.

Ages :—Under 5 years	2
5 and under 15 years	6
15 „ „ 25 „	1
25 „ „ 45 „	3

Date	Localities		Where Treated	Result
Feb. 24	8 Slicketts Hill	1 case	Home	Died
Mar. 3	12 Albany Road	4 cases	„	„
Mar. 11	Caravan, Ash Tree Road	1 case	„	„
April 1	27 Priest Dale	1 „	„	Recovered
May 27	4 Gambiers Court	1 „	Hospital	Died
June	57 Ordnance Street	1 „	R.N. „	„
July 18	8 Ruby's Court	1 „	„	Recovery doubtful
Aug. 13	168 Ordnance Street	1 „	„	Died
Dec. 13	164 Castle Road	1 „	Home	„

The case noted above as doubtful recovery died in January, 1916, after six months in Hospital, making 11 deaths out of 12 cases.

It is noteworthy that 9 deaths have been registered as due to Meningitis, some of which may have been Cerebro-Spinal, but were not recognised as such.

In none of the Civil cases was there any history of association with Naval or Military cases.

ADMINISTRATIVE MEASURES.

Owing to the occurrence of cases of Cerebro-Spinal Meningitis in various parts of the country, a Memorandum was issued by the Local Government Board in February, 1915, dealing with the incidence of the disease, the clinical features, the mode of onset, and the administrative action which should follow notification.

The preventive measures comprise :—

1. Bacteriological aids to diagnosis.
2. The isolation of the patient.
3. Disinfection.
4. Investigation of the sources of infection.
5. Precautionary measures as to contacts.

On February 25th I addressed the following letter to all Medical Practitioners in the District :—

Dear Sir,

CEREBRO-SPINAL FEVER.

Owing to the occurrence of cases of this disease amongst the Military and Naval populations, I should be obliged if you will give me information as to any anomalous cases of sickness in your practice of which the immediate diagnosis may be uncertain.

Yours faithfully,

As a result, I have seen all cases with the Medical Attendant, besides a number which proved not to be Cerebro-Spinal Meningitis.

The ordinary machinery for dealing with infectious diseases was not fully applicable in this disease, and partly on this account an unnecessary degree of public alarm was initiated in connection with an outbreak of four cases in one house, and it became at once apparent that if future cases were to be treated in Hospital, special arrangements must be made.

The fact is that there was no provision at the existing Isolation Hospital, the wards being definitely reserved for, and occupied by cases of Scarlet Fever, Diphtheria and Enteric Fever, and that the other institutions in the District declined to admit cases. Further than this, there was not a single institution in the District which would supply a nurse to help in the home. In a subsequent case, where a nurse was secured from a London institution, the District Nursing Association declined to allow her to sleep at their home, and she had to go to and from St. William's Hospital night and morning. The conditions at 12 Albany Road were certainly deplorable, and as the sequel proved, the cases were in my judgment too ill to admit of removal—even if there had been accommodation.

BACTERIOLOGICAL WORK.

The diagnosis of the disease can be confirmed by examination of fluid drawn from the spinal canal by lumbar puncture. The specific bacillus is found in this fluid. The operation is not an easy one, and in most cases an anæsthetic is needed. Fluid so obtained has been sent to the County Laboratory at Maidstone for examination. With regard to the Bacteriological examination of contacts, owing to the fact that the Meningo Coccus does not live long in the swab, it was necessary to make arrangements for local examination. The Authorities at Fort Pitt Military Hospital have very kindly given assistance for this purpose.

Thirty-five contacts have been examined, two of whom were found to be carriers. These were kept under supervision, and their throats regularly sprayed, until a neagative result was obtained. They harboured the meningo coccus in their throats for six weeks, during which time they resided at home. No further cases occurred in the house.

ISOLATION OF THE PATIENT.

If home circumstances admit, patients can be isolated at home, or failing that, effective isolation can only be secured by removal to a hospital. The failure to obtain admission to existing hospitals led to joint action on the part of the Sanitary Authorities of Chatham, Gillingham and Rochester. Representatives of the three Councils, with power to act, formed a Joint Emergency Committee, and after much patient inquiry and deliberation a scheme was formulated and carried through. The arrangement approved on March 16th was :—

To treat cases of Cerebro-Spinal Meningitis occurring in the

joint area of the Committee in the Small Pox Hospital at Wigmore, the joint Committee to pay the Gillingham Corporation a sum of £1 per week for such Hospital, and its existing adjuncts.

This arrangement is subject to the Rochester and Chatham Joint Hospital Board treating in their Small Pox Hospital any cases of Small Pox occurring in the Borough of Gillingham, on agreed terms.

Considerable alterations and additions were required before the Hospital could be open for the reception of patients. These involved the building of an administrative block for the necessary staff, and re-arrangement, renovation, and equipment of the existing building. This was proceeded with according to plans prepared by and carried out under the superintendence of the Borough Surveyor of Gillingham, with the result that the District is now in possession of a very well planned and equipped special Hospital.

Each Borough provides for the removal of patients in its area, and pays at the rate of £3 3s. per week for the maintenance of each.

Cases from adjacent rural areas are accepted at £1 1s. per day, and an arrangement has been concluded with the Military Authorities by which soldiers suffering from this disease will be received and treated at an agreed rate.

The number of beds available is 14, and there are two wards.

The Medical Officer of the Hospital resides within a convenient distance.

The Hospital was opened for the reception of patients on May 16th. Since that date out of five cases reported in Chatham, three have been admitted to the Hospital, one to the Royal Naval Hospital, and one died at home before removal could be effected.

PRECAUTIONARY AND PREVENTIVE MEASURES.

These embrace investigation into the sources of infection, a search amongst contacts for possible "carriers," the removal of overcrowding, lack of cleanliness, and, above all, the provision of free ventilation. The use of antiseptic nasal sprays or gargles is advised, and contacts should lead, as far as possible, an open air life. At the close of the illness the usual measures of disinfection are carried out.

GENERAL OBSERVATIONS.

The incubation period of the disease is not definitely established, but is probably two or three days.

It is not very infectious, and it is rare for a second case to occur even when treated at home amidst unfavourable conditions.

The chances of recovery are very slight, the average rate of mortality being about 80 per cent. of those attacked. It occurs chiefly in association with want of cleanliness, overcrowding and deficient ventilation. Inclement weather, which accentuates these conditions, and bodily fatigue, which lowers the power of resistance, are contributory causes.

Hospital provision satisfies a public demand, but apart from that, its beneficial effect on the spread of the disease and on the reduction of the mortality is not very apparent.

The danger of spread lies in the presence of "carrier" cases, who convey the germs which infect others, but who themselves are not ill and do not become ill.

From a preventive aspect, the salient fact is that the germ itself is of very low vitality, not highly infective, and that given plenty of fresh air its harmful properties are rapidly checked. It is essentially a disease of foul still atmospheres rendered impure by the products of respiration, and if amongst the people living in such an atmosphere there is a carrier, the infective particles which he discharges are likely to find a peculiarly receptive soil.

The chief preventive measure, ranking in importance even before isolation, is good ventilation. Currents of fresh air do more than anything else to retard the development and spread of Cerebro-Spinal Meningitis. This has been abundantly demonstrated in all outbreaks. For contacts the open air life, and the frequent use of antiseptic sprays and gargles is advised.

There is some ground for thinking that lack of cleanliness, especially where there are verminous conditions, may help the spread of the disease.

OPHTHALMIA NEONATORUM.

Number of cases notified, 9.

From Medical Practitioners, 4.

From Certified Midwives, 5.

With one exception all the cases came under medical observation subsequent to notification by the Midwives. The chief preventive measures should be practised by the person in attendance at the birth of a child. For this purpose Midwives receive instructions from the County Council, by whom the Midwives Act is administered. When the disease is due to infection from

purulent discharges in the parents, the early measures are not always effectual. When the disease is established its cure is a work of great difficulty, and success demands constant skilled attention.

Ophthalmia Neonatorum is responsible for about one-third of the cases found in schools for the blind. It would be a wise measure to make arrangements with the Local Hospital for the reception of cases of this disease, so that continuous skilled attention could be supplied. The serious character of the disease when once established would justify such a measure.

NON-NOTIFIABLE INFECTIOUS DISEASES.

The most serious of this class of diseases are Measles, Whooping Cough, and Infantile Diarrhœa.

On and after January 1st, 1916, Measles becomes a notifiable disease.

MEASLES.

Sixteen deaths were registered, the majority occurring during the last two months of the year.

From the Mortality returns, and from information received from the schools, there was evidence that an epidemic of Measles was beginning. The earlier cases were confined to portions of St. John's Ward, but at the time of writing it is general throughout the Borough.

The measures adopted have been detailed in previous reports. The occurrence of notification will cause a considerable extension of work, as presumably all cases will now be known.

The onus of notification rests on the parent and on the medical practitioner when in attendance, unless a case in the household has been previously notified within two months.

The necessary notices to the public and to the medical profession were issued in December. The progress of the epidemic and the methods adopted for dealing with it will be detailed in a subsequent report.

There is much difference of opinion on the subject of notification of this disease, and the procedure may be said to be on its trial.

Owing to its infectivity before the characteristic rash appears, I do not apprehend that notification will serve to stop its spread.

Hospital provision, except for a limited number of cases, is out of the question. The chief hope is that by systematic home visitation, ignorance may be dispelled, medical attendance provided, complications avoided, and mortality diminished; but whether compulsory notification will justify the large expenditure which its administration will entail cannot yet be stated. My own views were against the adoption of notification, but every endeavour consistent with the means at one's disposal will be used to make it a success.

There is no disease of childhood which causes so many deaths, and there is very little doubt that many of these deaths which are due to the complications of Bronchitis and Pneumonia would be prevented if the people could be made to realise the serious character of the disease.

WHOOPING COUGH.

Eleven deaths were registered.

Like Measles, it is responsible for attacks of Bronchitis or Pneumonia, which often prove fatal, and like Measles, these complications are the result of ignorance and carelessness in the management of the disease.

PREVALENCE AND CONTROL OVER TUBERCULOSIS.

The compulsory notification of all forms of Tuberculosis dates from February 1st, 1913.

The present Regulations require notification under four heads :

Form A.—By Medical Practitioners for primary cases.

Form B.—By School Medical Officers for weekly return of cases discovered in the course of medical inspection of school children.

Form C.—Applies only to cases previously notified on Form A., and is for the use of Medical Officers of Poor Law Institutions and Sanatoria, to make a weekly return of cases admitted to their institutions.

Form D.—Similar to Form C., is a weekly return of cases discharged, and of their intended destination.

PULMONARY TUBERCULOSIS.

Primary Notifications received during 1915, 71, apportioned as follows :—

Poor Law Cases	7
Hospital „	3
Tuberculosis Dispensary	1
Private Practitioners	60

They were thus distributed :—

St. Mary's Ward.....	24
Luton „	33
St. John's „	14

Age distribution :—

Under 1 year.....	1
1 to 5 years	1
5 „ 15 „	8
15 „ 25 „	7
25 „ 45 „	32
45 „ 65 „	22

Sex.—Males, 40. Females, 31.

NON-PULMONARY TUBERCULOSIS.

Total notifications, 9, from

Private Practitioners	6
Hospital Cases	2
Tuberculosis Dispensary	1

Distribution :—

St. Mary's Ward	1
Luton „	3
St. John's „	5

Ages :—

Under 1 year.....	1
1 to 5 years	2
5 „ 15 „	3
15 „ 25 „	1
25 „ 45 „	1
45 „ 65 „	1

Sex.—Males, 5. Females, 4.

CLASSIFICATION.

Glandular	5
Joints	1
Meninges	1
Other Parts	2

Deaths registered :—

Pulmonary Tuberculosis	67
Tuberculous Meningitis	7
Abdominal Tuberculosis	7
Other Tubercular Diseases	3

Table showing deaths from Pulmonary and other forms of Tuberculosis during past ten years.

Year	Pulmonary Tuberculosis	Other forms of Tuberculosis
1906	56	16
1907	56	19
1908	51	16
1909	39	20
1910	50	10
1911	64	9
1912	6	16
1913	52	20
1914	58	19
1915	67	17

The above Table does not indicate any amelioration of the fatality of Tuberculosis.

Respecting Dispensary Treatment, I am indebted to the Tuberculosis Officer of the District for the following particulars :—

New Cases examined at Dispensary	96
Tuberculosis of Lungs diagnosed	43
Doubtful cases	17
Chronic Bronchitis	8
Surgical Tuberculosis.....	11
Diagnosed no Tuberculous disease	17
Number of patients who have received Institutional treatment, 1915.....	22
Number of patients who have received Dispensary treatment, 1915	121
Total Attendances at Dispensary	1020

ADMINISTRATIVE MEASURES.

These are concerned with the causation and prevention of disease and with the arrangements for its treatment.

The latter provision is under County Administration, and the Tuberculosis Dispensary undertakes the primary treatment of

persons entitled to benefit under the National Insurance Act, and of non-insured persons sent by any medical practitioner or Medical Officer of Health.

The duties of the Sanitary Authority are very important, and include all measures which prevent infection and improve the environment of the patient.

All cases are visited on receipt of notification, a comprehensive work is invariably carried out by the same Inspector.

The objects of Home Visitation are :—

1. To secure adequate ventilation.
2. To urge the necessity of separate sleeping accommodation for the patient.
3. To see that the sputum is properly disposed of and to supply sputum flasks.
4. To see that general sanitation is satisfactory, and that due cleanliness is observed.
5. To bring to the notice of the Medical Officer of Health defective housing conditions.
6. To secure the examination of as many contacts as possible.

A register is kept of all children attending Elementary Schools who reside in infected houses, and arrangements are in force for their attendance from time to time at the Medical Inspection Clinic. If there is any suspicion of disease, they are referred to the Tuberculosis Dispensary for further investigation and treatment.

During 1915, 21 children were referred by me to the Dispensary. In 10 cases definite Tuberculosis was diagnosed.

In 11 cases the signs were indefinite, and the cases were directed to attend for observation.

It seems probable that for a long period little will be done towards the establishment of new institutions for the treatment of this disease. If Tuberculosis flourishes in close and unhealthy dwellings, and of this there is no doubt, then the proper direction of effort is to reform houses and modes of life, and not to take a sufferer away from the unhealthy area for a brief period into specially constructed healthy dwellings and surroundings, and afterwards allow him to go back to the very conditions which have been instrumental in causing his disease. Such work is not, and cannot be curative, although it is educative, and the best results of sanatorium treatment can only be attained in conjunction with the provision of healthier dwellings which are the

prime necessity, and if compulsory ventilation could be secured in all houses, so that currents of fresh air were constantly admitted, it would do much to check Tuberculosis. The mass of the population, including many educated people, have yet to learn the value of an open air life, and of the open window and door.

There is no disease in which the question of after care is so important as in this, and a scheme has been drafted by the County Insurance Committee by which District Committees are invited to form themselves into Care Committees for the purpose of visiting and inquiring into the general welfare of the insured tuberculous patients in their area. The practical result of such work if systematically performed will be to secure sufficiency of nourishment, the provision of shelters, and further treatment for those in need of it.

INVESTIGATION OF OTHER DISEASES.

There has been no special prevalence of any other disease, nor have any outbreaks of food poisoning occurred.

MEANS FOR PREVENTING MORTALITY IN CHILDBIRTH AND IN INFANCY.

The administration of the Midwives Act, 1902, is carried out by the County Council, and local Medical Officers of Health exercise no supervision over Midwives.

There was one notification, but no death from Puerperal Fever.

From accidents and diseases of Pregnancy and Parturition there were six deaths.

NOTIFICATION OF BIRTHS ACT, 1907.

On and after September 1st, 1915, this Act, hitherto a voluntary one, became compulsory in every area. It was adopted by your Council in 1910.

Under the principal Act notification of birth to the Medical Officer of Health is compulsory. This duty falls on the person in attendance) on the mother at or within six hours after the birth, or on the father of the child, if he is residing in the house at the time of its occurrence. Practically all notifications come from medical men or midwives.

The Act provides for penalties for failure to notify a birth. Up to the present the visitation of notified births has been carried out by one Health Visitor, who has given the bulk of her time to this work.

The total number of Births registered as belonging to Chatham during 1915 was 944, of which 781 were notified, or 82 per cent.

Table shewing results of Administration of Notification of Births Act during 1915 :—

Number of Births notified by Midwives	671
Doctors	110
Total number of Mothers visited	702
visits paid by Nurse	2864
Number of breast-fed children	645
bottle-fed "	57
Defective addresses	34
Changed "	14
Refused admission	3
Number of houses clean	509
" " fairly clean	167
" " dirty	26
Number improved during visitation	41
Number of cases of still born children notified by Midwives	15
Doctors' cases not visited	44
Deaths during Nurse's visits	28

Of these deaths

15 occurred during the first week.

9 between the second and fourth weeks.

4 between the fourth and eighth weeks.

Mothers employed	69
(a) Outworkers	27
(b) Factory	7
(c) Hawkers	13
(d) Charwomen	6
(e) Laundry	5
(f) Various	11

The annual percentage of notifications received during the voluntary adoption of the Act has been as follows :—

1910	82 per cent.
1911	82 "
1912	83 "
1913	84 "
1914	77 "
1915	82 "

The figures as regards breast feeding are misleading. The majority of mothers suckle their infants for a short period, but later on the tendency is to supplement or entirely substitute bottle feeding.

The Nurse is instructed to make a note of dirty and insanitary houses, which are the subject of further investigation by an Inspector, and the issue of notices where necessary.

Leaflets dealing with feeding and management are left by the Nurse, and in cases where there is no doctor, she is able to give valuable advice and help.

Up to the present time infant welfare work has been mainly confined to the first two months of life.

The passing of the Extension Act of 1915, together with the issue of Regulations for the payment of grants in aid of work undertaken to secure the health of mothers and children and to diminish infant mortality, has done much to stimulate public interest in the subject.

In July, 1914, the outlines of a very comprehensive scheme embracing ante-natal and natal work, and providing for the medical supervision of young children until school age, was issued by the Local Government Board.

The initiation of complete schemes by Local Authorities was not expected, and the various headings rather suggested the directions in which effort might be made according to the particular circumstances of a locality.

In your District it was felt that delay was advisable, in order to await further developments and to note the progress of organisations established elsewhere.

During the past year the need for national effort in relation to infant welfare has been much advocated, and its necessity has been emphasised by the continuous fall in the birth rate.

Many theories and opinions as to the best methods of dealing with this question are being put forward, but some of the remedies proposed lose sight of the fact that the causes of Infantile Mortality are multiple and inter-related. In some places there may be conditions aggravating it, which differ from the conditions causing it in other places. It is only by a study of the factors concerned, which vary in their relative importance and incidence, that suitable measures can be adopted. On one of these measures there is universal agreement, and that is—**A COMPLETE AND WELL ORGANISED SYSTEM OF HEALTH VISITING.**

In October last, Dr. J. Lane Claypon of the Local Government Board paid a visit to Chatham to inquire into the work undertaken for Maternity and Child Welfare, and with myself met a deputation of ladies interested in the formation of a Maternity Centre. Following on Dr. Lane Claypon's report, a letter was received from the Local Government Board, stating that owing to the circumstances of the Borough, they were of opinion that further provision for Health Visiting was necessary and suggesting as a first step the appointment of an additional Health Visitor to devote the whole of her time to this work. This would enable more children to be visited, and for a prolonged period; and ante-natal visiting could be undertaken. The question of establishing a Maternity Centre might be considered later, but the primary need was to put the arrangements for health visiting on a more satisfactory basis.

A Sub-Committee was appointed to consider this matter, and they decided to recommend to the Council the appointment of an additional whole time Health Visitor. The new post will be filled by the present Health Visitor, and a new one will be appointed in her place. Their duties will be so arranged that children will be visited up to the end of the first year of life, and at longer intervals up to school age. By the co-operation of the Midwives, some ante-natal visiting of expectant mothers will be undertaken, and advice given respecting the action necessary in the event of certain contingencies arising which menace the health of the mother. For this purpose trained workers are essential, and the work should be under municipal control. Later on arrangements may be made for the provision in certain cases of medical advice and treatment, either at existing institutions, or by the formation of an Infant Clinic or Mothers' Treatment Centre.

The cry which goes up throughout the land—to save all the babies—may be an excellent ideal, but is it wise? I think that no one who has the welfare of the country at heart would suggest any advantage in saving the congenitally imperfect, the syphilitic, or tuberculous offspring of degenerate parents. Mental and physical defects are transmitted to succeeding generations, and the possessors of these defects form the majority of the inmates of Poor Law institutions, asylums and prisons. To secure the perpetuation of a healthy and virile race should be the aim. In other words, we want to increase the best elements in the population, and not the worst. Doubtless from ignorance and neglect the lives of many healthy infants are sacrificed, and any measures which will check this deserve warm approval. At the same time, the restriction

of the Birth rate, because the duties of maternity interfere with the pursuit of social pleasure, must be laid at the door of a class other than the poor. The plain fact is that large families are common amongst the poor, and that small families are the rule amongst those better endowed. It would be a national gain if the balance was altered. The inducements held out to many women to leave their homes for work, pleasure or instruction, can only result in neglect of the home and the children. You cannot do two jobs in two places at the same time; and in relative importance the care of the home should take precedence of everything else. In the north of England, where there is much employment in factories, and home neglect, the death rate amongst children is very high; but during prolonged strikes, when the mothers have to stay at home and practice breast-feeding, the sickness and mortality always diminishes.

The Maternity Centre where the weighing, measuring, and general supervision of infants is carried out, appeals to many people, but for the present I prefer the method of home visitation by trained workers, and for reasons subsequently stated under the heading of Infant Mortality I am hopeful that the visitation of expectant mothers, and satisfactory midwifery attendance will reduce the risks of child-bearing and also the infantile death rate.

INFANTILE MORTALITY.

Total deaths under 1 year	115
Rate per 1,000 nett births	122

In considering this subject jointly with that of Infant and Maternal Welfare, it is well to remember that causes have been at work for many years which have operated in the direction of a lower mortality, and to remember also that death rates cannot go on falling indefinitely.

In England and Wales during the period from 1901 to 1914, the Infant Mortality rate declined nearly 40 per cent.

The figures for Chatham during the same period are shown in the following Table :—

1901	154
1902	163
1903	129
1904	178
1905	126
1906	137
1907	124

1908	127
1909	107
1910	92
1911	127
1912	115
1913	103
1914	97

The class of diseases in which the mortality is above the average is that of Premature Births and Congenital Defects.

An analysis of the Infant Mortality Tables shows that the largest proportion of deaths occur in very early infancy. Thus, taking the last year of the above series, 1914 :—

Total deaths under 1 year	107
Under 1 week	25
Between 1 and 4 weeks	21
„ 4 weeks and 3 months	22
„ 3 months and 12 months	39

Thus, 46 or 43 per cent. were under 1 month, and 68 or nearly 64 per cent. were under 3 months..

In 1912 and 1913, out of the total Infant Mortality, 68 per cent. in each year died before the third month.

The chief reduction in Infant Mortality has taken place amongst children over the age of one month. This fact suggests that the greater part of this early mortality is due to causes operating before birth. In other words, whilst the deaths due to conditions of defective environment have declined, those due to ante-natal causes remain unaltered. The inference is that better ante-natal care and better midwifery arrangements are needed.

Amongst the common causes of Infant Mortality is

ZYMOTIC OR INFECTIVE ENTERITIS.

This term comprises deaths registered as Diarrhoea, Enteritis, or Gastritis. Its incidence varies with climatic conditions, being always most prevalent in hot summers. Dirty surroundings and the prevalence of flies, together with defective food storage are contributory causes. Bottle-fed infants are specially affected.

Table shewing number of deaths from Infantile Diarrhoea during the past 5 years.

Year	Total	Under 1 year	1 and under 2 years	Temperature
1911	58	39	11	High
1912	12	11	1	Low
1913	22	15	3	Moderate
1914	38	31	7	High
1915	16	14	2	Moderate

The following measures were taken during the summer months.

The Nurse paid special visits to mothers in certain houses, and gave advice as to methods of feeding, the storage of food and cleanliness of the house and surroundings. An Inspector was detailed to give attention to the sanitary condition of closets, yards and streets, manure and refuse accumulations. Notices were issued respecting the weekly removal of manure, covers were provided for manure pits, and the Surveyor was directed to periodically flush out courts and alleys.

Table IV., page 10, gives the various causes of deaths amongst infants, and the ages at which they occurred.

VITAL STATISTICS.

Estimated population to the middle of 1915, 44,878.

The number of inhabited houses as shown by the Rate Books is 9,677.

There is scarcely an empty house to be found in the Borough.

Table showing the number of houses in each ward during 1913, 1914 and 1915.

	1913	1914	1915
St. Mary's Ward	2,048	2,052	2,036
Luton „ ..	4,535	4,549	4,572
St. John's „ ..	2,991	3,026	3,069
Average number per house, 4.6.			

BIRTHS.

The number of Births registered during 1915 was 944.

This total is made up as follows :—

Number registered in Chatham	940
Number occurring outside the Borough, of persons belonging to it	14
	—
	954
Number in the Borough, belonging to other localities	10
	—
Nett Total	944

Birth Rate 21 per 1,000

Of Males there were 493, and of Females, 451.

The illegitimate births numbered 39, or 4 per cent. of the total.

All the 10 births belonging to other localities were illegitimate.

The following Table shows the material increase of population, that is, the increase of births over deaths in each division of the Borough :—

	Births	Deaths	Number of Births over Deaths
St. Mary's Ward	195	132	63
Luton „	469	282	187
St. John's „	276	149	127
	-----	-----	-----
	940	563	377
Deaths in Institutions ..		133	133
	-----	-----	-----
		696	244

The nett result is an increase of births over deaths of 244.

The figures in this Table deal with births and deaths actually registered within the Borough, and do not include transfers.

DEATHS.

The deaths registered in the Borough include all occurring in Institutions, some of which are of persons belonging to other localities, whilst, on the other hand, there are deaths outside the Borough of persons belonging to it.

Thus, by the addition of the "inward" transfers, and the subtraction of the "outward" transfers, a nett total is found.

After making the necessary corrections the nett total of deaths belonging to Chatham for 1915 is 739.

With few exceptions the deaths of the "non-residents" occurred in the Medway Union Workhouse, whilst the deaths of "residents" transferred were in St. Bartholomew's Hospital, Fort Pitt Military Hospital, and the Military Families' Hospital, in Gillingham, and in addition, 43 deaths in other parts of the country, several being in lunatic asylums or London hospitals.

In order to arrive at a standard rate, the Registrar General has issued a factor for each town, by which the nett death rate must be multiplied in order to get the necessary correction for age and sex distribution. The factor for correction in Chatham is 1.0055, which scarcely alters the nett rate.

The rate of Mortality of 1915 is 16.4.

Table I. shows the Vital Statistics of the whole district during 1915 and the five previous years.

Table VI. shows the various causes of and ages at death during 1915.

The following Chart shows in graphic form the death rates in Chatham during the series of years 1900 to 1915.

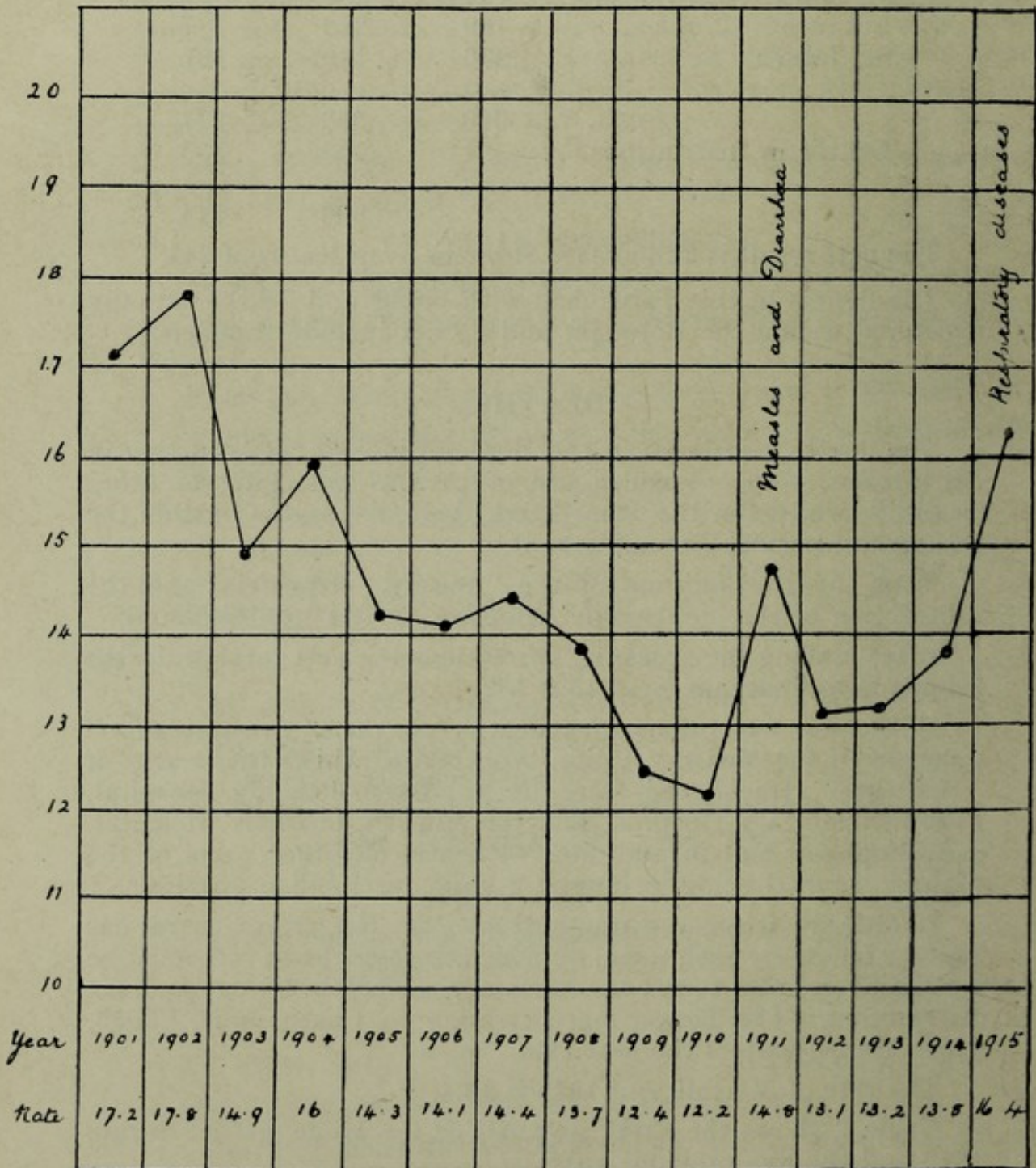


Table showing the Mortality in England and Wales, as compared with Chatham during 1915 :—

	Annual Rates per 1000 living		Deaths under 1 year to every 1000 Births
	Births	Deaths	
England and Wales	21.9	14.8	110
96 Great Towns, including London ..	22.8	15.9	117
148 Smaller Towns	21.6	14.2	114
England and Wales, less the 244 towns ..	20.7	13.6	98
Chatham	21.	16.4	122

The ages at which deaths occurred were as follows :—

Under 1 year	
1 and under 5 years	
5 „ „ 15 „	
15 „ „ 25 „	
25 „ „ 65 „	
65 years and upwards.	

Including transferable deaths the numbers registered during each quarter were :—

First Quarter	273
Second „	150
Third „	137
Fourth „	179

The number credited to each ward were :

St. Mary's Ward	132
Luton „	284
St. John's „	149

SEX.—Amongst Males there were 386 deaths

„ Females „ 353 „

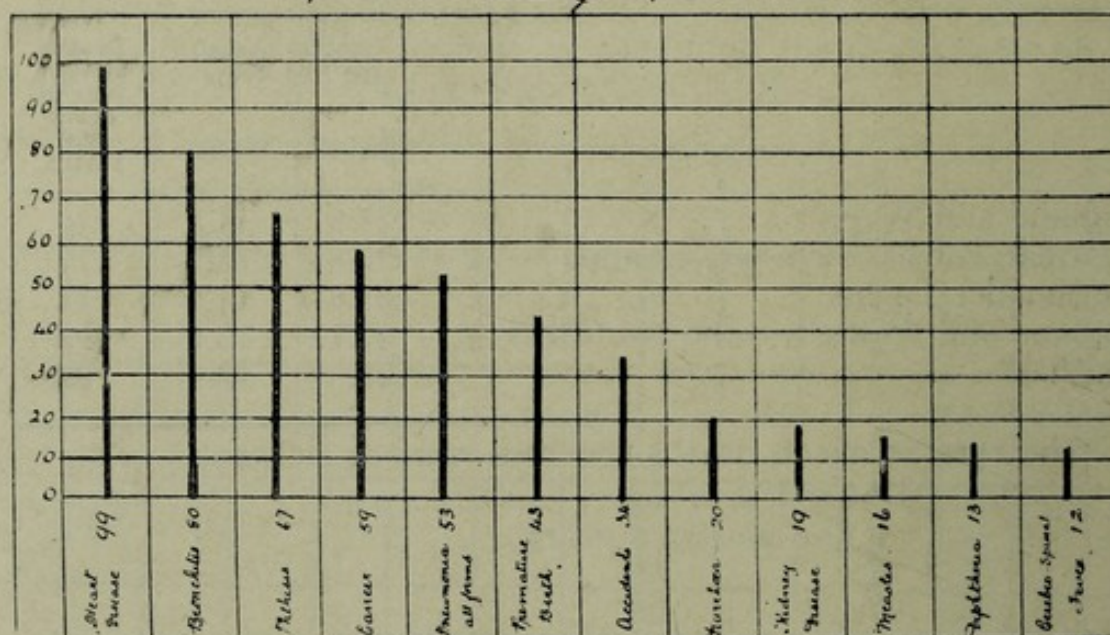
ILLEGITIMATE BIRTHS AND DEATHS.

The births of illegitimate children number 47, and there were 11 deaths, or 24 per cent.

NOTE.—Since the above report was compiled the Registrar-General has issued an estimate of the civil population, the figures being 39,248. This is at variance with my estimate, and I think understates the actual population. Based on these figures, and deducting 11 deaths of members of the armed forces of the Crown, the Birth and Death Rates respectively are as follows :—

Birth Rate	23.6 per 1000
Death Rate	18.5 „

Comparative view of the Principal causes
of death during 1915



The increase in the Death Rate is principally due to deaths from Respiratory Diseases, which were very prevalent and fatal during the first quarter of the year. Excluding Phthisis there were 138 deaths registered from this class of disease as compared with 88 during 1914. In addition there were 12 deaths from Cerebro-Spinal Fever.

FACTORY AND WORKSHOP ACT, 1901.

Supervision of the sanitary conditions of places where work is carried out are very necessary, and it is the specific duty of a Medical Officer of Health to report annually on the administration of the Act in his District.

The Table usually issued by the Home Office has not been forwarded this year.

Factories in which mechanical power is used are supervised by Factory Inspectors. Insanitary conditions are reported by them to the Local Sanitary Authority, whose duty is to secure a remedy.

The number of notices received from H.M. Inspectors was 10, all of which received attention.

HOME WORK.

This class of work is almost invariably carried out in the poorer class of homes, either as a means of livelihood, or with a view of

adding to the family earnings. Its control is important, because the dwellings may be insanitary or unwholesome, and dangerous infectious disease may occur in the families occupying them. Unwholesome conditions are more likely to be found in the dwellings of outworkers, because the time given to the work prevents in many cases due attention to the needs of the house and the children.

Employers' lists are received twice yearly, but not always with the necessary promptitude. It is obligatory on employers to send lists of outworkers, properly revised as to names and addresses. Neglect to revise the lists causes much unnecessary work for the Inspectors. In case of default it is always open to the Council to enforce the obligation by legal proceedings.

Most of the outworkers are females engaged in the making of wearing apparel. Several are wives of Royal Marines, and of this class the number has considerably increased.

The total number of outworkers reported during the first half of the year was 767, and during the second half, 718.

Work was suspended in 8 instances because of the unwholesome state of the dwelling, and in 7 instances because of infectious disease.

The total number of visits paid to the homes of outworkers was 984.

Number of outworkers residing in	Gillingham	18
" " " "	Chatham ..	15

BAKEHOUSES.

These are specially considered in the Factory and Workshop Act, Sections 97 to 102.

The points requiring attention are in connection with the position of closets and drains, water supply, position of bakehouse in regard to sleeping rooms, and to the periodical cleansing and limewashing of the interiors. There are 4 underground bakehouses in use.

The following Table gives particulars of work carried out under the Act during 1915.

Factories, Workshops, Workplaces and Homework.

BOROUGH OF CHATHAM.

1.—Inspection.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of		
	Inspections	Written Notices.	Prosecutions.
Factories (including Factory Laundries)	12	0	
Workshops (including Workshop Laundries)	62	12	
Workplaces (other than Outworkers' premises included in Part 3 of this Report)	2	0	
Total	76	12	

2.—Defects Found.

Particulars.	No. of Defects.			Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
Nuisances under the Public Health Acts :—				
Want of cleanliness	9	9		
Want of ventilation	0	0		
Overcrowding	0	0		
Want of Drainage of floors	0	0		
Other Nuisances	2	2		
Sanitary Accommodation { insufficient	0	0		
{ unsuitable or defective	1	0		
{ not separate for sexes	0	0		
Offences under the Factory and Workshop Act :—				
Illegal occupation of underground bakehouse	0	0		
Breach of special sanitary requirements for bakehouses	0	0		
Other offences (excluding offences relating to outwork which are included in Part 3 of this Report)	0	0		
Total	12	11		

3.—Homework.

Nature of Work.	Outworkers' Lists.						Notices served on Occupiers as to keeping or sending lists.	Outwork in infected premises.	
	Lists received from employers.							Instance.	Orders made.
	Sending twice in the year.			Sending once in the year.					
	Lists.	Contractors.	Workmen.	Lists.	Contractors.	Workmen.			
Wearing Apparel— (1) making, &c... ..	24	1	1456	1		29	14	7	7
Total	24	1	1456	1		29	14	7	7

4.—Registered Workshops.

Workshops on the Register at the end of the year.	Number.
Tenement Workshops	0
Workshop Bakehouses	23
Domestic Workshops	30
Laundries (Workshops)	6
Other Workshops	209
Total number of Workshops on Register	268

5.—Other Matters.

Class.	Number.
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Acts ..	0
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshops Acts :—	
Notified by H.M. Inspector	10
Reports (of action taken) sent to H.M. Inspector ..	6
Other	0
Underground Bakehouses :—	
In use at the end of the year	4

RAINFALL DURING 1915.

Taken at Luton Waterworks, Chatham, by Mr. Coles Finch.

January	2.87 inches
February	3.65 ..
March95 ..
April	1.35 ..
May	4.71 ..
June	1.30 ..
July	2.58 ..
August	1.76 ..
September	2.39 ..
October	1.68 ..
November	3.04 ..
December	5.18 ..
	<hr/>
Total	31.46 ..

