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Borough of



Guildford.

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# MEDICAL OFFICER'S REPORT

FOR THE


Year ending 31st December, 1905.

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# MEDICAL OFFICER'S REPORT

FOR THE YEAR 1905.

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*To the Mayor and Corporation of the Borough of Guildford.*

GENTLEMEN,

I have the honour to present to you my Annual Report for 1905.

As I have only held office since February, my Report upon the Sanitary circumstances of the Borough will not be as complete as it otherwise might be.

## STATISTICS—POPULATION.

The population at the middle of 1905 may be estimated to have been, in round numbers, 21,900.

## BIRTH RATE.

The number of births registered in the Borough, during the year, was 478, which gives a birth rate of 21·8 per 1,000. This is an extremely low rate; it is a little higher than the two previous years, but a little below the average for the last ten years (22·3).

The rate for England and Wales was 27·2 per 1,000.

## DEATH RATE.

The total number of deaths registered in the District was 302. Of these, 102 were deaths of non-residents which occurred in the County Hospital and Workhouse Infirmary, which reduces the num-



ber to 200. To this number must be added 8 deaths of Guildford residents who died in Brookwood Asylum, which makes a nett total of 208. This number is smaller than the average of ten years for the old Borough, and gives the remarkably low death rate of 9·5 per 1,000 population, as against an average of 13·1 per 1,000 for the previous ten years.

The rate for England and Wales was 15·2 per 1,000.

The causes of, and ages at, death are given in detail in Table iv.

The low death rate, as compared with previous years, is partly due to the almost entire absence of fatal cases of infectious disease and to the low infantile mortality. There were also fewer deaths from phthisis and diseases of the respiratory organs. It is however, difficult to compare last year's figures with those of previous years, owing to the enlargement of the Borough, which took place in 1904.

The low rate of 9·5 per 1,000, it must be stated, is not likely to continue. It would mean *for the existing population* that the average age at death would be over 100 years. It could only be kept up by a continued immigration of children (above infant age) and young adults.

### INFANT MORTALITY.

Thirty deaths occurred of infants under one year. This among 478 births registered gives the Infantile Mortality of 63 per 1,000. This again is exceptionally low. The average for the previous ten years was 116, and the lowest during that period was 88, in 1901.

The causes of death are set out in Table v.

The rate for England and Wales was 128 per 1,000 births.

The rates for England and Wales, County of Surrey, and the Borough of Guildford, for the years 1900—1904, are given below.

		England and Wales.		Surrey.		Guildford.
1900	...	160	...	107	...	128
1901	...	151	...	105	...	88
1902	...	133	...	101	...	110
1903	...	132	...	93	...	96
1904	...	146	...	108	...	90
Averages		<u>144</u>		<u>103</u>		<u>102</u>

The mortality has therefore been about the same as for the whole of Surrey, but much below that of England and Wales.

A large proportion of deaths in infants are usually caused by diarrhoeal diseases, but only four were due to this cause last year. The prevalence of this malady depends upon certain meteorological conditions, and to a greater extent on sanitary conditions, such as the frequency of unpaved and dirty back yards, which brings about the contamination of milk, or adds to the contamination, which, in many cases, already exists in it. In addition, must be mentioned the carelessness and ignorance of mothers in the matter of feeding.

Twelve of the deaths occurred under one week, and were due to immaturity or debility at birth.

It may confidently be anticipated that the Midwives' Act, which has just come into force, will gradually lead to an improvement in the education and training of midwives, and that this, by bringing greater knowledge to bear on the early care of infants, will tend to lower infantile mortality.

The County Medical Officer of Health has, for some years past, forwarded to medical men practising in the County, cards of instructions in the feeding of infants, with a view to distributing them amongst their patients. A more general distribution could, no doubt, be brought about if the co-operation of the Registrars and midwives could be secured. A still more effectual method of combating the mortality would be the employment of a skilled nurse to visit the homes of the poorer classes, where births have occurred, and to give instruction in the management and feeding of the infants.



### ZYMOTIC DEATH RATE.

Only four deaths are attributed to the seven principal zymotic or epidemic diseases, viz: one to diphtheria and three to diarrhœa. This gives the very low rate of 0·18 per 1,000 population.

The rate for England and Wales was 1·52 per 1,000 population.

### PHTHISIS, &c.

Sixteen deaths were registered from this disease (as against an average of 18 for the previous five years) and ten from other tubercular diseases.

### CANCER.

Twenty-four deaths occurred from this disease, compared with 16 as the average of the previous five years.

The following are the chief birth and mortality statistics for England and Wales during 1905.

	Birth Rate.	Death Rate.	Death Rate from seven principal epidemic diseases.	Death Rate of infants under one year per 1,000 births.
England and Wales	27·2	... 15·2	... 1·52	... 128
76 Great Towns	28·2	... 15·7	... 1·88	... 140
141 Smaller Towns	26·9	... 14·4	... 1·50	... 132
England and Wales less the 217 towns	26·3	... 14·9	... 1·09	... 113

### INFECTIOUS DISEASES.

The number of cases, and ages of the patients, are given in Table iii. There are included in the total of 43, 7 voluntary notifications of cases of phthisis, which were sent in during the last five months of the year.

It will be seen that of the total number notified, no less than 16 were cases of erysipelas.

Altogether 15 of the notifications were received from the Workhouse, viz: four of scarlet fever, one of diphtheria, one of typhoid fever, six of erysipelas, and three of phthisis.

Two cases of scarlet fever were notified from the County Hospital.

### SCARLET FEVER.

Apart from those notified in the public institutions mentioned—where owing to the influx of patients the chances of infection may be considerable—only four cases remain to be accounted for. One of these was of a doubtful character, one contracted the disease in London, and the other two were isolated cases in school children. The year's record therefore is a good one, and shews that the disease did not once get a footing in the district during the year.

### DIPHTHERIA.

Nine cases were reported. It was only between two of these that any connection could be traced—and these were two children living next door to each other. The children had not recently been in contact, and it is probable that the infection was carried to the second child by its mother. The origin of the first case remains a mystery, as the child had had no intercourse with strangers.

Three of the other cases were children living in large houses, only one of whom attended school. The two others were not known to have been exposed to any possible source of infection. The origin of these and of the cases previously mentioned, as well as many others that occur in one's experience, support the old theory as to the frequently spontaneous origin of diphtheria from bad smells polluted road dust, &c.

One of the remaining cases was a child who had the croupous form of the disease and was removed to the Isolation Hospital, and died soon after admission. The other was probably contracted whilst clearing out a blocked drain.

### ERYSIPELAS.

Sixteen cases are recorded. All were distinct from one another—it is indeed most rare to find one case infected from another—and it can only be regretted that this disease still remains notifiable only to swell the district's record of "infectious" disease.



### ENTERIC FEVER.

The case at the Workhouse was imported, so that the year's record is an excellent one.

### PUERPERAL FEVER.

It is very satisfactory to note, that not a single case was notified.

### PHTHISIS.

This disease became voluntarily notifiable from August 1st. Only seven notifications were however received up to the end of the year, which can only be a small proportion, unfortunately, of the actual cases existing. It is probable that a larger number will be notified as the public come to realise its infectious nature.

The notifications afford an opportunity for inspection of the sanitary condition of the premises and for giving advice as to ventilation, isolation, and disinfection of the sputum.

Disinfection is carried out by the Sanitary Inspector after the death or removal of the patient, and the walls stripped and cleansed.

### SMALL POX.

No cases were reported, but no less than six persons were notified by Port Sanitary Authorities as about to proceed to this district after having travelled on board an infected ship.

### MEASLES.

This disease was prevalent in the Autumn among the Sandfield school children.

### WHOOPIG COUGH.

Several cases occurred among the children attending the Stoughton and Guildford Park Schools.

### DIAGNOSIS OF INFECTIOUS DISEASES.

The Town Council have transferred to the Medical Officer of Health the examination of specimens from suspicious cases of diphtheria, typhoid fever and phthisis, which had hitherto been sent

to a London Institution. There is thus a considerable saving in time, and the arrangement has worked very satisfactorily. By these examinations some cases may be diagnosed earlier, and with certainty, so that there is increased protection to the community. It may also prevent the removal of suspicious cases to the Hospital, with the consequent trouble and expense.

### ISOLATION HOSPITAL.

One hundred and thirty-five cases were admitted into the Hospital from the whole of the Board's District.

The particulars are set forth in the following table :—

	Admissions.	Scarlet Fever	Diphtheria.	Typhoid	Deaths.
Guildford Rural	38	25	13	0	0
Guildford Borough	13	10	3	0	1 Diphtheria
Godalming	8	4	4	0	1 Diphtheria
Woking	76	57	19	0	0
	<hr/> 135	<hr/> 96	<hr/> 39	<hr/> 0	<hr/> 2

The admissions in the several months were as follows .—

	Total.	Scarlet Fever.	Diphtheria.
January	16	13	3
February	5	3	2
March	12	11	1
April	13	8	5
May	15	11	4
June	22	17	5
July	10	6	4
August	19	11	8
September	13	12	1
October	3	1	2
November	0	0	0
December	7	3	4
	<hr/> 135	<hr/> 96	<hr/> 39

There were seven patients in Hospital at the end of the year.



An exceptionally small number of patients were admitted during the last quarter, and more than usual during the second quarter.

It will be noticed that no cases of typhoid fever were admitted. The Board's district was comparatively free from this disease during the year.

Twenty-three patients admitted into Hospital were subsequently found not to be suffering from the disease on account of which they were sent in.

Seventeen of these were sent in as cases of scarlet fever, and six as diphtheria.

The large number of mistaken cases of scarlet fever was chiefly due to the prevalence of a puzzling and uncommon form of German measles, in which the symptoms closely resemble those of a mild attack of scarlet fever.

The mistaken cases of diphtheria were cases of septic sore throat. In none of the six cases had a "swab" been taken from the throat for bacteriological examination, for if this had been done, the risk and the expense of their removal would have been avoided.

Arrangements are in force in three out of the four of the Board's constituent districts whereby medical men are enabled to have "swabs" from suspicious cases of diphtheria examined by the Medical Officer of Health, at the expense of the respective Councils.

This not only affords—in many cases,—a means for earlier diagnosis than can be made by the naked-eye signs of the disease, but it may prevent the removal to Hospital of patients with bad, but non-diphtheritic sore throats, in which those signs are deceptive.

It appears to me that when a case on the first visit appears doubtful, it is better to keep the patient under observation for a day or two until the symptoms develope, rather than to notify at once for removal to Hospital.



It is sometimes urged that the immediate removal of all suspicious cases is the best means of preventing outbreaks of infectious disease, but this advantage, at any rate in the absence of ample observation wards, is outweighed by the risk the patients run of contracting the disease in the Hospital if they are not already infected, not to mention the expense of removal of the patient, involving as it does the subsequent removal and return of the bedding disinfection of the room, etc.

Most of the homes from which the Hospital patients are admitted are incapable of affording isolation for six or eight weeks, but there are very few in which sufficient isolation could not be arranged for a day or two.

The great majority of the cases were of a mild character, as is shown by the exceptionally small number of fatal cases, viz.: two. These were both children suffering from a severe type of diphtheria, who died within twenty-four hours of admission.

The number of cases and deaths in four previous years were as follows :—

		Cases.		Deaths.	
1901	...	293	...	27	9·2 per cent
1902	...	190	...	6	3·2 „
1903	...	161	...	8	5·0 „
1904	...	154	...	4	2·6 „
1905	...	135	...	2	1·5 „

The average stay in Hospital of the patients with scarlet fever was 53·2 days, and 34·3 days in the case of diphtheria patients.

The tender of Messrs. Mitchell Brothers, of Shalford, for the erection of the new Scarlet Fever Pavilion and additions to the Administrative Block, etc., was accepted in January, the amount being £2,875 for the Pavilion, and £445 for the additions. The work was completed in August.

The new block provides additional accommodation for twenty-two patients, allowing the full requirement of 2,000 cubic feet per bed. There is now on this basis a total accommodation for 60 patients in the Hospital.

## WATER SUPPLY.

The Borough Surveyor has kindly furnished me with the following particulars for this Report.

"The total amount of water consumed for the twelve months ending December 31st, 1905, in the Town and District was 228,151,000 gallons.

The amount of water used for manufacturing purposes out of the above quantity was 5,031,000 gallons.

You will see by the foregoing particulars that the following figures obtain as regards the consumption per head of the population :—

For all purposes 31·43 gallons per head per diem.

For manufacturing purposes solely, '68 gallons per head per diem.

NOTE.—This does not include the water supplied to the Railway Co., or any garden supplies.

The mean quantity used daily was 636,000 gallons."

There has been a sufficient and constant supply maintained during the year.

Negotiations are still in progress for the taking over from the Woking Water Company of the rights of supply in that portion of the recently added area which has hitherto been supplied by them.

When this area is taken over, recourse must be had to one of the new boreholes for an additional supply.

Samples from the Town well were sent for chemical and bacteriological analysis on two occasions during the year, and again on January 8th of this year ; on the first occasion to Dr. Sims Woodhead and Dr. Duprè, and on the second and third to Dr. Thresh, who is one of the leading authorities on water supply.

### THE REPORTS WERE AS FOLLOWS :—

(1) Samples taken 8.40 a.m., April 17th, 1905 ; water level 24ft. 3in. from surface. Rainful preceding week, '52 inches.



DR. DUPRE'S REPORT.—“The water is of a very high organic purity, distinctly better than the sample on January 8th, 1904. In this respect it is identical with the sample reported on in December, 1903.”

DR. SIMS WOODHEAD'S REPORT (condensed).—“The number of organisms growing on gelatin at room temperature in four days was 5; of these 3 liquified the gelatin. There were 12 colonies by the 10th day.

There was no evidence of the presence of *bacillus coli communis*.

This is an excellent sample of water from the bacteriological standpoint. The number of organisms is very low and all the organisms present were organisms usually met with in water.”

(2) Samples taken from the Town well November 9th, 1905, 11.30 a.m.; water 14ft. 3ft. from top. Rainfall preceding week .80 inches; no rain for previous three days.

DR. THRESH'S REPORT (condensed).—“The number of organisms in 1 c.c. growing on gelatin in four days, counted with pocket lens = 48.

*Bacillus coli communis* was not found in 20 cubic centimetres.

*Bacillus enteritidis sporogenes* was absent from 150, 350 and 500 cubic centimetres.

The water is of moderate hardness and free from any objectionable saline matter. It is of great organic purity and is free from any visible suspended particles.

Bacteriologically it is very satisfactory. It contains a comparatively small number of microbes, and none of the latter appear to be derived from sewage or manurial matter.

The water therefore is quite satisfactory and well adapted for all the purposes of a public supply.”

(3) Sample taken from Town well 11.30 a.m. January 8th, 1906; water level, 20ft. 9in. from top. Rainfall preceding week, 1.52 inches. (River in flood.)

DR. THRESH'S REPORT (condensed).—“The number of organisms in 1 c.c. growing on gelatin in 4 days, counted with pocket lens = 436.

Smallest quantity of water in which the *bacillus coli communis* was found = 5 cubic centimetres.



The bacillus enteritidis sporogenes was absent from 150, 300 and 500 c.c's.

Chemically the water is of a very high degree of purity, being almost identical with the sample examined in November last.

Bacteriologically however, the water is not so good as in November, since it contains more bacteria, and using 5 cubic centimetres of the water the bacillus coli was detected. Even in 500 cubic centimetres however the bacillus enteritidis sporogenes was absent, and had any sewage gained access to the well, both the above named bacteria should have been found.

I regard the water as being at present satisfactory, but it will be interesting to compare results after a longer spell of rainy weather."

The disputed question as to whether the well forms an ideal public supply is therefore no nearer solution than it was at the beginning of the year, neither will it be solved by the sending of occasional samples to different analysts. More may be expected from the comparison by the same analyst of samples taken under different conditions, and also by noting whether there is any progressive deterioration in samples taken under approximately similar conditions. The most promising way of settling the matter would be by the inspection of the well and its surroundings by a water expert, who would, no doubt, thereby be enabled to indicate the conditions under which he would require samples to be taken, in order to assist him in arriving at a conclusion.

I have carefully gone into and tabulated all the analyses from the commencement, which are in the possession of the Town Clerk. The comparison of successive analyses shews that the water has been somewhat variable in composition, but there has been a progressive increase in the amount of nitrates, or oxidised organic matter, present. The conclusions of the Analysts however, have been in the great majority of instances, highly favourable, and it is only occasionally that a suggestion of danger has been advanced.

I myself am not prepared to express a definite opinion as to the supply, without carrying out a series of analyses of the water under various conditions of water level, &c., and comparing the water with that from neighbouring deep wells, and from other external sources.

## SEWERAGE AND SEWAGE DISPOSAL.

According to a list supplied to me by the Sanitary Inspector, 59 premises were connected with the sewers during 1905, viz., 14 in the old Borough (all dwellings), and 45 in the Stoughton district. The latter were made up as follows.—

New Dwellings .....	20
Existing Dwellings .....	21
„ Stables .....	2
„ Slaughter-house .....	1
New Slaughter-house.....	1
	—
	45
	—

The total number of dwelling houses in the old Borough not connected to the sewers is now 69.

Fourteen of these are situated on Pewley Hill, but the extension of the sewer to take these in is now under consideration.

Local Government Board enquiries were made in July, and in October into the Council's application to borrow £10,012 and £3,165 for works of sewerage in the unsewered part of Stoke and in the portion of Artington recently added to the Borough, respectively. The enquiry in October included also the application for £7,200 for the purchase of land for the extension of the sewage disposal works.

These much needed works will shortly be commenced. When once the sewers are laid no time should be lost in enforcing connection of the house drains and abolition of the cesspools whose contents now leak away into the chalk—the water-bearing stratum of the district. This applies more especially to the Artington portion. Efforts should be made also to abolish all the cesspools in the remainder of the Borough which drain into the chalk.

It is wrong in principle to pollute a water-bearing stratum, and in the case of chalk, the water in which runs in fissures underground,



it is impossible to say at what distance or in which direction danger of pollution ceases.

I would, therefore, suggest that the drains and cesspools of all houses not connected with the sewers be tested to find if they are water-tight and otherwise satisfactory. If found good in every respect, and if the owners refuse to connect, it would be for the public interest that the connection should be made by the Council under Section 24 of the Public Health Act.

The Borough Surveyor has been kind enough to furnish the following particulars in answer to my enquiries:—

#### SEWAGE DISPOSAL.

"No new works were carried out in the year ending 1905 at the above works, but 120 acres of additional land in the immediate vicinity was acquired.

The area of the land used for irrigation of Sewage effluents and under-drained accordingly, is nearly 30 acres.

(1) The quantity of Sewage treated chemically and afterwards purified by the land, may be taken as 172,750,000 gallons per annum.

(2) The quantity dealt with in the Septic tank and passed through the Bacteria beds may be approximated as 36,000,000 gallons per annum.

(3) The sludge is drawn from the tanks into an underground chamber in close proximity, and pumped through a cast-iron main to the 17 acres of land lying at the extreme northernmost point of the works.

It becomes necessary to dispose of the sludge in this manner three times a week, and the land utilised for the purpose has given excellent results, inasmuch as part of it has yielded each year a very fine crop of mangold wurzel.

The approximate amount of Brewery refuse discharged into the low level sewers, may be taken at something about 100,000 to 150,000 gallons per day, but there is no means of recording the exact amount.

The number of samples taken by the Thames Conservancy Inspector last year was eighteen (twelve at Bell fields, and six at Slyfield). No complaints were received from the Board."



## REMOVAL AND DISPOSAL OF HOUSE REFUSE.

The collection of house refuse which had previously been let out to Contractors was entirely taken over by the Council during the year. Up-to-date covered vans and the necessary horses were bought for the purpose. The Refuse is collected at least once a week from all houses, and is carted to barges at the Council's Wharf for conveyance by river to the Sewage Farm. The place where it is deposited is fortunately well away from dwellings, but the heaping of refuse matter on wet ground is a questionable proceeding from a hygienic point of view. The processes of natural purification that go on in fairly dry soil are extremely slow in wet soils. Any low lying land raised by means of town's house and trade refuse would, therefore, be quite unsuitable for the disposal of sewage for a very long period of time,

The provision of a Refuse Destructor has again recently been considered in connection with the proposal to pump the Shalford sewage. The disposal of refuse in a Destructor is an immensely superior method to that now in use, and there is no reason whatever to fear that any nuisance from smoke or fumes would be produced by a high-temperature Destructor fitted with the usual fume cremator.

## HOUSING OF THE WORKING CLASSES.

Four cottages were reported to the Council under the Housing of the Working Classes Act, as being unfit for human habitation—two in Stoughton Lane and two at Slyfield. In the case of the first two a closing order was obtained on default in carrying out the necessary repairs. In the case of the Slyfield cottages, the owner decided they were not worth repairing, and intends to pull them down and re-build.

Six cases of overcrowding were found, and these, with considerable difficulty, were abated.

The scarcity of suitable cottages within the reach of the labouring classes makes it very difficult to remedy overcrowding without

exercising undue severity. There are also in the old parts of the Borough many cottages which are hardly fit for habitation, but one hesitates to take active measures until the present want of suitable cottages is to some extent supplied.

A Local Government Board enquiry was held in October into the Town Council's application to borrow £4,441 for the erection of eighteen cottages for the Working Classes, at the end of Cline Road.

Plans prepared by the Surveyor for two blocks of four cottages, similar to the Richmond dwellings, and by Mr. Capp for a terrace of ten cottages, were put before the Inspector, Mr. Capp's plans having been adjudged by the Housing Committee as the best in a competition among local Architects. It was estimated that the two sets of cottages, if let at 7/- and 6/3 per week respectively, would be self-supporting.

A letter was received from the Local Government Board in December with suggestions for minor alterations in the drawings, which were therewith remitted for amendment.

These suggestions are interesting as representing the Board's views on some of the points in the designing of dwellings which are not covered by the clauses in the Model Bye-Laws.

They were as follows :—

- (1) Staircases should be properly lighted and ventilated.
- (2) The best bedroom in every cottage should have a cubic capacity of at least 1,080 cubic feet.
- (3) Direct approach from living room to bedroom by open staircase is undesirable.
- (4) Direct entrance from street into sitting room is undesirable.
- (5) In rooms without a fire-place, ventilation in the ceiling is desirable in addition to the aperture in the external wall required by the Bye-Laws.



The Board suggested that the 15 feet frontage should be increased so as to allow of some of the above improvements being carried out.

Greater hope of solving the Housing problem in Guildford is, however, held out by the proposed development of some land near Bell fields recently acquired by the Council at £66 per acre. It was originally intended to divide the 22·7 acres into 385 building plots which, with the exception of 20 plots on the main road, would have a frontage of 17 feet.

In a report I was requested to make as to the suitability of the site and the number of plots proposed to be laid out, I expressed the opinion that in spite of disadvantages arising out of the low-lying nature of the site and the proximity of the Sewage Works, I did not anticipate that the locality would become an unhealthy one provided an undue density of population were avoided. I pointed out that the density of population that would follow if all the plots were sold, would be 84 to the acre, against 8·4 for the whole Borough, and 27 for the old Borough.

The density of population in the different parishes of the old Borough were as follows :—

Holy Trinity .....	24 persons to the acre.
St. Mary .....	34       "       "
St. Nicholas .....	20       "       "
The Friary .....	37       "       "
Stoke Within .....	29       "       "

The number for persons per acre in the other Surrey Boroughs at the census of 1901 were as follows :—

Kingston .....	30 persons per acre.
with Surbiton, =	11·8       "       "
Croydon .....	14       "       "
Richmond .....	12       "       "
Godalming .....	10       "       "
Reigate .....	4       "       "



The average of the whole of the Surrey Urban Districts works out at 4·8 persons per acre.

The reason for laying stress on density of population is that it is one of the factors which determine the health record of a locality. Statistics shew that mortality increases very rapidly with density of population, even when it is far below the above figures. It is true that where density is greatest other factors such as poverty, squalor, and pollution of the soil, come into play and help to make the area insanitary. The character of the subsoil and the elevation of the site are other important factors determining the healthiness of a district. It is obvious that where an area has disadvantages in respect of some of these factors, attempts should be made to compensate for them by diminishing the effect of the other factors. Hence the necessity for reducing the number of cottages to the utmost feasible limit, in order to counter-balance the effects produced by the disadvantages of the site and the character of the population which will probably reside there.

I have no doubt that the least harmful method of placing the maximum number of cottages on the site would be by increasing the width of the plots at the expense of their depth. With plots 120 feet in depth there would be about 160 feet between the cottages in adjacent streets. For purposes of health some of this space would be far more valuable if distributed between the cottages in the same row. For the field in question this could be economically effected by making the two proposed roads run parallel to the Woking Road, leaving the existing pathway to Slyfield as a back way to the innermost row.

In any event the maximum space possible should be allowed at the sides of each cottage or pair of cottages, so as to ensure abundant air and sunshine on all sides. These cannot with impunity be shut out to the smallest degree. With reference to the class of cottage required in Guildford it is generally considered that three bedrooms are essential in the smallest cottage. This is no doubt the case when the family comes to grow up, but for a small family it is unnecessary, and has the disadvantage that one good bedroom is spoilt by conversion into two small stuffy ones.

Similarly for a small cottage, one large living room is infinitely preferable from a health point of view, to two small rooms.

Another point of considerable importance in the designing of cottages to be built in rows is the objection to the back addition, which is too frequently built. This often keeps sunshine and air away from the very spots where most needed, viz: from the chief living rooms and from the backs of dwellings.

### **BUILDING BYE-LAWS.**

The revision of the existing series of Bye-laws has again been under the consideration of the Committee, and the work is now approaching completion.

The subject has been prominently before the public during the year, and considerable interest was taken in the Cheap Cottages Exhibition at Letchworth, which was instituted with the object of securing the erection of the best £150 cottage, a prize of £100 being offered for this exhibit. The Exhibition was held in a district where only the Rural set of model Byelaws are in force, i.e., Byelaws which do not deal with materials and construction of walls, &c. but only with certain sanitary requirements.

A Sub-Committee of three members of the Council were deputed to visit the Exhibition, and their report was presented to the Council in November.

It is interesting to note that, of the numerous materials used; bricks, concrete, concrete-blocks, expanded metal, wood, &c., the prize was awarded for a brickbuilt cottage, of nine-inch work, covered with cement rough-cast, which would, in all respects, comply with the Urban series of Bye-laws.

Among the provisions which should be included in the new Byelaws are in my opinion the following:—



- (1) Paving of yards and open spaces in connection with dwelling houses (Section 23 Public Health Acts, Amendment Act, 1890).
- (2) Ventilators in the chimney breasts of all rooms with fireplaces and in the ceilings of all living rooms without fireplaces. Minimum height for rooms.
- (3) Prohibition of cesspools in all new dwellings built on the chalk. (The cesspools may be made watertight at first, but from accident or design, they rarely remain so.)
- (4) The distance of privies from dwellings should be considerably increased, and so-called earth closets should be classed as privies.
- (5) Without injury to health a relaxation of the requirements as to structure of walls in upper stories might be allowed, such as by the admission of timber framing covered with tiles or slates for external walls.
- (6) "Good" cement concrete, "good" mortar, "good" bricks, should be properly defined.
- (7) Rainwater stackpipes should be required to discharge over a trapped gully, in order to ensure that the water is taken away from the foundations.
- (8) Waste pipes from sinks, baths, lavatories, &c., should be properly trapped.
- (9) Low-lying sites over a defined area should be ~~re-~~  
*required* ~~requested~~ to be raised up to a certain height above ordnance datum, before being built upon.

### **FACTORY AND WORKSHOP ACT, 1901.**

The appended table is now required in each Annual Report of the Medical Officer of Health.

It will be seen from the large number of visits paid to workshops, &c., what a heavy addition to the routine work of the Sanitary Department was brought about by the 1901 Act—work which for the most part was previously done by the Factory Inspectors.

Special attention was paid to bakehouses and other places like the kitchens of restaurants where food is prepared, and also to those workshops where protected persons (women and young persons), are employed.

Reference to the table will shew that a considerable number of defects were found and remedied, thus proving the necessity of frequent inspection.

### Factories, Workshops, Laundries, Workplaces, and Homework.

#### 1.—INSPECTION.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of Inspections.	Number of Written Notices.	Number of Prosecutions.
Factories (including Factory Laundries)	33	22 letters. No Notices.	Nil
Workshops (including Workshop Laundries)	352		
Workplaces ... ..	29		
Homeworkers' Premises ... ..	63		
	477		

#### 2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied	Referred to H.H. Inspector.	

*Nuisances under the Public Health Acts :—*

Want of Cleanliness ... ..	65	65	—	—
Want of Ventilation ... ..	6	6	—	—
Other Nuisances ... ..	27	27	Nil	Nil
Sanitary accommodation—				
Unsuitable or defective ... .. (Section 22 P.H.A.A. adopted.)	5	5	—	—

*Offences under the Factory and Workshop Act :—*

Breach of special sanitary re- quirements for Bakehouses (SS. 97 to 100) ... ..	16	16	—	—
Total ... ..	119	119	—	—



## 3.—OTHER MATTERS.

Class.	Number.
Matters notified to H.M. Inspectors of Factories :—	
Failure to affix Abstract of the Factory and Workshop Act, (S. 133) ... ..	10
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (S. 5)—	
Notified by H.M. Inspectors ... ..	Nil
Reports (of action taken) sent to H.M. Inspectors ... ..	Nil
Underground Bakehouses (S. 101) ... ..	None

## Homework.—

	Number of Lists.	Number of Outworkers.
<i>List of Outworkers</i> (Sec. 107) :—		
Lists received ... ..	43	124
Addresses of Outworkers forwarded to other Authorities ... ..		4
Addresses of Outworkers received from other Authorities ... ..		Nil
Homework in unwholesome or infected premises ...		None

## Workshops on the Register (S. 131) at the end of 1905

Workshops Bakehouses ... ..	32
Workshops where women and young persons are employed ... ..	84
Mens' Workshops ... ..	118
Domestic Workshops ... ..	12
Total number of Workshops on Register ...	246

Fuller details as to the various classes of workshops are given in the Sanitary Inspector's Report at the end, together with details of the various defects found.

## SALE OF FOOD AND DRUGS ACT.

This Act is now administered by the Town Council, through the Public Health Committee.

The Public Analyst for the Borough is Arthur Angell, Esq., Ph.D., F.I.C., of Southampton.

The Officer appointed to take samples under the Act is the Chief Constable of the Borough, who has furnished me with the following particulars for 1905.

Samples sent to Public Analyst during 1905 —

<i>No. of samples.</i>			<i>No. of samples.</i>		
Milk	...	37	Mixed Sweets	...	4
Butter	...	28	White Pepper	...	3
Cheese	...	22	Coffee	...	3
Whiskey	...	19	Bread	...	1
Lard	...	8	Rum	...	1
Tea	...	7	Mustard	...	1
Gin	...	5	Flour	...	1
Brandy	...	5			
Jam	...	4			
Sugar	...	4			
			Total...		153

All the samples, except five, were pronounced genuine, without comment.

Of these five, one was a sample of milk-blended butter, containing the maximum amount of water allowed, viz.: 16 per cent.; three were samples of milk, one of which was reported as containing less than 3 per cent. of fat; another as containing barely 3 per cent. of milk fat, and the third as adulterated; and one was a sample of Scotch Whiskey, which was reported as containing 3·86 per cent. excess of water.

Proceedings were taken in reference to the first-mentioned sample of milk and the sample of whiskey, but the cases were withdrawn owing to a technical objection being raised; the vendors of the other two samples of milk were cautioned by the Committee.



## DAIRIES AND COWSHEDS.

There are now 21 Dairymen and Purveyors of milk on the Register as well as 5 Cowkeepers, whose premises are now included in the enlarged Borough. All have been visited by the Sanitary Inspector and myself. The cowsheds have been fully reported on by Mr. Tribe, and his report is now under consideration by the Public Health Committee. One cowshed is specially defective and it may have to be considered whether action should be taken under Section 8 of the Dairies Order which has reference to the general sanitary condition of cowsheds.

Only four of the dairymen have their milk cooled prior to distribution. A prejudice is said to exist among some consumers in favour of having their milk delivered warm, as proving freshness. There can, however, be no question but that all milk should at all seasons be thoroughly cooled immediately it is drawn, for this strongly retards bacterial growth, and thereby diminishes risk of harm from any contamination of the milk, besides increasing its keeping qualities.

## SLAUGHTER-HOUSES.

There are now 12 slaughter-houses in the Borough. Four of these are in the added area, and are now held under an annual license from the Council. One of them was built during the year on the most modern principles and two of the others have been greatly improved under the supervision of the Sanitary Inspector.

Of the registered slaughter-houses in the Borough, some are of old and poor construction and are situated in undesirable positions. They are, however, on the whole, kept in a fairly satisfactory condition.

## OFFENSIVE TRADES.

Only the following are established in the district:—one gut-scrapers, two tripe-boilers, two marine store-keepers. These have

been satisfactorily conducted, and are under frequent supervision by the Sanitary Inspector.

### COMMON LODGING HOUSES.

There is only one registered common lodging house and this is under the jurisdiction of the Chief Constable of the Borough as Inspector. Bye-laws in connection thereto are in force.

### NUISANCES.

Two certificates were given by me under Section 46 of the Public Health Act as to the necessity for cleansing, white washing, and purifying filthy houses.

Proceedings had to be taken before the Magistrates on two occasions, once to enforce the proper drainage of some cottages, and once to apply for a closing order for a pair of cottages in Stoughton Lane.

A large number of nuisances have been dealt with by the Sanitary Inspector, details of which are given in his Report which is appended.

The Inspector has carried out his duties in a conciliatory, yet thorough, manner.

It is essential for efficient sanitary administration that once a matter is taken up, it should be carried through to a finish. Much good work is done by interviews and communications in matters which may not clearly come within the letter of the Public Health Acts. Official notices even on the preliminary forms should, in my opinion, not be served unless it is clear that they can be enforced in a Court of Law if necessary, but when once served they should obviously be pressed until the requirements are carried out in a satisfactory manner.



**RAINFALL.**

The following is the monthly inches of Rainfall, registered in the district during the year ending December 31st, 1905:—

January ...	...	...	1.05 inches.
February...	...	...	.50 "
March ...	...	...	3.50 "
April ...	...	...	1.55 "
May ...	...	...	.55 "
June ...	...	...	4.15 "
July ...	...	...	1.25 "
August ...	...	...	1.85 "
September	...	...	2.50 "
October ...	...	...	1.10 "
November	...	...	2.65 "
December	...	...	.50 "
Total...			21.15

I am, Gentlemen,

Your obedient Servant,

R. W. C. PIERCE,

M.D., B.SC.

FEB. 1st, 1906.

TABLE I.

## BOROUGH OF GUILDFORD.

## Vital Statistics of Whole District during 1905 and previous Years.

Year.	Population estimated to middle of each Year.		Births.		Total Deaths Registered in the District.				Total Deaths in Public Institutions in the District.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Nett Deaths at all Ages belonging to the District.	
	Number.	Rate. †	Under 1 Year of Age.		At all Ages.		Number.	Rate. †					
			Number.	Rate per 1,000 Births Registered.	Number.	Rate. †							
1895	14924	381	25	49	128	282	18	100	89	not stated	193	12.1	
1896	15096	366	24	51	139	298	19	96	71	do.	227	14.2	
1897	15270	345	22	34	98	241	15	81	59	8	192	12.5	
1898	15446	380	24	52	136	316	19	114	78	5	243	15.7	
1899	15624	350	22	51	145	313	18	136	98	1	216	13	
1900	15804	342	21.6	44	128	302	19.1	120	81	9	230	14.5	
1901	15986	338	21.1	30	88	270	16.8	127	95	14	189	11.8	
1902	16154	361	22.3	40	110.8	286	17.1	113	72	11	226	13.9	
1903	16330	331	20.2	32	96.6	258	15.7	110	77	9	190	11.6	
1904	*16508	364	21	33	90.6	295	16.9	139	100	8	203	11.7	
Averages for years 1895-1904	15714	356	22.3	42	116	286	17.5	113	82	8	211	13.1	
1905	21900	478	21.8	30	63	302	13.8	161	102	8	208	9.5	

Area of District in acres (exclusive of area covered by water):

New Borough	2601.
Old Borough.	607.

(At census of 1901.)

Total population at all ages.....	20,779 (estd).
Number of inhabited houses ....	4,796
Average No. of persons per house	4.3

New Borough.	Old Borough.
15,937	15,937
8,530	8,530
4.5	4.5

\* An average population of 17,333 was used in the calculation of the birth and death rates owing to the increase of population (amounting to about 5,000) that followed on the extension of the Borough on November 9th, 1904.

† Rates in columns 4, 8, and 13 calculated per 1,000 of estimated population.



I.

Institutions within the District  
receiving sick and infirm  
persons from outside  
the District.

Royal Surrey County Hospital.

Workhouse Infirmary.

Isolation Hospital (Joint).

II.

Institutions outside the District  
receiving sick and infirm  
persons from the  
District.

Brookwood Asylum, Woking.

TABLE III.

## BOROUGH OF GUILDFORD.

## Cases of Infectious Disease notified during the Year 1905.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.						No. OF CASES REMOVED TO HOSPITAL.
	At all Ages.	At Ages—Years.					
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	
Small-pox ...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...
Diphtheria ...	9	5	4	...	...	...	3
Membranous Croup ...	...	...	...	...	...	...	...
Erysipelas ...	16	...	...	...	16	...	...
Scarlet fever ...	10	1	6	...	...	...	9
Typhus fever ...	...	...	...	...	...	...	...
Enteric fever ...	1	...	...	...	1	...	...
Relapsing fever ...	...	...	...	...	...	...	...
Continued fever...	...	...	...	...	...	...	...
Puerperal fever ...	...	...	...	...	...	...	...
Plague ...	...	...	...	...	...	...	...
Phthisis (voluntary)	...	...	...	...	...	...	...
Aug. to Dec. ...	7	...	...	1	6	...	...
Totals ...	43	6	10	4	23	...	12

ISOLATION } Woodbridge, Guildford.

HOSPITAL. } Guildford, Godalming, and Woking Joint Hospital Board.



TABLE IV.

BOROUGH OF GUILDFORD.

**Causes of, and ages at, Death during Year 1905.**

Causes of Death.	Deaths at the subjoined ages of "Residents" whether occurring in or beyond the District.							Total deaths whether of Residents or Non "Residents" in Public Institutions in the District.
	All ages.	Under 1	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards	
1	2	3	4	5	6	7	8	16
Small-pox ... ..	...	...	...	...	...	...	...	...
Measles ... ..	...	...	...	...	...	...	...	...
Scarlet Fever ... ..	...	...	...	...	...	...	...	...
Whooping Cough ... ..	...	...	...	...	...	...	...	...
Diphtheria and membranous croup	1	...	1	...	...	...	...	3
Croup ... ..	1	...	1	...	...	...	...	...
Fever } Typhus... ..	...	...	...	...	...	...	...	...
} Enteric ... ..	...	...	...	...	...	...	...	1
} Other continued	...	...	...	...	...	...	...	...
Epidemic Influenza ... ..	2	1	...	...	...	...	1	...
Cholera ... ..	...	...	...	...	...	...	...	...
Plague ... ..	...	...	...	...	...	...	...	...
Diarrhœa ... ..	3	1	...	...	...	...	2	...
Enteritis ... ..	3	3	...	...	...	...	...	...
Puerperal Fever ... ..	...	...	...	...	...	...	...	...
Erysipelas ... ..	...	...	...	...	...	...	...	...
Other septic diseases ... ..	9	1	...	2	3	1	2	21
Phthisis (Pulmonary Tuberculosis)	16	...	...	1	3	12	...	12
Other tubercular diseases ...	10	2	3	2	...	3	...	8
Cancer, malignant diseases ...	24	...	...	...	...	13	11	21
Bronchitis ... ..	8	1	...	...	...	2	5	...
Pneumonia ... ..	9	3	3	...	...	3	...	1
Pleurisy ... ..	...	...	...	...	...	...	...	...
Other diseases of Respiratory Organs	...	...	...	...	...	...	...	...
Alcoholism ... ..	3	...	...	...	...	3	...	3
Cirrhosis of Liver ... ..								
Venereal diseases ... ..	...	...	...	...	...	...	...	...
Premature birth ... ..	10	10	...	...	...	...	...	1
Diseases and Accidents of parturition	...	...	...	...	...	...	...	...
Heart diseases ... ..	31	...	...	1	...	14	16	19
Accidents ... ..	4	1	...	...	...	2	1	5
Suicides ... ..	2	...	...	...	...	1	1	1
All other causes ... ..	72	7	...	...	3	25	37	65
All causes ... ..	208	30	8	6	9	79	76	161

TABLE V. Infantile Mortality during the Year 1905.

Deaths from stated causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.		Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under 1 year.
All Causes.	Certified .. Uncertified ..	12 ..	12 ..	12 ..	12 ..	12 ..	12 ..	12 ..	12 ..	12 ..	12 ..	12 ..	12 ..	12 ..	12 ..	12 ..	12 ..	29 1
Common Infectious Diseases.	Small-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Chicken-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Measles ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Scarlet Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhoeal Diseases.	Diphtheria: Croup ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Whooping Cough ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Diarrhoea, all forms ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Enteritis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wasting Diseases.	(not Tuberculous) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Gastritis, Gastro-intestinal Catarrh ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Premature Birth ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Congenital Defects ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculous Diseases.	Injury at Birth ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Want of Breast-milk ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Atrophy, Debility, Marasmus ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Tuberculous Meningitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculous Diseases.	Tuberculous Peritonitis: ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Tabes Mesenterica ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Other Tuberculous Diseases ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Erysipelas ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculous Diseases.	Syphilis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Rickets ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Meningitis (not Tuberculous) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Convulsions ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculous Diseases.	Bronchitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Laryngitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Pneumonia ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Suffocation, overlaying ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculous Diseases.	Other Causes ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Population of the Borough (estimated to middle of 1905) 21,900.		12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	30

Deaths from all causes at all ages, 208. Births in the year, 478. Deaths from all causes at all ages, 208.



# ANNUAL REPORT OF THE SANITARY INSPECTOR,

For the Year ending 31st December, 1905.

Sanitary Inspector's Office,  
Tuns Gate,  
Guildford,  
25th January, 1906.

Gentlemen,

I beg to submit to you my Eleventh Annual Report of the work done in the Sanitary Department during the year 1905.

Included in the Report is the work done in the added area.

## OFFICE WORK.

Number of letters written ...	...	...	318
Statutory Notices ditto ...	...	...	20
Preliminary Notices ditto ...	...	...	24
Reports made to Council ...	...	...	22
Various other Reports ...	...	...	12

## COMPLAINTS.

56 complaints were received and attended to.

## HOUSING OF THE WORKING CLASSES ACT.

Two cottages were closed by Justices' Order, in the Stoughton Road district.

A cottage situated in Bright Hill having been closed a considerable time, has been made habitable.

The dilapidated back additions to two cottages in Stoke Grove have been pulled down, and new additions built..

The outbuildings to twelve cottages in Falcon Road have been pulled down, and a great improvement made by attaching new sculleries and w.c.'s to the main buildings.

A room used as a scullery at premises in Quarry Street has been closed, as same was insufficiently lighted and ventilated, and a new scullery constructed.

#### PREMISES CLEANSED AND WHITEWASHED.

The whole of the rooms of 25 premises found in a dirty and unwholesome condition have been cleansed and whitewashed.

29 rooms in a similar condition—at different premises—have also received the same attention.

#### DEFECTIVE ROOFS, FLOORS, &c.

Twenty defective roofs have been repaired.

Two defective roofs were renewed.

Defective weatherboarding at two cottages were repaired.

Eight defective ceilings repaired.

Two defective walls of premises repaired.

Damp courses were put to four damp walls of premises.

Six defective windows renewed.

The whole of the windows to the bedrooms of six cottages have been made to open at the top-half, which were previously fastened.

Defective gutterings and downpipes to 18 premises have been renewed or repaired.

Fourteen defective floors have been repaired.

Five unpaved cellar floors have been properly paved.

Two ditto w.c. floors have been properly paved.

Three unventilated floors have been provided with proper ventilation.



Twenty-four unpaved yards, at the rear of premises, have been paved.

#### DEFECTIVE DRAINAGE, &c.

Defective drainage at twelve premises, discharging to cesspools, have been reconstructed and now discharge to sewers.

Defective drainage, at sixteen premises, has been reconstructed.

Nineteen defective drains, at different premises, have been repaired.

Fourteen defective ventilation shafts to drains have been repaired.

Seven defective soil pipes ditto.

[The whole of the above defects were found by the smoke or water test being applied to same.]

Seven defective surface water drains repaired.

Six defective w.c. pans have been renewed.

Thirty-one blocked foul drains have been unstopped and cleansed.

Seven overflowing cesspools emptied.

Two slop sinks discharging into stackheads have been properly connected to drains.

One defective ditto renewed.

Three defective inspection chambers—drain—repaired.

Two w.c.'s provided with windows, previously without.

Four defective sink waste pipes renewed and trapped.

Three defective flushing cisterns to w.c.'s repaired.

Seventeen dilapidated w.c.'s rebuilt.

## STABLES, MANURE PITS, &amp;c.

Sixteen accumulations of mauure were removed.

Three undrained stable floors have been properly drained.

Four ditto manure pits ditto.

One manure pit provided.

One ditto paved.

Two stable floors repaved.

One ditto roof repaired.

One dirty stable yard cleansed.

Two blocked stable drains unstopped.

Complaints were made of the offensive smells caused by the unloading of manure at London Road and Guildford Stations.

## IMPROPER KEEPING OF ANIMALS, &amp;c.

Six fowl houses, with accumulations, and very offensive, received attention.

Three dirty pig-styes were cleansed

One unpaved ditto paved.

Fowls and Pigeons kept in cellars, at three premises, received attention.

Shed for stabling, unpaved and rough erection, discontinued being used as such.

LIST OF MATTERS THAT HAVE ALSO RECEIVED  
ATTENTION.

Accumulation of bones in the cellars of two business premises removed.



Ditto of fat, two.

Three accumulations of garden refuse removed.

Five offensive accumulations properly buried.

One case of rag-picking in a small dwelling house stopped.

Fifty-one dustbins have been provided to premises.

Six cases of overcrowding abated.

Five dirty urinals at licensed premises cleansed.

One new urinal built at ditto.

The occupiers of a number of caravans pitched on land at Stoughton were warned as to insufficient and unsuitable sanitary arrangement and water supply.

#### UNSOUND FOOD.

The owner of ten carcasses of pigs affected with tuberculosis voluntarily handed same over to be destroyed.

A quantity of meat, left at business premises without an occupier, a number of days, became unwholesome, was removed and destroyed.

Two ducks, in an unwholesome condition, were destroyed; as the owners were hawkers and strangers to the town and immediately took their departure, no proceedings were taken.

During the fruit season, a quantity of cherries and pears in an unwholesome condition, were voluntarily destroyed, on the owners' attention being called to same.

Also a quantity of bananas.

#### SLAUGHTERHOUSES.

There are twelve slaughterhouses within the Borough, this being an addition of four, situated in the added area.

The four additional slaughterhouses have been licensed for a period of twelve months.

Before the above licenses were granted, the premises were put in proper order, to the satisfaction of the Authority.

A person was warned for slaughtering in a shed.

One ditto in an open yard.

Four premises were ordered to be limewashed.

One dirty yard cleansed.

Two accumulations removed.

#### DAIRIES, COWSHEDS AND MILKSHOPS.

There are 21 dairymen and purveyors of milk on the register.

There are now 5 cowsheds within the Borough ; a report of these are now being considered by the Council.

Two rooms for washing vessels, in a dirty state, were lime-washed.

One purveyor was warned for washing vessels in a stable.

One ditto for storing milk in a living room.

#### SMOKE NUISANCES.

During the year the following action has been taken in regard to above.

Proceedings taken and conviction obtained in one case.

One statutory notice served.

Two preliminary ditto.

Eight letters warning persons.

Four reports made to Council.



## SPECIAL PREMISES.

Two tripe dressers and boilers.      One gut scraper.

Two marine stores.

One person was warned for gut scraping in a shed attached to a dwelling house.

Accumulations of bones and fat were removed after attention had been called to same.

## INFECTIOUS DISEASES.

Twenty-eight rooms were disinfected after infectious diseases.

Twenty-three rooms cleansed, etc. after ditto.

The bedding, etc. from 13 premises was removed and disinfected.

As usual, the drains at premises where infectious disease occurred were examined and tested.

## SCHOOLS.

Stoke Hill Schools.—The whole of the drainage has been reconstructed. Modern sanitary conveniences provided. Roof repaired.

Stoughton Schools.—Entirely renovated. Roof repaired.

High School for Girls.—Drainage reconstructed.

## CONNECTIONS TO SEWERS.

Total number of premises, including workshops and stables, connected to the sewers in the Old Borough, is 3,890.

Of this number, 2,134 are on the low level, and 1,756 are on the high level.

Number of premises connected to the sewers during the year in added area :—

Agraria Road 24.      Stoughton district 45.

Foul drains from five premises discharging into the river in the Stoughton district have been connected to the sewers.

I am, Gentlemen,

Your obedient Servant,

F. C. TRIBE, A.R.S.I.

## **REPORT OF INSPECTOR OF CANAL BOATS**

**for the Borough of Guildford, Surrey, 1905.**

Tuns Gate,  
Guildford,

3/1/1906.

Gentlemen,

I beg to submit my Third Annual Report under the Canal Boats Acts of 1884 and 1887.

During the past year I have inspected eleven boats, used as dwelling boats, under the above Acts, all of which I found very clean, and in other respects complied with the requirements of the Acts,

All of the boats were owned by Messrs. W. Stevens & Sons, the Wharf, Friary Street, Guildford.

The only occupants of the boats being the master and mate.

No notificatton of infectious disease have been made during the year.

F. C. TRIBE,

Inspector of Canal Boats.



# FACTORY AND WORKSHOPS ACT.

Fourth Annual Report of the number of Workshops, Workplaces, Domestic Workshops and Outworkers, within the Borough of Guildford, and for the first time including those in the added area.

## LIST OF ABOVE

Business.		Workshops. Employing protected persons.		Men's Workshops..		Workplaces.
Coach Builders ...	...	1	...	4	...	1
Photographers ...	...	1	...	2	...	0
Dressmakers ...	...	32	...	0	...	0
Milliners ...	...	14	...	0	...	0
Shoeing Smiths ...	...	0	...	8	...	0
Sanitary Engineers ...	...	0	...	2	...	0
Watchmakers ...	...	4	...	2	...	0
Art Needlework ...	...	1	...	0	...	0
Shoemakers ...	...	0	...	16	...	0
Picture Framing ...	...	2	...	1	...	0
Tinsmiths ...	...	0	...	4	...	0
Tailors ...	...	2	...	11	...	0
Plumbers and Painters...	...	0	...	9	...	0
Saddle and Harness Makers	...	1	...	5	...	0
Bottle Washing ...	...	0	...	0	...	6
Cabinet Makers ...	...	3	...	7	...	0
Upholsterers ...	...	2	...	5	...	0
Polishing ...	...	2	...	3	...	0
Rick and Tent Making .	...	0	...	1	...	0
Gunsmiths ...	...	0	...	2	...	0
Glass Cutting ...	...	0	...	2	...	0
Paint Mixing ...	...	0	...	2	...	0
Fitters and Engineers ...	...	0	...	3	...	0
Restaurants ...	...	0	...	0	...	4
Corset Makers ...	...	1	...	0	...	0
Cycle Works ...	...	3	...	2	...	0
Boat Building ...	...	0	...	0	...	2
Millwrights ...	...	0	...	2	...	0
Gas Fitters ...	...	0	...	1	...	0

Piano Makers	...	...	0	...	1	...	0
Basket Making	...	...	0	...	1	...	0
Blind Making	...	...	1	...	0	...	0
Stonemasons	...	...	0	...	1	...	0
Laundries	...	...	8	...	0	...	0
Confectioners	...	...	0	...	1	...	0
Coopers	...	...	0	...	1	...	0
Construction Dept., S.W.R.	...	...	0	...	0	...	1
Builders	...	...	1	...	14	...	0
Carpenters	...	...	0	...	6	...	0
Brick Making	...	...	0	...	1	...	0
Cigar and Cigarette	...	...	1	...	0	...	0
Portmanteau and Trunk	...	...	1	...	0	...	0
Umbrella Making	...	...	1	...	0	...	0
Bakers	...	...	2	...	30	...	0
Total...			84		150		14

## DOMESTIC WORKSHOPS.

Dressmakers	...	...	...	...	6
Milliners	...	...	...	...	1
Watch Makers	...	...	...	...	2
Art Needlework	...	...	...	...	1
Picture Framing	...	...	...	...	1
Taxidermist	...	...	...	...	1
Total...					12

Number of Outworkers' Workrooms ... 50

## NUMBER OF VISITS TO

Factories	...	...	...	...	33
Workshops	...	...	...	...	202
Workplaces	...	...	...	...	22
Outworkers	...	...	...	...	63

Number of lists received from persons employing Outworkers—43.



# REPORT OF MATTERS ATTENDED TO UNDER THE ACT.

No. of workrooms cleansed and whitewashed	...	...	...	...	...	35
Dirty w.c. pans cleansed	...	...	...	...	...	13
W.C.'s limewashed	...	...	...	...	...	4
Defective w.c. pans renewed...	...	...	...	...	...	1
Dirty floors of w.c.'s cleansed	...	...	...	...	...	2
Windows provided to w.c.'s...	...	...	...	...	...	2
Dirty urinal cleansed	...	...	...	...	...	1
Urinal insufficiently lighted...	...	...	...	...	...	1
Ditto ditto ventilated	...	...	...	...	...	1
Dirty floors of workrooms cleansed	...	...	...	...	...	2
Defective floor of workroom repaired	...	...	...	...	...	1
Blocked drain, unstopped and cleansed	...	...	...	...	...	1
Dirty yards cleansed	...	...	...	...	...	2
Offensive accumulation removed	...	...	...	...	...	1
Workrooms insufficiently ventilated, properly ventilated.						4
New workroom built in place of bedroom being used as workroom	...	...	...	...	...	1
Cottage closed on account of rooms being used as work- rooms, same being in a very dilapidated condition						1
Woodwork of ceiling and walls of laundries cleansed	...	...	...	...	...	2
Ceilings and walls of bakehouses cleansed & limewashed						13
Ditto and ditto of ditto woodwork cleansed	...	...	...	...	...	3
Defective ceilings repaired	...	...	...	...	...	5
Ditto roof ditto	...	...	...	...	...	1
Ditto floors	...	...	...	...	...	3
Ditto sink renewed	...	...	...	...	...	1
Bakehouse insufficiently ventilated, properly ventilated...						1
Accumulation of rubbish removed from bakehouse	...	...	...	...	...	1
Dirty floor of bakehouse cleansed	...	...	...	...	...	1