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AC 22177 TUNBRIDGE WELLS



BOROUGH OF ROYAL TUNBRIDGE WELLS.

# ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

AND

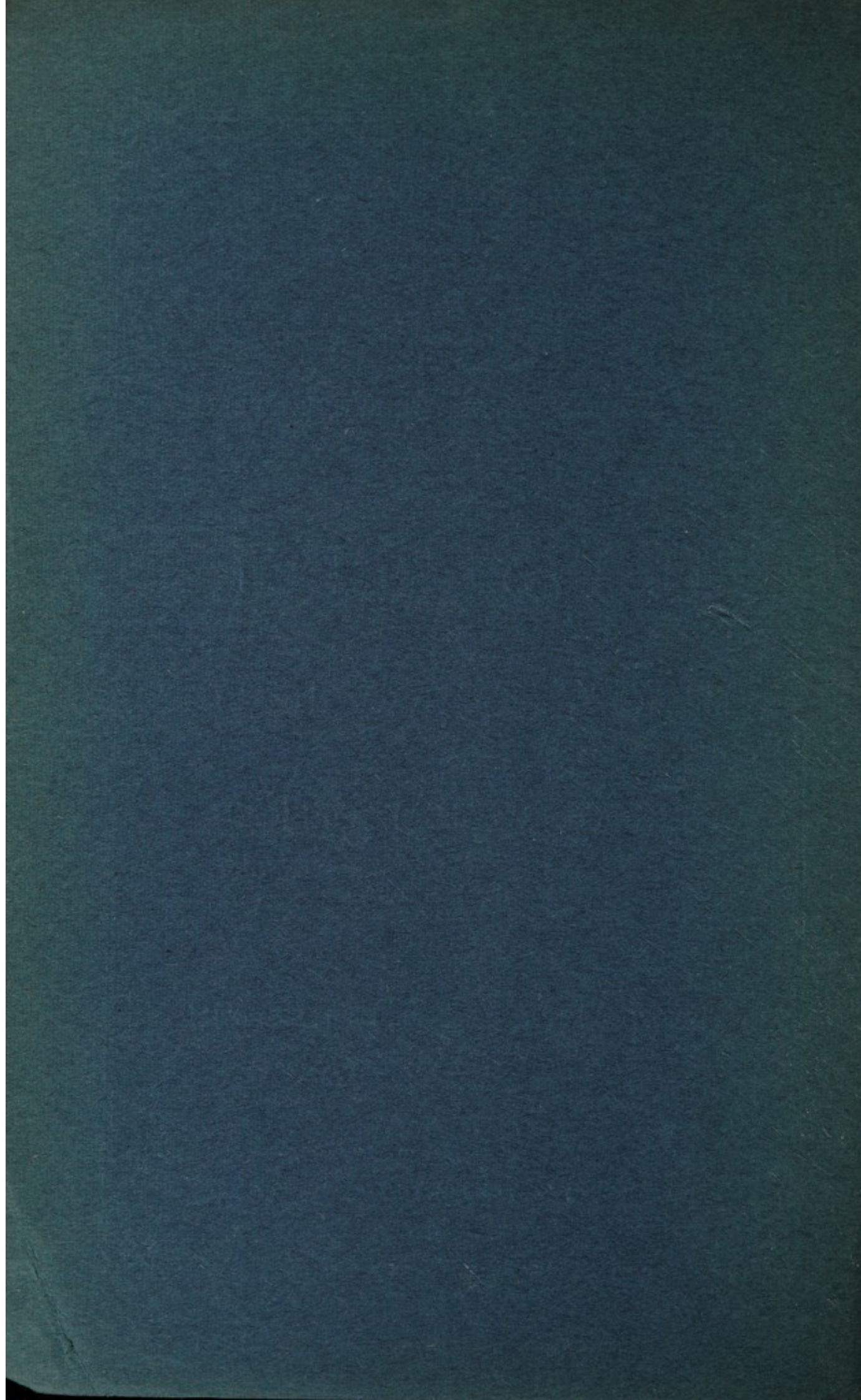
SCHOOL MEDICAL OFFICER

For the Year 1912.

EDWARD BURNET, B.A., M.B., Ch.B., B.Sc. (P.H.)

Tunbridge Wells:

HEPWORTH AND CO., LTD., VALE ROAD WORKS.



BOROUGH OF ROYAL TUNBRIDGE WELLS.



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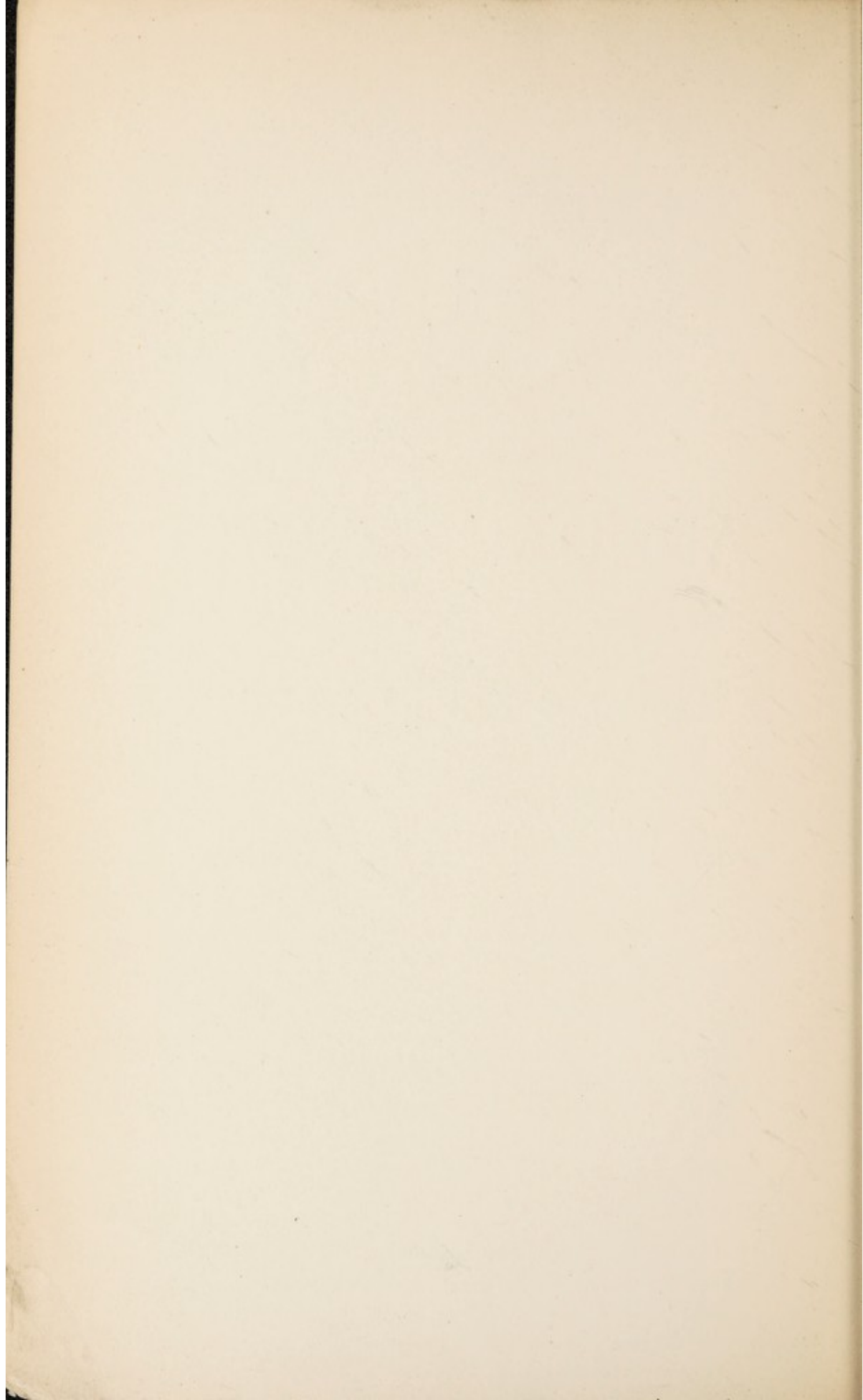
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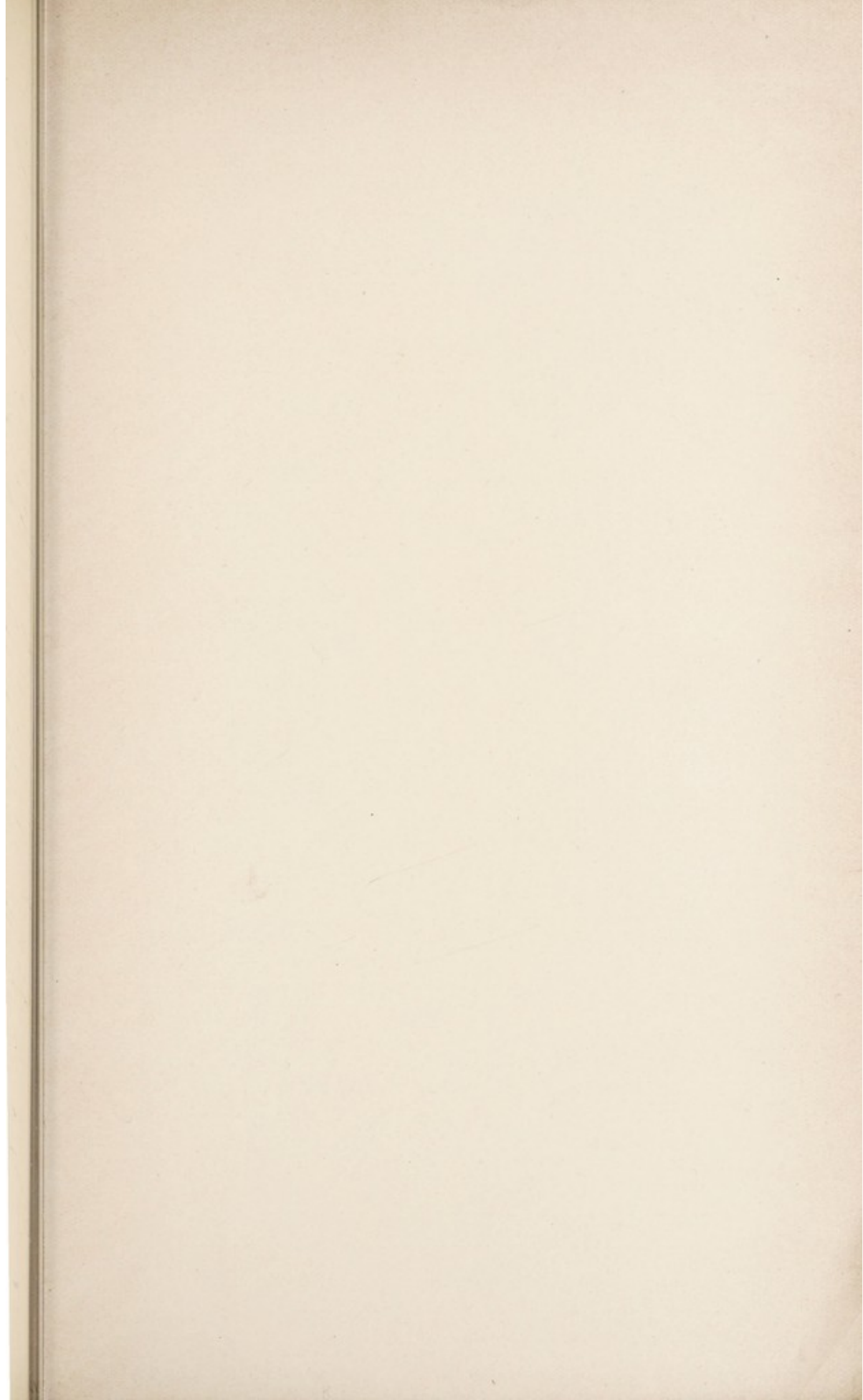
EDWARD BURNET, B.A., M.B., Ch.B., B.Sc. (P.H.)

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Tunbridge Wells:

HEPWORTH AND CO., LTD., VALE ROAD WORKS.







WILLIAM STAMFORD, Esq., L.R.C.P., M.R.C.S., F.R.I.P.H.,  
MEDICAL OFFICER OF HEALTH, 1881 TO 1911.

PUBLIC HEALTH OFFICES,  
CALVERLEY PARADE,  
TUNBRIDGE WELLS.

*To the Mayor, Aldermen and Burgesses of the Borough of  
Royal Tunbridge Wells.*

GENTLEMEN,

I beg to present to you my Annual Report for the year 1912, as your Medical Officer of Health and School Medical Officer.

During the first half of the year DR. J. CECIL RIX was the temporary Medical Officer of Health and supervising School Medical Officer, and DR. C. HAROLD DYER and DR. FRANCIS RILEY were associated with him as School Medical Officers. My thanks are due to these gentlemen for their share in the work of the year, and for the facilities they have afforded me of becoming conversant with the results of their labours. I am further indebted to Dr. Rix for his services as my deputy.

I have also to thank the Chairmen and Members of the Health and Education Committees for the time and attention they have devoted to the work of my department.


I would also acknowledge the constant and assiduous help which I have received from the Town Clerk, the Deputy Town Clerk and his assistants, the Borough Engineer, the Teachers, and the members of my own staff. And, lastly, I would gratefully express my obligations to my medical colleagues for their unfailing courtesy and kindly co-operation, without which my labours would have availed little.

I am, Gentlemen,

Your obedient servant,

EDWARD BURNET.





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## BOROUGH OF ROYAL TUNBRIDGE WELLS.

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### Health Committee :

Mr. Alderman CARPENTER (Chairman).

The MAYOR (Mr. Councillor J. G. SILCOCK).

Mr. Alderman CALEY.

Mr. Councillor GOWER.

Alderman Col. SLADEN.

Mr. Councillor SNELL.

Mr. Councillor EDWARDS.

Mr. Councillor WILLMOT.

### Education Committee :

The Ven. Archdeacon SCOTT (Chairman).

The MAYOR (Mr. Councillor J. G. SILCOCK).

Alderman Col. SLADEN.

Mr. Councillor GOWER.

Mr. Alderman STONE.

Councillor Col. HUNTER.

Mr. Councillor BERWICK.

Mr. Councillor PASSINGHAM.

Mr. Councillor DENNIS.

Mr. Councillor SCOTT.

Mr. Councillor ELWIG.

Mr. Councillor WATSON.

Mr. Councillor EMSON.

Mr. Councillor WILLMOT.

Mrs. ABBOTT.

Miss BARNETT.

Rev. D. J. STATHER HUNT.

Rev. Dr. USHER.

Mr. A. I. KING.

### Staff of the Public Health and School Medical Departments :

#### Inspectors :

JAMES CAVE, A.R.S.I. E. J. WELLS, A.R.S.I. W. P. CAVE, A.R.S.I.

E. READER. D. R. CHALMERS, M.R.C.V.S. C. ROBERTS, M.R.C.V.S.

#### Clerk :

A. HARDING.

#### School Nurse :

Miss M. D. CLARKE.

#### Public Analyst :

A. H. M. MUTER, F.I.C.

#### Medical Officer of Health, School Medical Officer, and Bacteriologist :

EDWARD BURNET, B.A., M.B., Ch.B., B.Sc. (P.H.)

## SUMMARY OF STATISTICS FOR 1912.

---

Population Estimated to the middle of the year, 36,038.

Area of the Borough, 3,991 acres.

Rateable Value, £296,066.

CENSUS 1911.	{	Population, 35,703.
		Number of Inhabited Houses, 7,671.
		Average Number of Persons per House, 4·6.
		Density of Population, 8·9 Persons per acre.

Number of Deaths, 398.

Crude Death-rate per thousand, 11·0. Average for previous ten years, 12·1.

Number of Deaths of Visitors, 4.

Death-rate, if Visitors are excluded, 10·9 per thousand.

Death-rate corrected for sex- and age-distribution, 9·55.

Number of Deaths from Zymotic Diseases, 14. Death-rate from Zymotic Diseases, 0·3 per thousand of the inhabitants.  
Death-rate from Phthisis, 0·66 per thousand living.

Number of Births. Boys, 294 ; Girls, 276 ; Total, 570.

Birth-rate per thousand, 15·8. Average for the previous ten years, 17·4 per thousand.

Infantile Mortality, 43·8 per thousand born. Average for the previous ten years, 74·6.

Mean Annual Temperature, 49·1 Fahr.

Hours of bright Sunshine recorded, 1,838 hours, 12 minutes.

Total Rainfall, 38·20 inches.

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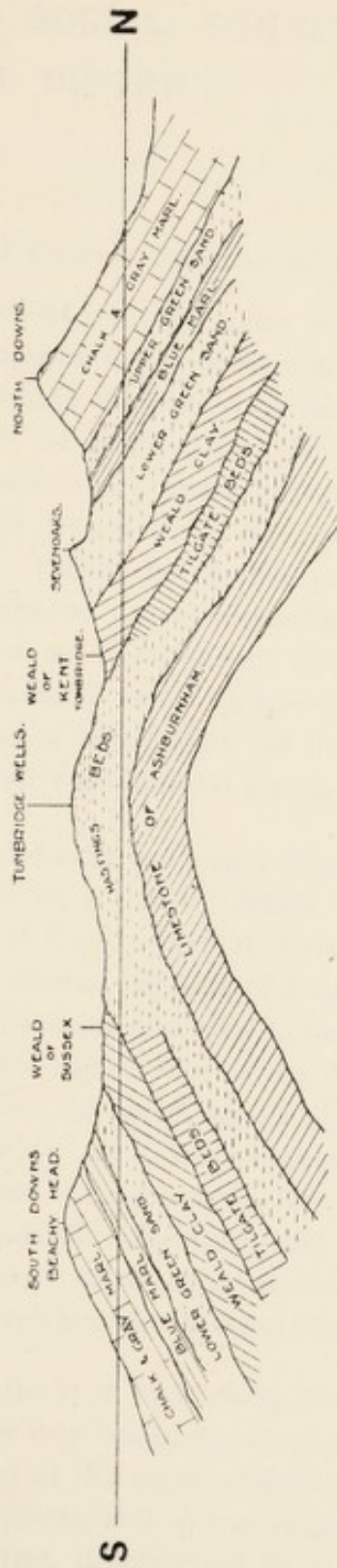
## HEALTH REPORT.

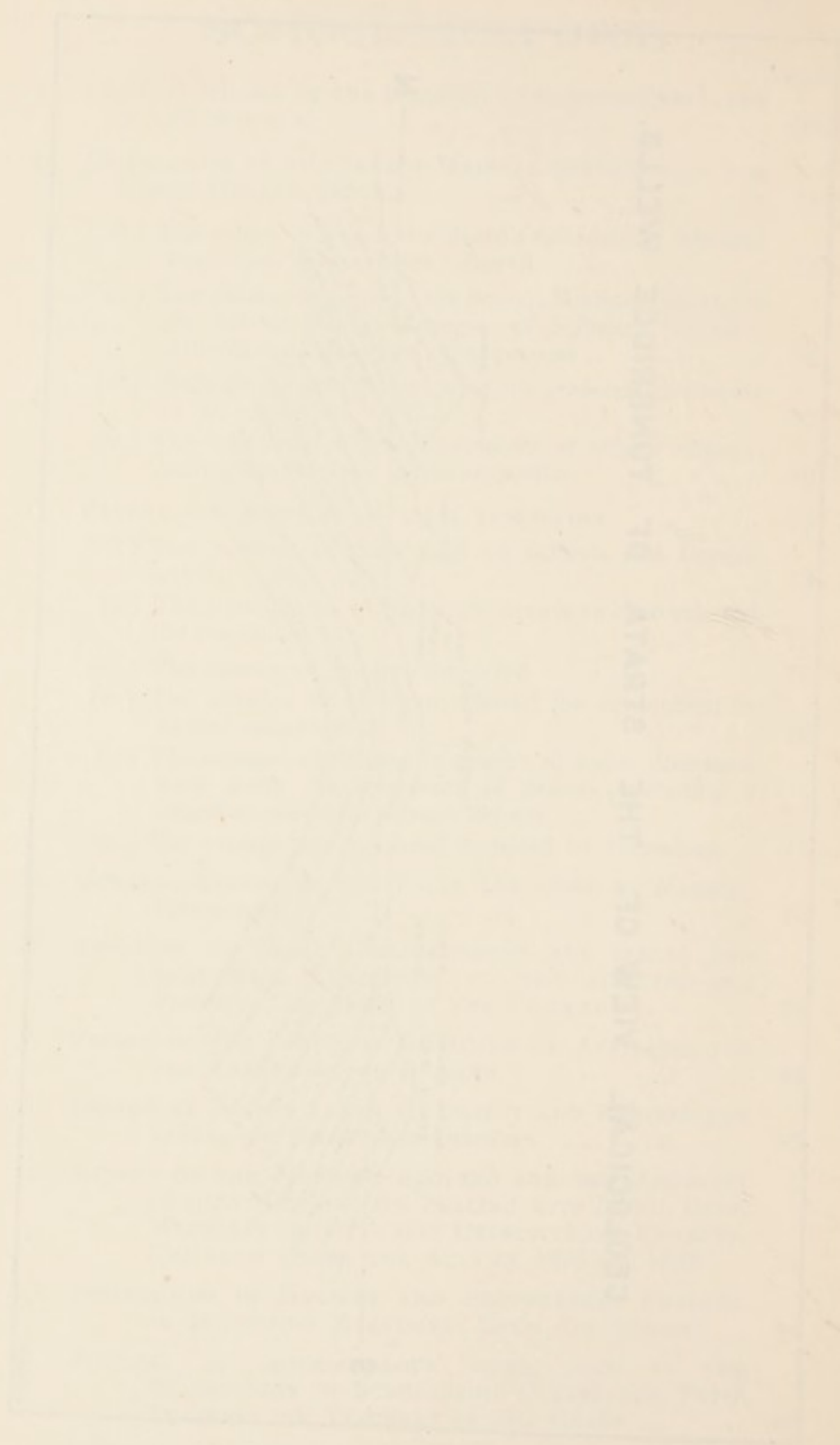
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# CEOLOGICAL VIEW OF THE STRATA OF TUNBRIDGE WELLS.





## A.—NATURAL AND SOCIAL CONDITIONS OF THE DISTRICT.

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### (1) *The Physical Features and General Character of the District.*

ROYAL TUNBRIDGE WELLS ( $34\frac{1}{2}$  miles from London) is situated in the south-western angle of Kent, the southern portion of the Borough, however, lying just within Sussex. As a health resort it is said to have been "discovered" by Dudley, Lord North, in the year 1606, since when it has developed from a crude hamlet to its present stately proportions. In the early days its repute was founded upon the virtues of its chalybeate waters. Whilst the curative properties of the latter have been preserved unimpaired, an enlightened generation have a wider view of its possibilities on "preventive" lines, the natural characteristics of the neighbourhood being no less valuable for the maintenance of a high standard of health than the iron-impregnated waters are admittedly so for certain constitutional disorders.

The physical features of the district are largely responsible for the popularity of Tunbridge Wells as a health resort. At one time the whole of the southern half of Kent, a part of Surrey, and a large area of Sussex were covered by alluvial deposits of fresh-water origin. This district probably formed the delta of a river in former ages, and the detritus brought down from the higher parts of the distant country accumulated as ooze. The deposits of gravel, sand and loam became the bed of an enormous lake, when more sedimentation took place. As layer after layer was spread upon the old bed, the lake was gradually filled in, and the water area diminished. Eventually dry land took the place of the water, the topmost layer of the land consisting largely of clay. This upper stratum is the well-known "London Clay."

Subsequently, upheavals of the land took place, and the Downs were formed. Rivers of later ages then busied themselves in denuding the higher portions of the district of the accumulations deposited by the agency of their ancient precedents, and in the neighbourhood of Tunbridge Wells all the upper strata, disintegrated by rain, frost and weather, were washed away until the sandstone layer of the Hastings Beds was exposed. The comparative hardness of this stratum delayed



the process of denudation, and the surface became carpeted with the organic remains of vegetable life, intermingled with the inorganic—the surface soil. The subsoil of Tunbridge Wells is, therefore, of a highly porous nature, being composed of gravel, sandstone and sand, with here and there a “pocket” of Weald clay.

The undulating character of the district, its elevation above sea-level—in the higher portions of the Borough as much as 420 feet—and the porous nature of the subsoil, account alike for the bracing character of its climate, and the hygienic conditions which obtain generally. Its relatively short distance from the sea, its sheltering woods and turfey Commons, and the nature of the prevailing winds, are factors which considerably influence the moisture and range of temperature of the local atmosphere. The result generally is the production of a climate characterized by frequent moderate variations in the weather, which exercises the powers of adaptation and resistance of the different organs without subjecting them to excessive strain, and keeps the body in proper working condition. In short the climatological conditions of the district favour the development of the vigorous in body and capable in mind.

Nature has been lavish in her gifts to Tunbridge Wells. Its sunny slopes and 250 acres of breezy Common, with the nutty, golden gorse and purple heaths, the bramble and the bracken, are a never-ending source of pleasure to its visitors and residents. Its many parks are a noted feature of the town, and the centre of the Borough is within a few minutes' walk of some of the finest panoramic scenery in the country. The district is richly wooded with elm, oak, beech, lime, poplar, ash, fir and yew, and forms a rambler's veritable Eldorado; and its geological, botanical and entomological interests appeal to a wide circle of admirers.

### METEOROLOGICAL NOTES.

It is with deep regret that I have to record the death of Dr. Francis Gray Smart, who for 25 years made himself responsible for the Meteorological Notes of the district. His loss, together with that of his wife, who predeceased him by only a few days, is not merely a local but a national one. Many charitable causes throughout the country, including our own Hospitals and other Institutions, were the recipients of their munificent joint benefactions.

Through the generosity of Mr. Duncanson and his Co-Trustees, the whole of the late Dr. Smart's Meteorological Instruments have been presented to the Borough, and the continuity of his records will be unbroken. The Health Committee are making arrangements for establishing a Municipal Meteorological Station, and when this is completed the daily records will be exhibited in a suitable position, and published in the Press.

The total amount of sunshine shown by the Jordan (Photographic) Recorder was 1,838 hours 12 minutes. The mean is 1,856 hours 22 minutes. The most sunny day was June 22nd, when 15 hours 35 minutes were recorded. There were 68 sunless days, 60 being the average.

The sunshine recorded in :—

		Hrs.	Mins.		Hrs.	Mins.
January	was ...	30	17	the average being	63	36
February	„ ...	62	19	„ „	90	11
March	„ ...	118	14	„ „	143	38
April	„ ..	274	50	„ „	189	13
May	„ ...	234	56	„ „	237	40
June	„ ...	251	25	„ „	228	18
July	„ ...	227	43	„ „	246	46
August	„ ...	177	48	„ „	228	32
September	„ ...	171	29	„ „	186	3
October	„ ...	184	13	„ „	118	50
November	„ ...	56	22	„ „	72	28
December	„ ...	48	36	„ „	49	21

10	hours of sunshine were first recorded on	March 29th.
11	„ „ „ „	March 29th.
12	„ „ „ „	March 29th.
13	„ „ „ „	April 19th.
14	„ „ „ „	June 10th.
15	„ „ „ „	June 22nd.
15	„ „ „ last	June 22nd.
14	„ „ „ „	July 16th.
13	„ „ „ „	July 17th.
12	„ „ „ „	July 17th.
11	„ „ „ „	September 22nd.
10	„ „ „ „	October 8th.

The Campbell Stokes Sunshine Recorder (burning glass) showed 1,607·4 hours of sunshine.

THE GREATEST HEAT IN THE SUN was 123·4 degrees on June 19th.

It first reached	100	degrees	on	March 26th.
"	"	110	"	April 19th.
"	"	120	"	June 19th.
It last reached	120	"	"	July 16th.
"	"	110	"	July 27th.
"	"	100	"	September 23rd.

The mean Solar Maximum for the Year was 85·5 degrees.

THE GREATEST HEAT IN THE SHADE was 87·3.

It first reached	60	degrees	on	April 5th.
"	"	70	"	April 21st.
"	"	80	"	June 19th.
It last reached	80	"	"	July 16th.
"	"	70	"	July 27th.
"	"	60	"	October 13th.

The lowest temperature 4ft. above the ground on Mount Ephraim was 20·3 degrees on January 29th.

The hottest night was July 15th, when the thermometer did not go below 62·0.

THE MEAN TEMPERATURE OF THE YEAR was 49·1, the average being 48·7.

The mean daily range was 13·9 deg. ; the average is 14·5 deg.

The mean temperature of each month was :—

January	...	39·0	degrees,	the average	being	37·5	degrees.
February	...	41·3	"	"	"	38·6	"
March	...	45·0	"	"	"	41·2	"
April	...	47·9	"	"	"	46·2	"
May	...	54·7	"	"	"	52·3	"
June	...	57·2	"	"	"	57·9	"
July	...	62·7	"	"	"	61·3	"
August	...	56·0	"	"	"	60·7	"
September	...	52·4	"	"	"	58·4	"
October	...	47·2	"	"	"	49·7	"
November	...	42·9	"	"	"	43·3	"
December	...	43·5	"	"	"	38·9	"

The lowest temperature on the grass was 6·2 degrees on the 5th February.

The difference between the wet and dry bulbs at 9 a.m. was greatest (14·7 degrees) on May 12th, the mean being 2·9 degrees.

The last frost in the air in spring was on April 12th. The first in the autumn was on October 4th. The last on the grass in spring was May 26th, and first in the autumn was September 22nd. There were 34 frosts in the air and 105 on the grass ; the average is 65 and 131 respectively.

THE TEMPERATURE OF THE SOIL at the depth of one foot was highest (69·1 degrees) on July 16th, and lowest (34·9 degrees) on February 3rd. The mean was 50·8 degrees, 49·9 being the average.

It first reached	50	degrees	on	April	7th.
"    "	60	"	"	May	15th.
It last reached	60	"	"	August	26th.
"    "	50	"	"	October	30th.

The means for the months were :—

January	...	41·8	degrees,	the	average	being	38·2	degrees.
February	...	40·9	"	"	"	"	38·3	"
March	...	45·0	"	"	"	"	40·9	"
April	...	48·7	"	"	"	"	46·6	"
May	...	56·8	"	"	"	"	53·9	"
June	...	60·6	"	"	"	"	60·5	"
July	...	64·2	"	"	"	"	64·3	"
August	...	59·9	"	"	"	"	62·9	"
September	...	55·4	"	"	"	"	56·8	"
October	...	48·5	"	"	"	"	51·6	"
November	...	44·7	"	"	"	"	44·8	"
December	...	43·1	"	"	"	"	40·5	"

THE ANEMOMETER showing the horizontal force of the wind recorded 87,382 miles, the mean being 88,493 miles.

The most windy day was March 4th, when 644 miles were recorded, the calmest January 21st, when only 39 were shown.

The wind at 9 a.m. was N., 22 days ; N.E., 30 ; E., 30 ; S.E., 33 ; S., 71 ; S.W., 52 ; W., 83 ; N.W., 42. It was variable on 3 days.

THE RAINFALL amounted to 38·20 inches, the average is 31·05 inches. It fell on 192 days, the average being 172. It came as snow on 8 days. The most rain that fell on one day was 1·87 inches on September 29th.

The rainfall in :—

January	was	2·92	inches,	the	average	being	2·54	inches.
February	„	2·79	„	„	„	„	2·16	„
March	„	5·20	„	„	„	„	2·54	„
April	„	·12	„	„	„	„	1·88	„
May	„	1·24	„	„	„	„	1·72	„
June	„	2·84	„	„	„	„	2·29	„
July	„	1·24	„	„	„	„	2·16	„
August	„	7·07	„	„	„	„	2·40	„
September	„	3·57	„	„	„	„	1·94	„
October	„	4·27	„	„	„	„	4·27	„
November	„	2·66	„	„	„	„	3·42	„
December	„	4·28	„	„	„	„	3·37	„

The mean amount of cloud at 9 a.m. was 6·7, 6·8 being the average, 10 representing overcast.

There were 24 fogs, and it was slightly foggy on 9 other mornings.

There was thunder and lightning on 11 days, but on only 2 occasions was it near.

(2) *The Social Conditions, including the Chief Occupations of the Inhabitants; the Influence of any particular Occupation on Public Health; the Amount of Poor-Law Relief, and the extent to which Hospital and other forms of gratuitous relief are utilized.*

Tunbridge Wells is essentially a Health Resort and a Residential Borough, and the majority of its industrial inhabitants are more or less concerned with catering for the requirements of a town of such a character. Details as to the industries will be found under Section B (10). The Hotels and Boarding Houses are of a high order, and are quite capable of accommodating the large number of visitors, without unduly taxing their resources. On the other hand there is a demand for a suitable class of artisan dwelling at a moderate rental, which the conditions of land tenure render it difficult to supply, and this occasionally engenders some degree of overcrowding. I have more to say on this subject under the section on "Housing." Fifty-two new houses were built during the year.

**Poor Law Relief.**—The Clerk to the Tonbridge Union Board of Guardians informs me that the cost of the Outdoor Relief in the Parish of Tunbridge Wells, for the year 1912, was £1,946 5s. 5½d.

**The Medical Charities** are generously supported, and, as they ought to be, thoroughly appreciated. The GENERAL HOSPITAL, the resources of which are available for a very wide area—patients having been received during the past year from no fewer than 73 towns and villages in the adjoining districts—rendered medical and surgical aid to 735 In-Patients, and 6,379 Out-Patients, with 28,794 attendances. The Committee of Management have decided that insured persons under the National Health Insurance Act shall not be deprived of the benefit of Hospital treatment if their condition is such as to render their admission as In-Patients desirable in their own interests. Nor, again, will it be denied to any “Insured” Patient as an “Out-Patient” if the treatment required is such as “cannot be properly undertaken by a general practitioner of ordinary competence and skill.”

The EYE AND EAR HOSPITAL treated 31 In-Patients and 2,846 Out-Patients, and supplied 1,174 pairs of spectacles. The latter are provided by the Hospital at reduced prices; but the Royal Surgical Aid Society and Hospital Spectacle and Instrument Fund enable patients who cannot afford to pay to obtain them gratuitously.

The HOMOEOPATHIC HOSPITAL AND DISPENSARY recorded 91 In-Patients and 6,066 attendances of Out-Patients.

The PROVIDENT DISPENSARY had 2,937 members on its books—2,158 being above the age of 14 years, and 779 under that age.

The Nurses of the DISTRICT NURSING ASSOCIATION paid 16,493 visits to patients at their homes.

The Tunbridge Wells, Tonbridge and District Branch of the ROYAL SURGICAL AID SOCIETY relieved 1,126 patients, and supplied 1,426 appliances.

The CHARITY ORGANIZATION SOCIETY distributed £883 15s. 1d. as grants to Pensions and Special Cases. The INVALID CHILDREN'S AID Branch of this Society sent 29 children either to Hospitals, Convalescent Homes or Boarding-out Homes, and otherwise assisted 51 other children.

The foregoing charitable institutions mainly depend upon subscriptions, donations and legacies ; and it is to be hoped that they will continue to receive the substantial support so necessary for their maintenance. I am indebted to their respective Secretaries for copies of the Annual Reports, from which I have been able to furnish the above account.

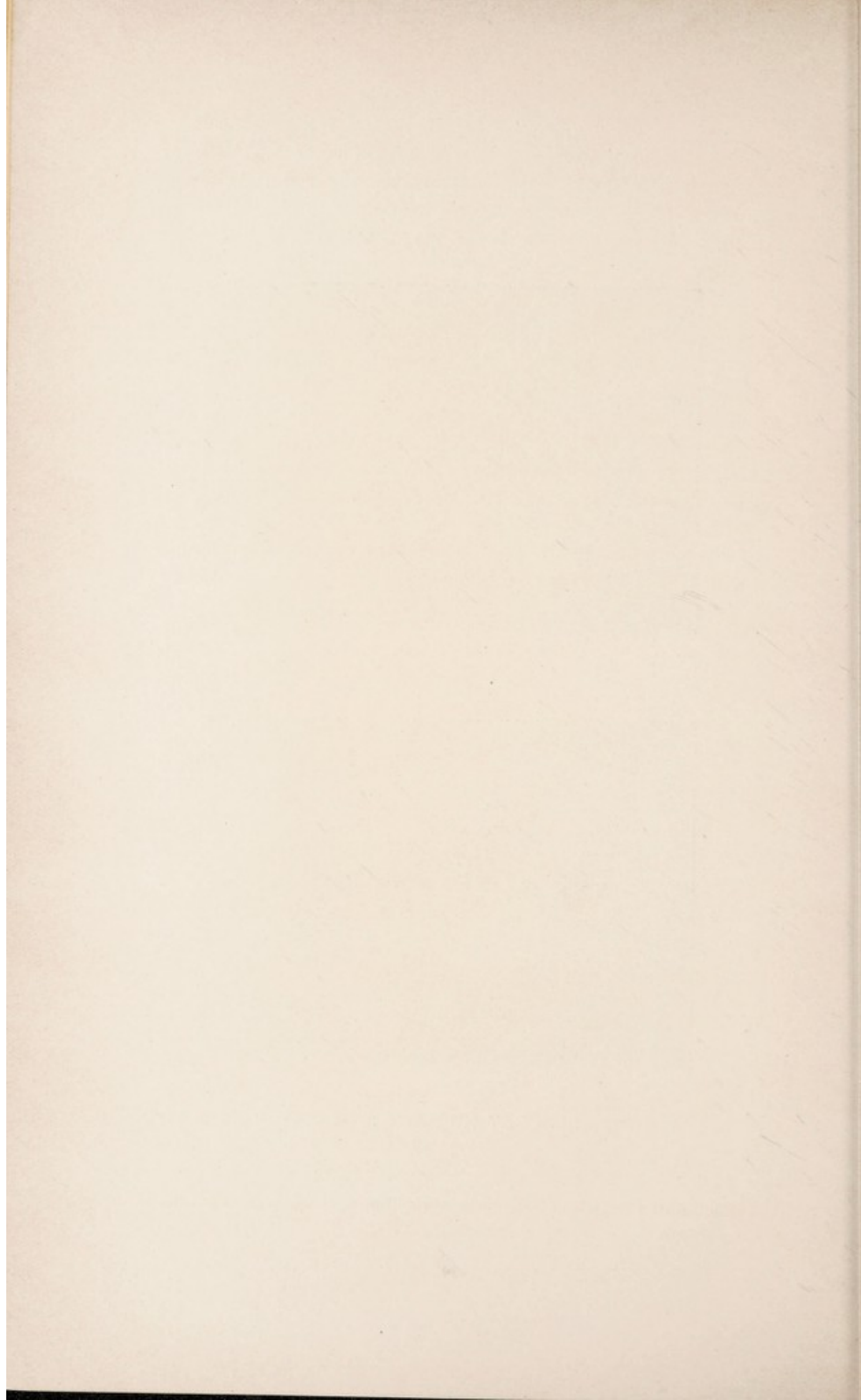
THE DAY NURSERY, Silverdale Road.—On the 18th of November, 1912, the Crèche in Silverdale Road was opened for the benefit of mothers who go out to work. The whole expense of the Institution—equipment, management and maintenance—has been borne by Miss Thornton, of Frant. The house has been most tastefully and hygienically decorated, and is replete with all the appliances one expects to find in an ideal home of the kind. It contains six rooms, and accommodation is provided for 14 infants and young children. The latter are received at the Home at 8 a.m., and their mothers claim them again at 6 p.m. Each child is bathed daily, on admission, and clothed in the outfits provided ; their own clothes, in the meantime, being sterilized ready for use again in the evening. The staff consists of a Matron, a Nurse and a Maid, and Dr. Manser has enthusiastically associated himself with the movement as Honorary Physician.

I have repeatedly visited the Crèche, at most unexpected moments, and have been charmed with the ideal conditions which invariably prevail. Miss Thornton has shown her intense interest in the social problems of the district in an eminently practical way, and, if she would permit it, I am sure many sympathisers would be delighted to share the financial burden involved in the maintenance of her scheme.



MISS THORNTON'S DAY NURSERY IN SILVERDALE ROAD.





## B.—SANITARY CIRCUMSTANCES OF THE DISTRICT.

### (1) *Water Supply.*

At the time of the Incorporation of the Borough in 1889 the only sources of the water supply were the surface springs in the neighbourhood of Pembury and Tangiers, the daily yield being 700,000 gallons. In dry weather these were apt to be somewhat inconstant; moreover, considerable difficulty had been previously experienced in storing the water. In 1894 the Council decided to bore two Artesian wells, and at the present time there are five such wells, delivering a practically inexhaustible supply of an exceedingly wholesome water. The Artesian wells penetrate below the Wadhurst clay into the Ashdown sands. Two new wells are also in process of construction, the estimated supply from which will be 1,000,000 gallons a day.

The water undergoes sand-filtration through filter beds of about one acre in extent. In addition, the underground supply is passed through Candy oxidising pressure filters, for the purpose of extracting the iron in solution. In dry periods practically two-thirds of the total water supply is obtained from the Artesian wells. The Storage Reservoir is situated at Pembury, and is capable of holding 42,000,000 gallons.

The purity of the water, both at the source and at the mains, is periodically tested at the Municipal Laboratory, as a routine measure. The following is the result of a recent Chemical Analysis:—

Free or Saline Ammonia (in parts per 100,000)	0.0040
Albumenoid Ammonia	0.0030
Nitrates, in terms of Nitrogen	a trace
Chlorides, in terms of Chlorine	2.7
Oxygen absorbed in 15 minutes	0.0065
Oxygen absorbed in 4 hours	0.0090
Total Solids at 100° C.	12.0
Total Hardness (in Clark degrees)	3.6
Temporary Hardness	2.1
Permanent Hardness	1.5

The sample was clear, colourless and odourless, and showed only a trace of iron.

The Bacteriological examination of the same water gave the following result :—

Number of organisms per cc., capable of growing on Standard Gelatine at 20° C. in 4 days	...	62
Number of organisms per cc., capable of growing on Standard Agar-Agar at 37° C.	... ..	5
Bacillus Coli Communis absent in 1 cc., 5 cc., 10 cc., and 25 cc.		
Streptococci and Bacillus Enteritidis Sporogenes not found.		

The combined Chemical and Bacteriological examinations are confirmatory of the opinion that the Tunbridge Wells Water Supply is of high organic purity, and its remarkable softness renders it particularly suitable for domestic purposes. There have been no cases of sickness due to plumbo-solvent action, iron services being used as a precautionary measure.

There are approximately 90 miles of water mains in the Borough. The average daily supply per head is 21 gallons, and during the year 56 additional houses were supplied with town water.

MEDICINAL WATERS.—Many of the springs in the district are richly charged with iron and other minerals, and it was to the presence of these waters that the town owed its origin. The Chalybeate Spring at the Pantyles is still largely patronised by visitors. Among its constituents are to be found Ferrous Carbonate (about 4½ grains to the gallon), Sodium Chloride, Calcium Sulphate, Magnesium Sulphate, Magnesium Carbonate, Silica, and traces of other salts. I have no criticism to make of the water, which for many years has proved of great value in many conditions; but the manner in which it is doled out to the public is contrary to the dictates of common sense. For a penny a consumer may have a tumblerful of the appetising fluid, obtained by dipping a jug into the receiving basin. Every journey of the jug washes the dust which may have gathered in and about it into the main body of the water. Those in less affluent circumstances may obtain as much as they require free, so long as they provide their own receptacles. The "free" supply consists of the overflow from the primary receiver, and is collected into a granite basin similar to the

latter. This second basin is very inadequately protected against contamination, and I have frequently seen both children and dogs imbibing freely at the same time. Both the granite basins are supposed to be cleansed daily, but on several occasions I have had to draw the custodians' attention to the fact that the public one has gone for days together without such attention. It is a very simple matter to arrange for the delivery of the water in such a manner as to neither offend the fastidious nor risk the possibility of contamination at the point of delivery, and it is to be hoped that some such improvement may take place, in the interests of the consumers.

As I have pointed out above, under normal conditions there are factors at work which jeopardise the fair fame of the medicinal waters. Under exceptional circumstances there are still graver risks of serious contamination. It occasionally happens, during a more than usually severe rain-storm, that the drainage system in the lower reaches of the town is inadequate to accommodate the sudden rush of water, and flooding takes place. The basins of the mineral spring, being considerably lower than the immediate neighbourhood, are the first to be submerged. I am of the opinion that the present unprotected condition of the chalybeate spring is potentially harmful, and the Council ought to urge upon the inhabitants the necessity for obtaining such powers as will enable them to place these valuable springs above suspicion. At present they are not in that most desirable position.

RIVERS AND STREAMS.—Together with the Borough Engineer I have made several inspections of the water courses, and found them satisfactory. Chemical analysis of the stream at the South Sewage Farm proves that it is not adversely affected by the effluent.

(2) *Drainage and Sewerage.*

The Borough is drained to, and the sewage is dealt with on two Sewage Farms—one at the northern end of the town at Great Lodge, and the other at the southern end, at Groombridge. The North Farm is 187 acres in extent, and the South Farm 199 acres, 14 of which are devoted to the cultivation of hops. At the South Farm percolating bacteria beds deal with a part of the sewage. The effluents at both farms are analysed frequently, and are in a satisfactory condition.

**Main Sewers, New Houses, &c.**—The Borough Surveyor informs me that main sewers in the following streets have either been provided, reconstructed or repaired :—

Goods Station Road.	Cumberland Walk.
Molyneux Park.	Culverden Down.
Culverden Street.	Queen's Road.
Western Road.	Pembury Road.
Warwick Park.	Dale Street.
Crescent Road.	Stone Street.
Forest Road.	Calverley Terrace.
Shaftesbury Road.	Eridge Road.

All flat gradients are flushed periodically from manholes, and at frequent intervals.

56 New Houses have been built, and 47 Road Gullies have been re-constructed and properly trapped.

(3) *Closest Accommodation.*

There are no privies within the Borough. With the exception of about 60 water-closets all are equipped with satisfactory flushing cisterns. The old type of boxed-in closet is being gradually replaced by pedestals.

**Public Conveniences** are provided in the following sites :— Pantiles, Common, Grosvenor Road, St. John's Road (rear "Harp" Hotel), Sussex Yard, Great Hall, Quarry Road, Basinghall Lane, Dunstan Road, opposite the Kentish (or Grand) Hotel; also in the Grove, St. John's Recreation Ground, and Grosvenor Recreation Ground—the last three sites having accommodation for both ladies and gentlemen. The Conveniences in the Recreation Grounds are free, but W.C.'s in other cases are fitted with penny-in-slot locks.

(4) *Scavenging.*

Refuse, both domestic and trade, is collected in covered carts from all premises once in five days. In some cases trade refuse is collected daily. Some 12,000 loads are thus dealt with annually, employing 15 carts and 10 fillers, in addition to drivers.

In one respect we are not as up-to-date as our neighbours--we have no refuse destructor. There are probably legitimate reasons for this. Such a plant is usually somewhat costly to instal and to maintain, and, naturally, local authorities do not feel justified in incurring expense if it can possibly be avoided. The principle, however, of leaving succeeding generations to grapple with difficulties the foundation of which has been laid by ourselves, is not a good one, and except on the score of expediency and economy there is nothing to be said in favour of the refuse-tips now in use for the Borough. These refuse-tips are situated at the old brickworks in Forest Road, the High Brooms Brickworks, the brickworks at Hawkenbury, and near the Allotments at Rusthall. I trust this question will come prominently forward at no very distant date.

I also hope to see the time when the present system of carting the refuse may be discontinued. The emptying of the household bins into the carts, especially on a windy day, is not exactly the ideal of hygiene. Covered sanitary bins might be provided in duplicate, and as the full bin is taken bodily away, an empty one may be left in its place. This would put an end to many grievances, and add immeasurably to the reputation of the Borough as a Health Resort. During the year 8,232 Dustbins have been periodically emptied and cleansed.

With a view to improving the condition of the roads about seven miles were tarred, with most encouraging results; 208 streets and roads were regularly swept. I am of the opinion that some of the principal streets most frequented by visitors would present a better appearance if youths were constantly employed with small hand-brushes and shovels. The cab-stands about the South Eastern Railway Station would certainly justify some little expenditure in this way. The total mileage of streets and roads in the Borough is 47.

The most objectionable practice of expectorating upon the pavements is much too freely indulged in, and I have had to complain especially of the outdoor porters at the Railway Stations. They have improved considerably, but a warning notice might profitably be fixed in places where loiterers usually collect.

(5) *Sanitary Inspections of the District.*

The following Tables present a summary of the work performed by the Sanitary Inspectors during 1912.

41	Complaints received and investigated.
6	Premises in respect of which statutory notices have been served.
48	Premises in respect of which informal notices have been served.
308	Houses, drains and sanitary fittings inspected.
1640	Visits of re-inspection or to works in course of progress.
50	Drains re-constructed.
31	Drains repaired.
18	Choked drains cleared and cleansed.
103	Inspection chambers constructed.
35	Inspection chambers repaired.
51	Drain ventilation shafts erected or repaired.
28	Soil pipes erected.
15	Soil pipes repaired.
100	W.C.'s re-constructed and provided with flushing apparatus.
9	Flushing apparatus repaired.
208	Efficient traps substituted for inefficient ones.
113	Rain-water and waste pipes disconnected from drains and made to discharge over properly trapped gullies.
83	Yards and areas paved or paving repaired.
8	New W.C. buildings and apparatus constructed.
17	W.C.'s cleansed and repaired.
44	New sinks provided.
19	New lavatory basins provided.
104	Old sinks provided with new waste pipes.
2	Defective W.C. buildings condemned and demolished.
42	Eaves gutters repaired.
63	Windows repaired.
53	Floors repaired.
39	Air inlets under floors provided.
24	Roofs repaired.
56	Houses provided with sufficient supply of water.
42	Samples of water submitted for analysis.
134	Rooms cleansed and limewashed.
17	Houses condemned and closed.
27	Dustbins provided or repaired.
89	Various improvements.
172	Hours' observation work.
326	Special Inspections of back yards.
215	Chicken, ducks, etc., removed.
1537	Inspections of stable yards and manure pits.
143	Offensive accumulations removed.
9	Stables paved and drained.
138	Inspections of slaughter houses.
180	Inspections of cowsheds, dairies, and milkshops.
105	Inspections of common lodging houses.
583	Inspections of food shops.
710	Parcels of food examined.
472	lbs. food unfit for human consumption seized and destroyed.
919	Visits, interviews, etc., <del>re</del> work to be carried out.

**Works carried out under the Infectious Diseases Acts  
during 1912.**

- 379 Visits to infected houses.
- 740 Rooms disinfected.
- 10710 Articles of clothing disinfected.
- 4 Loads of bedding removed to the steam disinfecter and returned to their respective owners.
- 6 Visits to disinfect public buildings.
- 8 Visits to disinfect St. John Ambulance and private vehicles.
- 10 Visits to disinfect wards at Sanatorium, General Hospital, etc.
- 4 Loads of bedding destroyed.
- 25 Visits to Sanatorium to disinfect clothing, etc.
- 51 Visits to flush W.C.'s and drains.

**Sanitary Certificates.**—The drains and sanitary fittings of properties of an aggregate rateable value of £2,001 were surveyed as a result of applications made for Sanitary Certificates which are issued to owners or occupiers applying for same, provided the drains and sanitary fittings are in accordance with the prescribed regulations and certain fees are paid.

The income derived from this work during the year was £48 12s. 5d. The time and labour devoted to the work is considerable, but it is satisfactory to be able to say that it is the cause of many improvements being made that could not be legally insisted on.

**Showing Income derived from Sanitary Certificate Work during  
the past Ten Years.**

Year.	Aggregate Rateable Value of Properties Surveyed.	Amount of Application Fees received.	Amount of Certificate Fees received.	Total amount received.	What the Income would have been if all the Certificates were taken up that it was possible to grant.
	£	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1903	3651	29 7 0	27 0 4	56 7 4	104 1 3
1904	4711	32 0 6	50 14 2	82 14 8	120 3 8
1905	3178	26 5 0	29 3 7	55 8 7	85 0 0
1906	2712	27 6 0	14 1 1	41 7 1	44 16 9
1907	3440	63 15 7	9 1 0	72 16 7	103 10 9
1908	3678	67 5 9	11 0 6	78 6 3	108 15 3
1909	3521	41 14 11	10 10 0	52 4 11	59 11 11
1910	1518	31 4 5	8 18 6	40 2 11	50 12 12
1911	1090	21 17 2	3 3 0	25 0 2	34 9 2
1912	2001	41 5 5	7 7 0	48 12 5	62 5 5
<b>Totals</b>	<b>29500</b>	<b>382 1 9</b>	<b>170 19 2</b>	<b>552 10 11</b>	<b>773 7 1</b>

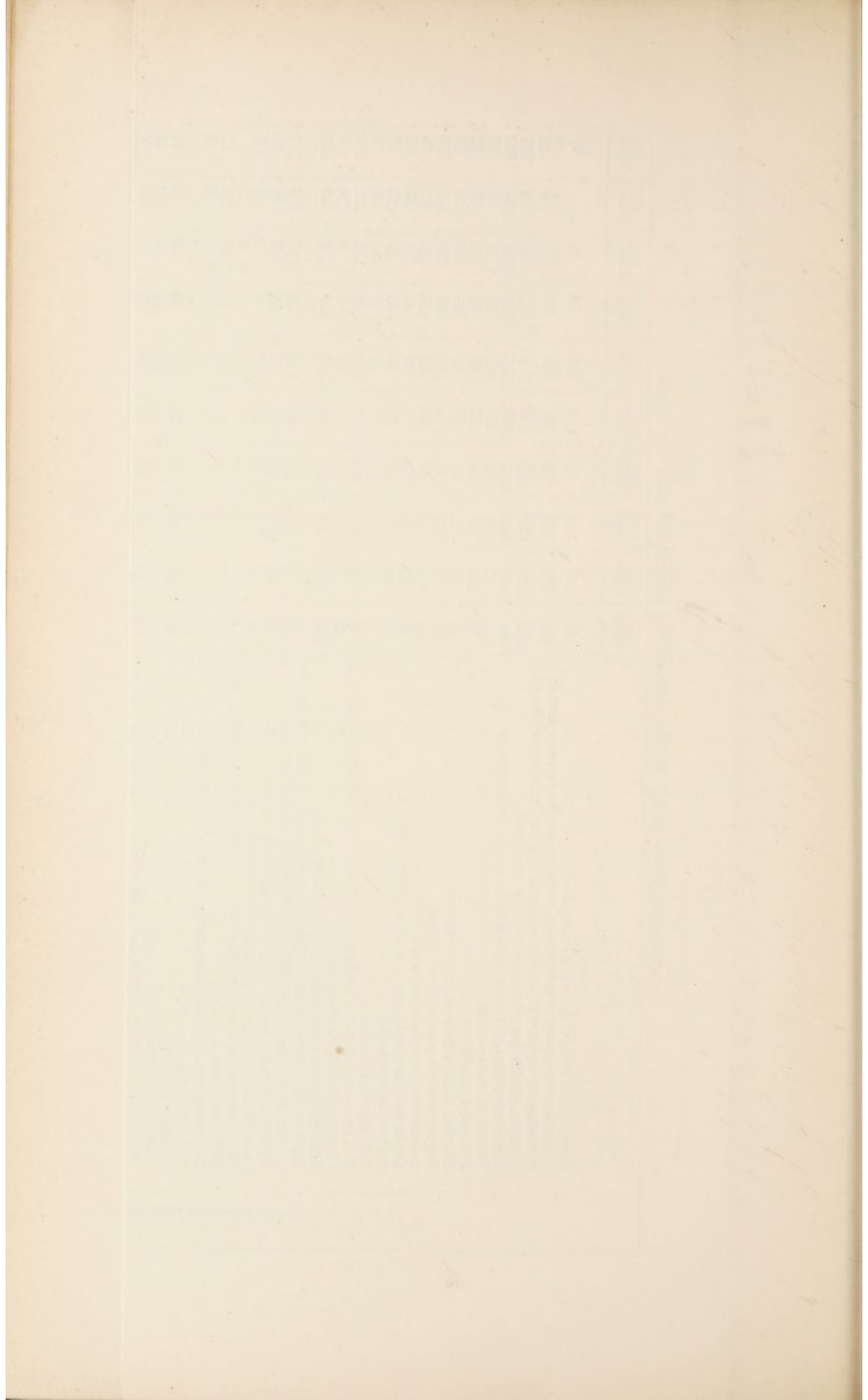


Disinfection of rooms by fumigation or spraying, and of clothing, etc., by steam, has been carried out in nearly all notified cases of infectious disease. The statement that 10,710 articles of clothing have been disinfected gives a very inadequate idea as to the labour and inconvenience involved in the process. The only steam disinfecting plant we possess is at the Sanatorium, where, of course, it is an absolute necessity. It would be a very great convenience to have a similar plant erected in the vicinity of the Health Offices, behind the Baths, for example. Probably the same boiler would serve both for the Baths and the disinfector, and articles could be disposed of at short notice, instead of having to wait until a sufficient quantity had accumulated to justify the expense of transit to the Sanatorium. Such a plant would also be useful for the disinfection of flocks and bedding, etc., for the Trades, and would materially enhance the value of a cleansing station, should it be deemed desirable to establish one in connection with the schools.

From my remarks in another section on the rôle played by human "carriers" in the dissemination of infectious diseases, it will be gathered that I am not a strong supporter of the idea that a prolonged sojourn of specific micro-organisms in inanimate nature is a very potential source of infection; but I cannot close my eyes to the fact that bedding and clothing, which come into intimate contact with any patient suffering from an infectious disorder, are capable of spreading infection, and disinfection of such ought to be encouraged. The Compulsory Notification of all cases of Tuberculosis has resulted in a considerable increase of articles requiring sterilization before being permitted to be used indiscriminately by susceptible persons; and if there is any truth at all in the possibility of inanimate intermediaries, such articles must be suitably treated. Obviously they cannot all be transported to the Sanatorium, and hence the necessity for a more convenient station which would enable us to disinfect as many articles as prudence might suggest, without the extra cost of transit out of town, and on premises not so closely associated with the acute infectious disorders.

Comparative Table of all Works carried out during the past ten years.

	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912
Public Health and Tunnage Wells Improvement Acts.	Complaints received and investigated	109	117	118	93	113	94	36	38	41
	Premises in respect of which statutory notices have been served	398	102	138	30	27	65	40	22	6
	Premises in respect of which informal notices have been served	1058	1022	946	822	656	718	410	662	468
	Houses, drains and sanitary fittings inspected	2948	2687	2589	2053	2323	2053	1749	2089	1747
	Visits of re-inspection or to works in course of progress	111	71	61	64	89	48	50	56	45
	Drains re-constructed	33	40	45	34	32	43	41	45	39
	Drains repaired	18	20	32	41	28	21	15	18	19
	Choked drains cleared and cleansed	85	186	137	138	152	131	102	125	112
	Inspection chambers constructed	20	13	9	15	16	32	31	27	27
	Inspection chambers repaired	36	45	42	52	37	80	44	32	34
	Drain ventilation shafts erected or repaired	41	61	73	48	35	29	36	35	28
	Soil pipes erected	178	196	195	143	129	126	120	131	147
	Soil pipes repaired	49	6	8	...	...	11	8	8	18
	W.C.'s re-constructed and provided with flushing apparatus	273	385	283	287	300	257	242	227	260
	Flushing apparatus repaired	...	...	...	...	...	...	...	...	...
	Efficient traps substituted for inefficient ones	169	177	140	89	80	159	88	157	125
	Rain water and waste pipes disconnected from drains and made to discharge over properly trapped gullies	112	78	78	69	80	63	64	82	82
	Yards and areas paved or paving repaired	11	7	7	6	15	5	7	2	4
	New w.c. buildings and apparatus constructed	...	...	2	...	...	2	2	5	3
	W.C.'s ventilated to outside air	...	...	3	5	...	29	31	12	11
	W.C.'s cleansed and repaired	...	...	4	...	...	6	...	...	3
	Defective w.c. buildings condemned and demolished	40	25	35	35	39	35	36	50	49
	Urinals re-constructed	9	11	45	63	73	119	83	99	112
	New lavatory basins provided	2	5	1	2	1	3	1	...	...
	Old sinks provided with new waste pipes	13	13	5	2	21	53	22	41	46
	Urinals provided at licensed premises	14	10	...	9	13	86	51	14	31
	Eaves gutters repaired	24	6	4	4	12	41	35	16	29
	Windows repaired	...	...	10	6	7	9	8	11	38
	Floors repaired	14	3	7	6	10	47	17	28	44
	Air inlets under floors provided	42	8	38	12	2	11	1	4	11
	Roofs repaired	18	38	137	71	69	86	65	85	91
	Defective cisterns abolished and water supply taken from rising main	4	12	32	26	9	3	6	2	6
	Houses provided with sufficient supply of water	116	88	92	32	66	179	180	110	142
	Samples of water submitted for analysis	189	27	69	23	17	81	45	32	32
	Rooms cleansed and limewashed	4	9	3	1	5	3	...	1	5
	Dustbins provided or repaired	1	5	...	...	...	...	...	...	...
	Wells and cesspools abolished	4	6	2	6	...	...	...	...	3
	Cases of overcrowding abated	5	...	1	...	...	...	...	...	33
	Offensive ditches cleansed	38	42	39	56	79	81	69	86	78
	Houses condemned and closed	781	876	732	306	374	478	258	165	109
	Various improvements	...	...	2	19	13	23	2	...	...
	Numbers of hours observation work	...	...	...	...	...	...	...	...	...
	Pigs removed	...	...	...	...	...	...	...	...	...
	Special inspections of back yards	...	...	...	...	240	283	240	128	138
	Chicken, ducks, etc., removed	1574	2395	2466	3343	3119	3136	4221	3451	2316
	Inspections of stable yards and manure pits	244	608	498	684	745	848	844	650	652
	Offensive accumulations removed	5	4	5	1	6	5	3	3	1
	Stables paved and drained	81	68	106	98	189	140	112	126	131
	Inspections of slaughter-houses	243	249	49	129	130	128	161	164	152
	Inspections of cowsheds, dairies and milkshops	...	...	2	1	3	...	...	...	...
New cowsheds constructed	5	3	...	1	...	...	1	...	1	
Cowsheds paved and drained	378	72	25	44	92	112	80	78	91	
Inspections of common lodging houses	210	332	588	521	508	570	571	495	549	
Inspections of food shops	620	1120	916	980	435	520	490	610	580	
Parcels of food examined	...	...	...	...	...	...	...	...	...	
Food unfit for human consumption seized and destroyed, No. of lbs.	1937	1344	358	1216	1261	1418	93	861	54	
Visits, interviews, etc., re work to be carried out	...	...	...	684	1246	1373	1138	1068	1036	
Factory and Workshops Acts.	Complaints received from Home Office	2	13	3	2	1	6	5	6	
	Notices served	16	23	17	...	...	...	...	...	
	Inspections of factories, workshops, bakehouses, etc.	1078	1360	1529	1448	1712	1840	991	1042	
	Workshops provided with sufficient and maintainable ventilation	21	33	27	3	1	...	11	3	
	Workshop walls and ceilings cleansed and limewashed	92	74	42	9	48	65	53	61	
	Workshop floors repaired	...	...	5	...	...	3	2	2	
	Workshop roofs repaired	...	...	2	...	...	2	2	...	
	Underground bakehouses made certifiable	7	7	...	...	...	...	...	...	
	Underground bakehouses abolished	2	2	...	...	...	1	...	...	
	New bakehouses provided	2	1	...	...	...	1	...	...	
	Drains re-constructed or repaired	4	5	...	...	...	6	2	...	
	New w.c.'s provided	4	6	2	...	1	2	7	1	
	W.C.'s repaired	6	7	5	...	...	3	5	5	
	Cases of overcrowding abated	3	5	7	...	...	1	2	3	
	Yard pavings re-constructed or repaired	5	16	5	...	...	6	...	...	
	Dustbins provided	6	4	2	...	...	3	...	...	
	Drain inlets inside workshops abolished	5	9	2	...	...	1	5	...	
	Efficient traps substituted for defective ones	9	13	...	...	...	21	5	...	
	Workrooms measured up	20	38	19	14	18	19	6	9	
	Visits to outworkers' premises	...	...	...	114	114	132	141	80	
Visits re Shop Hours and Seats Acts	...	...	...	...	74	209	125	121		
Infectious Diseases Acts	Visits to infected houses	748	572	501	274	249	228	314	353	
	Rooms disinfected	366	239	195	337	455	355	575	606	
	Articles of clothing disinfected	3620	4300	3460	7441	6888	7879	13965	12095	
	Loads of bedding removed to the steam disinfecter and returned to the respective owners	40	12	1	8	2	2	10	6	
	Visits to flush w.c.'s and drains	129	70	620	138	41	51	...	28	
	Public buildings disinfected	...	...	...	6	12	12	23	11	
	St. John's ambulance and private carriages disinfected	...	...	...	10	6	8	8	6	
	Wards at Sanatorium, General Hospital, etc., disinfected	...	...	...	4	5	20	15	15	
	Loads of bedding destroyed	...	...	...	...	...	1	1	3	
	Visits to Sanatorium to disinfect clothing, etc.	...	...	...	...	...	...	40	28	
Food and Drug Acts	Samples of food examined in Public Health Department	86	164	216	142	131	141	157	147	
	Samples of food submitted to the Public Analyst	41	100	101	96	103	99	104	110	
	Samples of milk submitted for bacteriological analysis	...	...	...	1	9	8	13	18	



(6) *Premises and Occupations which can be controlled by Bye-laws and Regulations.*

There are 16 Cowsheds, 10 Dairies and 53 Milkshops; 6 Slaughter-houses (5 Registered and 1 Licensed); and 5 Common Lodging Houses (with accommodation for 118 persons).

We have Bye-laws for the prevention of nuisances arising from snow, filth, etc., and the keeping of animals. Bye-laws are also in force with respect to New Streets, and the construction of New Buildings. We have no Bye-laws for houses let in lodgings.

Common Lodging Houses are inspected periodically, both by day and by night. Considering the class of persons who use them they are kept in a satisfactory manner. Limewashing of walls and ceilings and cleansing of floors are well carried out, as is also the washing of bedding. No cases of sickness or of infectious disease were reported to me.

We have no Cellar Dwellings, and no scheduled Offensive Trades. Section 51 of the Public Health Act Amendment Act, 1907, gives power to the Local Authority to declare Fish-frying to be an Offensive Trade, and I am of the opinion that this ought to be done. The vegetable oils used in the frying of fish in some establishments are a potential source of nuisance, and I am convinced that the inclusion of these shops in the schedule would effect improvements in the general standard of cleanliness.

(7) *Schools.*

See School Report.

(8) *Food.*

(a) **Milk Supply.**—At the end of 1912 there were 79 persons on the Register of Cowkeepers, etc., viz., 16 owners of Cowsheds, 10 of Dairies, and 53 of Milkshops or as Purveyors of Milk. The premises used for the storage or sale of milk have been diligently inspected, 180 visits having been paid. All these premises have been found generally in a satisfactory condition, but many of the smaller class, being used for the sale of other articles which it is very undesirable to have associated with milk, occasion us a considerable amount of anxiety. During the year 58 samples were submitted to the Borough Analyst for Chemical Analysis, and nine were found to be adulterated. The vendors of two samples, taken formally and returned as adulterated, were prosecuted

and fined £2 and £1 11s. 6d. costs, and £1 with £1 11s. 6d. costs respectively. The vendors of two other adulterated milks were cautioned.

(*b*) **Other Foods.**—During the year 404 lbs. of meat, and 70 lbs. of fish were condemned as unfit for human food, and destroyed in the furnace at the Baths. As no attempt had been made to sell the material for human consumption, no action was taken beyond confiscation and destruction.

Samples of other foods to the number of 143 were examined at the Public Health Office. Of these, 117 were obtained on Saturday nights and Sunday mornings.

There are 6 private Slaughter Houses in the Borough—5 registered ones, established before 1847; and one new one, built and licensed during 1907. Frequent inspections of the premises (138) have been made, both by day and night, and during killing hours, and no complaint has been reported.

(*c*) **Sale of Food and Drugs Act.**—The following table shows the formal and informal samples of food submitted by Mr. James Cave, the Chief Sanitary Inspector, who is the officer appointed under the Act, for analysis by the Borough Analyst.

			Taken Formally.		Number Adulterated.		Taken Informally.		Number Adulterated.
Milk	...	...	9	...	3	...	49	...	6
Butter	...	...	—	...	—	...	16	...	—
Margarine	...	...	—	...	—	...	6	...	—
Lard	...	...	—	...	—	...	8	...	—
Cheese	...	...	—	...	—	...	6	...	—
Fresh Cream	...	...	—	...	—	...	1	...	—
Preserved Cream	...	...	—	...	—	...	1	...	—
Sausages	...	...	—	...	—	...	5	...	3
Ammoniated Tincture of Quinine	...	...	—	...	—	...	1	...	—
Camphorated Oil	...	...	—	...	—	...	1	...	—
Coffee	...	...	—	...	—	...	1	...	—
Sweets	...	...	—	...	—	...	2	...	—
<b>TOTAL</b>	...	...	<b>9</b>		<b>3</b>		<b>97</b>		<b>9</b>

The vendors of the three samples of sausages containing preservatives were cautioned.

(9) *Housing.*

The Housing and Town Planning Act of 1909 came into operation on December 3rd of that year, and on September 2nd, 1910, the Local Government Board issued an Order relating to the systematic inspection of dwelling houses.

Article I., Sub-section 2, reads :—

“The Local Authority shall, as part of their procedure, make provision for a thorough inspection to be carried out from time to time according to the varying needs and circumstances of the dwelling houses or localities in the district of the Local Authority.”

Article II. of this Order enumerates the matters in relation to which inspection should be made ; and Article III. prescribes the records to be kept of each inspection.

Article IV. directs the Local Authority to take these records into consideration at each meeting, and to give such directions for action as may be desirable ; while Article V. requires the Medical Officer of Health to include in his Annual Report certain information and particulars as to the inspections made and the results.

Under the Act, in any contract made after December 3rd, 1909, for letting a house or part of a house in Tunbridge Wells at a rent not exceeding £16 a year, there is now an implied condition that the house at the commencement of the holding was in all respects reasonably fit for human habitation. And further, by Section 15, that the premises shall during the holding be kept by the landlord in all respects so fit, unless the house or part of the house is let for a term of not less than three years, on the understanding that the lessee shall put the premises into a habitable condition. If Section 15 is not complied with, the Town Council may order such work to be carried out as may be necessary to make the house or part of the house reasonably fit for human habitation, if in their opinion it can be rendered so fit ; and in default of compliance with the order the Council may do the work themselves, and recover the cost from the landlord in a summary manner, subject to the right of appeal by the landlord to the Local Government Board.

If the Town Council are satisfied, on the representation of the Medical Officer of Health, that any house within their district is unfit for human habitation, they are compelled to make a Closing Order. This power is given under Section 17 of the Act.

The Housing problem is one in which, for many years, I have taken a very special interest, and upon which I consider myself peculiarly qualified to speak. It has, however, been a keen disappointment to me that a combination of circumstances has rendered it impossible to gain that grasp of the situation as presented in the Borough, the possession of which alone would justify any detailed annotation by myself.

The following is a statement of the work carried out in 1912 in accordance with Article V. referred to above :—

- I. Number of houses inspected, 54.
- II. Number of houses found unfit for habitation, 17.
- III. Number of representations to the Local Authority, 0.
- IV. Number of Closing Orders made, 0.
- V. Number of houses remedied without Closing Orders, 37.
- VI. Number of Closing Orders determined, 0.
- VII. Number of houses dealt with under Section 15 of the Act, 54.
- VIII. Number of houses dealt with under Public Health Acts, 308.
- IX. Number of houses dealt with by mutual consent, 54.
- X. Number of houses not requiring remedy, 0.

(The 17 houses unfit for habitation were closed—2 permanently.)

(10) *Workshops, Workplaces, etc.*

During the year 842 inspections have been made in order to secure observance of the provisions of the law in regard to cleanliness, ventilation, overcrowding, drainage of floors, sanitary accommodation and proper means of escape in cases of fire. As in the previous year 86 defaults were discovered, and means taken to remedy the same.

Of the 42 Bakehouses in the Borough 11 are underground. Of the latter one was not occupied at the end of 1912.

In accordance with the provisions of the Shop Hours and Seats for Assistants Acts, 129 visits were paid. We have had no occasion to complain of any contravention of the Acts, and no complaints were received from employees or other persons concerned.

**FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES,  
AND HOMEWORK.**

(HOME OFFICE No. 1.)—INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR  
INSPECTORS OF NUISANCES.

Premises. (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Prosecutions. (4)
Factories ... .. (Including Factory Laundries).	38	—	—
Workshops ... .. (Including Workshop Laundries).	410	6	—
Workplaces ... .. (Other than Outworkers' premises included in Part 3 of this Report).	394	—	—
Total ... ..	842	6	—



## (HOME OFFICE No. 2.)—DEFECTS FOUND.

Particulars. (1)	Number of Defects			Number of Prosecutions. (5)
	Found. (2)	Remedied. (3)	Referred to H.M. Inspector. (4)	
<i>Nuisances under the Public Health Acts :—*</i>				•
Want of cleanliness ... ..	58	58	—	—
Want of ventilation ... ..	—	—	—	—
Overcrowding ... ..	1	1	—	—
Other nuisances .. ..	16	16	—	—
† Sanitary accommodation { insufficient ... ..	2	2	—	—
{ unsuitable or defective ... ..	8	8	—	—
{ not separate for sexes ... ..	1	1	—	—
Total ... ..	86	86	—	—

\* Including those specified in sections 2, 3, 7 and 8, of the Factory and Workshop Act as remediable under the Public Health Acts.

† For districts not in London state here whether section 22 of the Public Health Acts Amendment Act, 1890, has been adopted by the District Council; and if so what standard of sufficiency and suitability of sanitary accommodation for persons employed in factories and workshops has been enforced.

Section 22 of the Public Health Acts Amendment Act, 1890, has been adopted, and the standard of sufficiency and suitability enforced is as follows:—"That one W.C. be required for every 20 females, and subject to sufficient urinal accommodation being provided, one W.C. be required for every 25 males."

(HOME OFFICE No. 3.)—HOME WORK.

NATURE OF WORK*	OUTWORKERS' LISTS, SECTION 107.						OUTWORK IN UN- WHOLESOME PREMISES, SECTION 108.				OUTWORK IN INFECTED PREMISES, (SECTIONS 109, 110).						
	Lists received from Employers.		Sending once in the year.		Sending twice in the year.		Prosecutions.		Instances served.		Prosecutions.		Orders made.	Instances.			
	Outworkers †		Lists.		Outworkers †		Failing to keep lists.		Notices served on occupiers as to keeping or sending lists.		Failing to send lists.						
	Lists †	Con-tractors	Work-men.	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
(1)	22	3	62	5	—	16	10										
Wearing Apparel— Making, &c. ...																	
No Outworkers' Lists received for any of the other 30 trades enumerated in the Home Office Table.																	

\* If an occupier gives out work of more than one of the classes specified in column 1, and subdivides his list in such a way as to show the number of workers in each class of work, the list should be included among those in column 2 (or 5 as the case may be) against the principal class only, but the outworkers should be assigned in columns 3 and 4 (or 6 and 7) into their respective classes. A footnote should be added to show that this has been done.

† The figures required in columns 2, 3 and 4 are the total number of the lists received from those employers who comply strictly with the statutory duty of sending two lists each year and of the entries of names of outworkers in those lists. The entries in column 2 must necessarily be even numbers, as there will be two lists for each employer—in some previous returns odd numbers have been inserted. The figures in columns 3 and 4 will usually be (approximately) double of the number of individual outworkers whose names are given, since in the February and August lists of the same employer the same outworker's name will often be repeated.

## (HOME OFFICE NO. 4.)—REGISTERED WORKSHOPS.

Workshops on the Register (Sec. 131) at the end of the year. (1)	Number. (2)
Important classes of workshops, such as workshop bakehouses, may be enumerated here. {	
Bakehouses ... ..	42
Dressmakers and Milliners ...	69
Tailors ... ..	33
Laundries ... ..	45
Various ... ..	142
Total Number of Workshops on Register ... ..	331

## (HOME OFFICE NO. 5.)—OTHER MATTERS.

Class. (1)	Number. (2)
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Act (s. 133)... ..	Nil.
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5) {	
Notified by H.M. Inspector	7
Reports (of action taken) sent to H.M. Inspector...	7
Other ... ..	
Underground Bakehouses (s. 101) :—	
Certificates granted during the year ... ..	Nil.
In use at the end of the year ... ..	10 in use, 1 unoccupied.

NOTE.—The Factory and Workshop Act, 1901 (s. 132) requires the Medical Officer of Health in his Annual Report to the District Council to report specifically on the administration of that Act in workshops and workplaces, and to send a copy of his Annual Report, or so much of it as deals with this subject, to the Secretary of State (Home Office). If the Annual Report is presented otherwise than in print, it is unnecessary to include in the copy sent to the Home Office the portions which do not relate to factories, workshops, workplaces or homework. The duties of Local Authorities and the Medical Officer of Health under the Act of 1901 are detailed in the Home Office Memorandum of December, 1904. A further Memorandum, on the Home Work Provisions of the Factory Act, was issued to all District Councils and Medical Officers of Health in October, 1906.

LIST OF WORKSHOPS, FACTORIES AND WORKPLACES, 1912.

WORKSHOPS.	No. on Register.	Persons employed.			No.	FACTORIES.	Persons employed.		
		Male.	Female.	Total.			Male.	Female.	Total.
Bakers ...	42	110	—	110	1	Brewer ...	8	—	8
Basket Maker ...	1	3	—	3	1	Builder ...	20	—	20
Blacksmiths ...	13	55	—	55	1	Cabinet Maker ...	6	—	6
Boot Makers ...	16	41	—	41	1	Carpet Beating Works...	3	—	3
Builders and Carpenters ...	35	278	—	278	1	Carriage Builder ...	25	—	25
Cycle Manufacturers ...	11	32	—	32	1	Coffee Roaster ...	2	—	2
Cabinet Makers ...	5	23	—	23	1	Cycle Manufacturer ...	6	—	6
Carvers and Gilders ...	3	7	—	7	1	Electrical Engineer ...	2	—	2
Carriage Builders ...	6	24	—	24	1	Engineer ...	2	—	2
Confectioner ...	2	4	—	4	2	Electric Light Works ...	22	—	22
Dressmakers and Milliners ...	69	—	3	3	1	Gas Works ...	40	—	40
French Polisher ...	1	3	—	3	4	Laundries ...	15	179	194
Gas and Hot Water Fitters ...	6	50	—	50	4	Mineral Water Factories	18	—	18
Knitting ...	1	—	1	1	4	Photographers...	27	21	48
Laundresses ...	45	3	175	178	11	Printers ...	150	10	160
Monumental Masons ...	3	12	—	12	2	Saw Mills ...	32	—	32
Motor Engineer ...	2	5	—	5	1	Stone Breaker...	12	—	12
Picture Frame Makers...	2	10	—	10	1	Tonbridge Ware Factory	7	3	10
Saddlers and Harness Makers...	5	16	—	16	1	Wood and Metal Letter Maker...	3	—	3
Sign Writer ...	1	2	—	2	38		400	213	613
Scale Makers ...	2	4	—	4					
Syphon Filler ...	1	1	—	1					
Tailors ...	33	92	—	92					
Telephone Fitter ...	1	4	—	4					
Undertakers ...	3	11	—	11					
Upholsterers ...	10	19	8	27					
Umbrella Manufacturer ...	1	1	1	2	78	Including—	286	39	325
Watchmaker ...	1	4	—	4		Restaurant Kitchens, Livery ...			
						Stable Yards, &c. ...			
	331	814	728	1542	116	Totals	686	252	938

## C.—SANITARY ADMINISTRATION OF THE DISTRICT.

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(1) *Staff: Work of Inspectors of Nuisances and other Officers engaged in sanitary work.*

The Staff consists of a Chief Sanitary Inspector (Mr. James Cave, A.R.S.I.); three Assistant Inspectors (Mr. E. J. Wells, A.R.S.I., Mr. W. P. Cave, A.R.S.I., and Mr. E. Reader); one Health Visitor and School Nurse (Miss M. D. Clarke), and one Clerk (A. Harding); in addition to myself, as Medical Officer of Health, School Medical Officer and Bacteriologist, etc.

The work of the Inspectors is set out in the Tables already given, and in the School Report.

(2) *Hospital Accommodation in relation to the Acute Infectious Diseases and to Tuberculosis.*

The Infectious Diseases Hospital is stationed at Frant Forest, about one and a half miles out of the town. It is beautifully situated in seven acres of ground, and is capable of accommodating 57 patients.

The only cases admitted hitherto have been Diphtheria and Scarlet Fever. By a special arrangement with the General Hospital in Tunbridge Wells, Enteric Patients have been admitted into that Institution.

There is no accommodation for the treatment of Tuberculosis, although the position of the Frant Hospital is admirably adapted for such a purpose.

During the year 132 Patients were removed to the Sanatorium. Of these 82 were Diphtheria Patients (90 per cent. of the total number notified) and 50 (94·3 per cent. of the total) were admitted as suffering from Scarlet Fever. Of the latter 7 were treated in the Observation Block. Two Patients with Enteric were treated at the General Hospital.

Provision is made for any possible cases of Small-pox or Plague at the Dislingbury Hospital (Capel), which has 20 beds. This is under the administration of the Tunbridge Wells, Tonbridge and Southborough Joint Hospital Board.

(3) *Administration of Local Acts, or General Adoptive Acts in force in the District.*

THE TUNBRIDGE WELLS IMPROVEMENT ACT, 1890, Parts II., III., IV., VI., VII. and XII. apply to sanitary matters. These sections deal respectively with the Water Supplies, Public Baths, Buildings and Streets, Infectious Diseases and other sanitary matters, Slaughter-houses and Common Lodging-houses.

Part III. of the PUBLIC HEALTH (AMENDMENT) ACT, 1890, has been adopted.

Of the PUBLIC HEALTH (AMENDMENT) ACT, 1907, the following portions have been adopted :—

Part I., Sections 1 to 14.

Part II., Sections 17, 21 to 24, 26 to 30 and 32 to 33 inclusive.

Part III., Sections 34 to 42, 45 and 47 to 51.

Part IV., Sections 52 to 66 and 68.

Part V., Sections 69 to 75.

Part VI., Sections 76 and 77.

Part X., Sections 93 and 95.

The NOTIFICATION OF BIRTHS ACT, 1907, has not yet been adopted.

(4) *Chemical and Bacteriological Work during the Year.*

Previous to my appointment as Medical Officer of Health the Health Committee had decided as to the desirability of instituting a Municipal Laboratory for Chemical and Bacteriological work. The County Laboratory at Maidstone, which was established a little more than a year ago, provides for certain examinations, but cannot reasonably be expected to cater for the very exceptional amount and character of material requiring investigation in the Borough.

The work of the Laboratory has been of a very onerous nature, owing to the special circumstances related elsewhere. The sense of security it has given us, however, the enormous help it has afforded in tracing out the "carriers" of infectious disease, and the manner in which its resources have been appreciated by my medical colleagues, have amply compensated me for the countless hours of "overtime" spent in connection with it. What that work has been none but the initiated can possibly realize.

The Laboratory has now been working for eight months, and the following is a summary of the examinations performed:—

## LABORATORY WORK, 1912.

Throat Swabs (for Diphtheria)	...	...	2811
Sputa (for Tubercle)	...	...	173
Hair (for Ringworm)	...	...	49
Blood (for Typhoid)	...	...	15
Other Blood Examinations	...	...	23
Examinations of clinical material, and sundry preparations other than above	...	...	77
Water Analyses	...	...	42
Sewage Effluents	...	...	14
	Total	...	3204

All the Swabs, Outfits, Culture Media, Stains and Standard Solutions are prepared by ourselves in the Laboratory; and I would take this opportunity of expressing my obligations to every member of the Staff for their cheerful acceptance of additional responsibilities which the institution of the Laboratory has incurred.

In one respect the Municipal Laboratory has been a great disappointment to me. It was originally intended to equip the Laboratory in such a manner as to enable us to undertake any description of analysis likely to be required for the Borough. It is especially desirable that we should be in a position to analyse our own informal samples of Milk ; moreover, the members of the trade themselves, who are just as anxious as we are to maintain as high a standard as possible, have a right to all the assistance we can afford.

Provision was originally made for an electrical centrifuge which would enable us to expedite the analysis of milk in quantity, and test for the presence of the Tubercle Bacillus. The cost of making the new Offices and Laboratory reasonably tenable, however, compelled us to cut down the scheme, and the Milk department had to suffer. Now that the new Tuberculosis Order is in force the necessity for making such provision is accentuated, and I trust this may be done at an early date. Our equipment for the Bacteriological examination of Milk is exceptionally good.

The Analytical work done by the Borough Analyst during the year will be found under the section B, § 8 (c), page 28—" Sale of Food and Drugs Act."



### D.—PREVALENCE OF AND CONTROL OVER ACUTE INFECTIOUS DISEASES.

There were 157 notifications received under the Act, as compared with 151 in 1911. The cases notified were as follows:—

Diphtheria ... ..	91
Erysipelas ... ..	9
Scarlet Fever ... ..	53
Enteric Fever ... ..	4
—	
Total ... ..	157
—	

The **Zymotic Death Rate**, by which we understand the number of deaths per thousand of the population which are due to the seven common epidemic diseases, was 0·3, as compared with 1·0 in 1911.

The following Table shows the  
MORTALITY FROM ZYMOTIC DISEASES FOR TEN YEARS.

	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912
Scarlet Fever ... ..	1	0	0	0	1	0	2	0	0	0
Enteric Fever ... ..	3	3	0	1	0	1	1	1	1	1
Erysipelas ... ..	0	0	0	0	1	0	0	0	0	0
Diphtheria and Membranous Croup ... ..	1	1	0	0	6	1	3	0	8	10
Diarrhoea and Dysentery ... ..	2	4	3	9	1	2	4	3	..	...
Diarrhoea and Enteritis ... ..	...	...	...	...	...	...	...	...	18	2
Small-pox ... ..	2	0	0	0	0	0	0	0	0	0
Measles ... ..	4	5	0	0	16	3	7	1	3	1
Whooping Cough ... ..	4	15	5	0	17	3	3	3	8	0
Total number of deaths from Zymotic Diseases ... ..	17	28	8	10	42	10	20	8	38	14
Percentage upon deaths from all causes ... ..	4·0	6·4	1·8	2·4	8·7	2·4	4·2	1·9	9·1	3·5
Zymotic Death-rate per thousand living ... ..	0·4	0·8	0·2	0·2	1·1	0·3	0·5	0·2	1·0	0·3

SEASONAL INCIDENCE OF ACUTE INFECTIOUS  
DISEASES.

Month.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Erysipelas.
January ... ..	8	6	0	3
February ... ..	2	24	0	1
March ... ..	0	9	1	0
April ... ..	5	4	0	0
May ... ..	7	7	0	0
June ... ..	7	9	0	0
July ... ..	2	1	2	0
August ... ..	10	3	0	1
September ... ..	2	7	1	0
October ... ..	5	11	0	1
November .. ..	4	9	0	1
December ... ..	1	1	0	2
Total ... ..	53	91	4	9

Of the Scarlet Fever patients 94·3 per cent. were removed to the Sanatorium; and of the Diphtheria cases 90 per cent. were removed from their homes. One of the Diphtheria patients in the October group had come into town to have his complaint diagnosed; and at his own request, and with his medical adviser's consent, he was removed to his own home at Paddock Wood in the Borough ambulance.

**Enteric Fever.**—Four cases of Typhoid Fever were notified, one of which proved fatal. Two of these were treated at the General Hospital, while two remained at home. The diagnosis was somewhat doubtful in two of the cases, and in none could any probable cause be traced to the Borough.

**Measles.**—In future we shall be in a better position as regards our knowledge of the incidence of Measles. This is not a notifiable disease in Tunbridge Wells. One death was due to this complaint, but none to Whooping Cough.

**Epidemic Diarrhœa.**—Two deaths were attributable to Enteritis, compared with 18 last year. A cool, damp summer is always favourable to a low death-rate from Diarrhœa.

**Small-pox.**—There have been no cases of Small-pox in the Borough since the year 1903.

**Erysipelas.**—Nine cases were notified, all above the age of 25 years, and no deaths occurred.

**Scarlet Fever.**—Fifty-three cases were notified and 50 removed to the Sanatorium. No deaths occurred from this disease. During the years 1903 to 1912 inclusive, 872 cases of Scarlet Fever were notified, with only four deaths, showing a case-mortality of 0·45 per cent. The number for 1912 is low compared with the average (87·2), but might be considerably lower still.

Scarlet Fever prevails most in the last six months of the year, the maximum being usually in the December quarter. A temperature of about 60° F. favours the extension of the disease, and a fall to 50° F. tends at once to arrest it. The greatest number of our cases occurred in the month of August, when the mean temperature was 59·9° F. The next largest number of cases was notified in January, when the mean temperature was 41·8° F. We really know too little about the etiology of the complaint to be dogmatic, but my own opinion is that we are sometimes over anxious to saddle the season with the responsibility of these scarlatinal visitations, when, probably, the reason for their extension may be found nearer home. We do know that the virus of Scarlet Fever is very persistent, and special care has been invariably taken in the disinfection of rooms, clothes, books, etc., throughout the year.

**Diphtheria.**—The continued prevalence of Diphtheria in the Borough has occasioned constant anxiety and a great amount of extra work throughout the year. No fewer than 91 cases were notified, as compared with 69 in 1911. Of the 91 cases 59 occurred during the first six months, and 32 during the latter half of the year. Ten deaths resulted, 3 occurring between the ages of 2 and 5 years, and 7 between the ages of 5 and 15. The deaths occurred as follows:—Two on the 1st day, 4 on the 2nd, 1 on the 4th, 1 on the 5th, 1 on the 10th, and 1 on the 46th day after first coming under treatment.

THE INFECTIOUS DISEASES (NOTIFICATION ACT) came into operation on January 1st, 1890, since when only have we any reliable information as to the number of cases occurring throughout the year. During that year 20 cases were notified, with 5 deaths. The following Table gives the Number of Notifications for each year, the Number of Deaths Registered, the Fatality per cent., and the Attack-rate per thousand of Population.

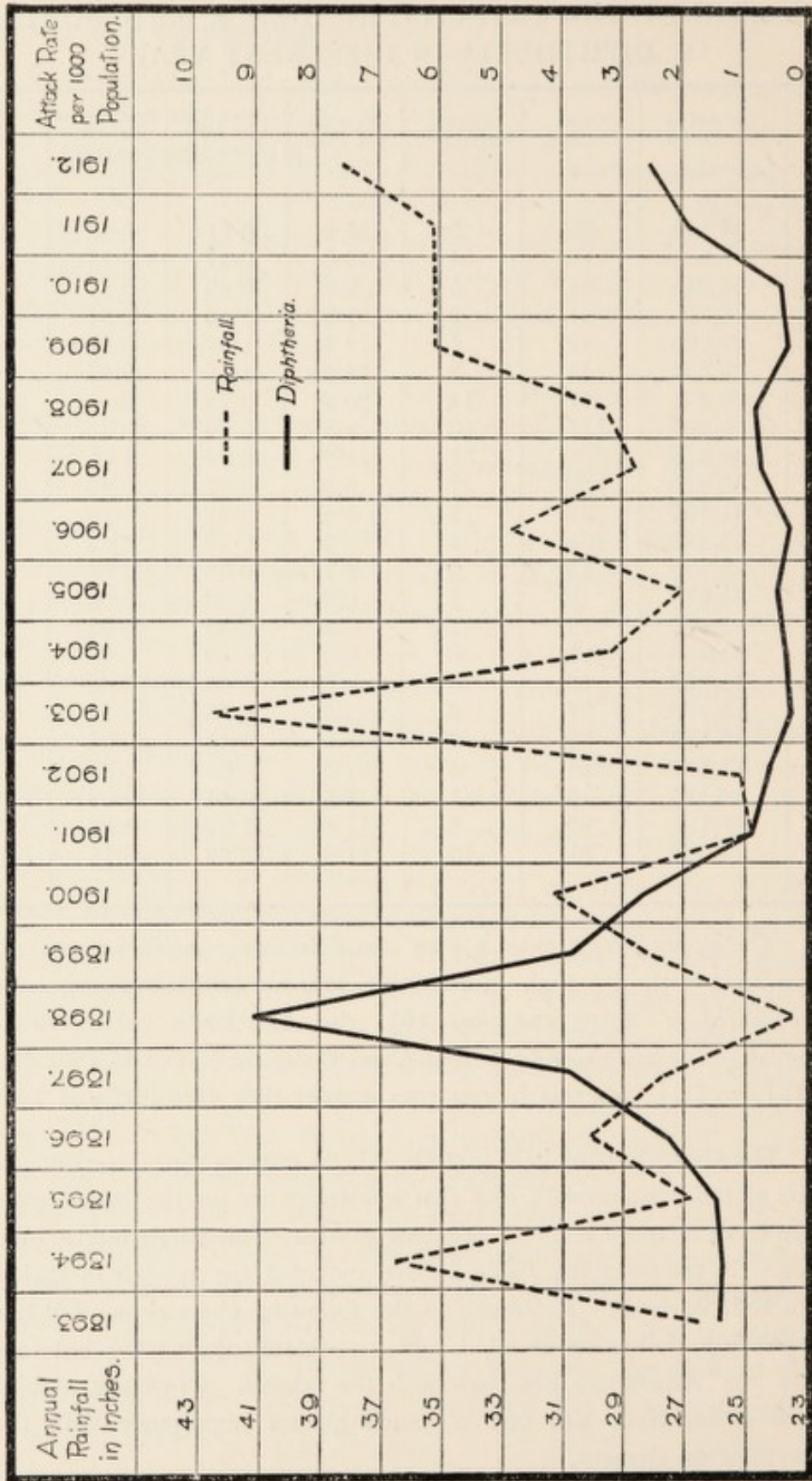
COMPARISON OF THE FATALITY, INCIDENCE, AND MORTALITY  
OF DIPHTHERIA IN DIFFERENT YEARS.

Year.	Estimated Population.	Cases Notified.	Deaths Registered.	Fatality per cent.	Attack-Rate per 1,000 Population.	Death-Rate per 1000 Population.	Rainfall in Inches.
1890	28,148	20	5	25.0	0.71	0.18	—
1891	27,984	16	4	25.0	0.57	0.14	—
1892	28,345	24	5	20.8	0.85	0.17	—
1893	28,705	41	9	21.9	1.40	0.31	26.05
1894	29,065	40	5	12.5	1.37	0.17	36.58
1895	29,535	44	8	18.2	1.49	0.27	26.69
1896	29,895	67	14	20.9	2.24	0.46	30.07
1897	30,255	117	10	8.5	3.86	0.33	27.65
1898	30,615	278	31	11.2	9.07	1.01	23.39
1899	30,975	120	7	5.8	3.87	0.23	28.10
1900	31,335	82	3	3.6	2.61	0.10	31.28
1901	33,443	31	1	3.2	0.92	0.03	24.84
1902	33,773	23	2	8.7	0.68	0.06	25.19
1903	34,073	9	0	0.0	0.26	0.00	42.41
1904	34,373	12	1	8.3	0.34	0.03	29.32
1905	34,673	17	0	0.0	0.49	0.00	27.05
1906	34,973	10	0	0.0	0.28	0.00	32.74
1907	35,273	27	6	22.2	0.76	0.17	28.55
1908	35,573	29	2	6.9	0.81	0.06	29.53
1909	35,873	11	3	27.3	0.31	0.08	35.14
1910	36,173	15	1	6.6	0.41	0.03	35.14
1911	35,778	69	8	11.6	1.92	0.22	35.19
1912	36,038	91	10	11.0	2.52	0.28	38.18

The above figures show a very unsatisfactory condition as regards Diphtheria in the Borough—a condition, however, which has since been ameliorated. During the year 1911 the Attack-rate per 1,000 of population for the whole of England and Wales amounted to 1.32, and in 1912 to 1.24; whereas in our own district they were 1.92 and 2.52.

The view has been held that Diphtheria only becomes epidemic in years of deficient rainfall, and that epidemics are on the largest scale when three or more years of deficient rainfall immediately follow each other. In the foregoing Table I have included the rainfall in inches from 1893 onwards. Reference to the following chart shows that this relationship, if it exists at all, is not a constant; during the last four years the Attack-rate has risen with the rainfall. Obviously a third factor is involved, and one of much greater importance than the climatological element.

DIPHThERIA AND RAINFALL.



W.P. CAVE.

Before the discovery of the Diphtheria Bacillus, and even before the science of bacteriology had been founded, it was believed, on clinical grounds, that severe cases of Diphtheria could give rise by infection to mild cases of "Erythematous Sore Throat," and these in turn to fresh cases of Membranous Diphtheria. Later, it was also recognised on clinical grounds that patients who had recovered from an attack of Diphtheria, and who had seemed perfectly well for two or three weeks, could still communicate the disease to others. In 1883 the Bacillus of Diphtheria was discovered, and shortly afterwards the same bacillus was isolated from the throat of a perfectly healthy person. The clinical and bacteriological evidence, therefore, both pointed to the existence of persons who were the "carriers" of the Diphtheria Bacillus, but who were themselves in normal health, having either recently recovered from an attack of Diphtheria, or having been in sufficiently close contact with cases of the disease to be invaded by the bacillus, but without themselves suffering from any local pathological change.

The third factor which has to be considered is the amount of infective material at large, and there is not the shadow of a doubt but that this is mostly carried about by living "carriers." For very many years large sums have been spent annually in disinfecting houses and things. I question whether all this expenditure of money and labour has ever prevented a single case of Diphtheria from occurring. It is not infected *things* but *persons* who count. The part played by human "carriers" in the spread of infectious disease is on all sides gaining wider recognition, and we have every reason to appreciate the importance of dealing effectively with these sources of infection.

Of the 91 cases of Diphtheria notified, 74, or 81·3 per cent., were actually attending school. The infection was evidently a school infection. A careful examination of the school premises fully exonerated them from any possible suspicion, but investigation amongst the children attending these schools revealed a very different state of affairs. Swabs were taken from 950 apparently healthy children, all of whom had been in contact with patients suffering from the disease. Of these 167, or 17·6 per cent., were proved to be harbouring the germs of Diphtheria. I do not doubt the fact that inanimate objects may frequently play the part of intermediaries, but their potentialities for harm are small in comparison with those permanent sources of infection—the human "carriers." If we could cure these, and if we

succeed in preventing the acute infection from culminating in the carrier state, there is every hope of entirely eliminating Diphtheria from the Borough.

The 167 "carriers" were promptly excluded from school, and their condition carefully explained to their parents or guardians. Instructions were given as to how the germs could be got rid of, and suitable local applications were furnished to those who wished to take advantage of our assistance. With one or two exceptions our services were properly appreciated, and no child was allowed to return to school until at least three consecutive negative swabs had been obtained from their throats. The exceptions have proved somewhat troublesome, and all that we have been able to do is to see that other children, who are compelled by law to attend school, shall be protected from the risk of consorting during school hours with those who are known to be virulently infective. We have, however, no control over them in the Sunday schools, and we cannot prevent them from playing together when out of school. These uncontrolled "carriers" are not only a menace to others, but they themselves are in the best possible condition for becoming victims to the disease, should they have their general vitality lowered by any other ailment. As a matter of fact many of our patients treated at the Sanatorium were listed as "carriers" long before they succumbed to the complaint. Incidentally I might mention the fact that the uncontrolled "carriers," owing to the perversity of their parents or guardians, are being neglected educationally. The sooner we are in a position to bring some force to bear upon these cases, the better it will be both for themselves and for the community.

Hitherto we have not had facilities for "swabbing" the throats of contacts on a large scale, but the institution of the Municipal Laboratory has effected all we require in this respect. There can be no doubt that not only have effective measures been wanting in former years for searching out the sources of infection, but that patients have been discharged from the Sanatorium in an infective condition. The arrangements now are that no patient can be discharged until three consecutive negative swabs have been obtained; and after the usual month's convalescence at home, no patient of school-attending age is allowed to return to school until three additional negative swabs have been secured. Moreover, no "contact" is allowed to return to school until three consecutive negative swabs justify the assumption that the individual is not a "carrier."

We can now understand how it is that climatological excesses of any kind are capable of exciting an epidemic. The essential factor which must be present is a large proportion of "carriers." When the community is saturated, if I may use the expression, with persons carrying the specific bacillus in the nose or throat, the enervation of a hot, dry, rainless summer, or the depression of cold, damp, sunless periods, is quite sufficient to lower the resistance of a "carrier" to such an extent as to enable the germs to exert a pathological effect. It will be noticed, for example, that the cold months of February, March, October, and November, and the hot month of June were characterized by high Attack-rates. So also with bad drains, and insanitary conditions generally; they are merely an exciting cause inasmuch as they tend to lower a person's vitality. Bad drains alone cannot possibly cause an attack of Diphtheria.

I have already referred to the possibility of inanimate objects acting as intermediaries, although their power for harm is small, in comparison with the human "carrier." On one occasion I obtained a culture of the Diphtheria Bacillus from a pencil used by a "carrier." This is surely quite sufficient to condemn the practice prevalent in most of our schools, of pens and pencils being used first by one child and then by another. Even in those schools where each child has his own, these utensils are collected at the end of a term, and after no manner of disinfection are distributed to different users during the following session. The common drinking cup at the schools might also be abolished, and spray jets provided instead. We have isolated a large number of "carriers" already, and the value of the proceeding is amply shown in the markedly diminished incidence of the disease since this was done; but there must be many still undiscovered, and I shall not feel secure until every school child in the Borough has been properly "swabbed."

The type of disease during the past year has been exceptionally severe, and many "hæmorrhagic" cases have occurred. The prognosis is generally very good, if specific treatment can be given at an early stage; but when four, five, or even more days are allowed to elapse before we can get hold of these cases, the outlook is almost hopeless. I am much indebted to my medical colleagues, and especially to the Medical Officer of the Board of Guardians, for their ready help in securing "suspicious" cases.



Reference to the type of disease would not be complete without mention of a condition, of which we have had several examples, which has apparently not been associated with the Diphtheria Bacillus. Repeated cultures have failed to reveal the specific organism, yet clinically the cases have proved exceedingly severe. Fortunately none of these proved fatal, although, without exception, they occasioned us much anxiety.

**Conclusions.**—Several important lessons can be gathered from our experience with the visitation of the last two years, and we have taken full advantage of them. It still remains, however, for the community generally to appreciate what we are trying to do, and why it is necessary to do it. The following facts will, I trust, justify their hearty co-operation:—

- (1) Of all sources of infection the human "carrier" is the most mischievous.
- (2) Many "carriers" are really mild cases of Diphtheria which have either escaped notice altogether, or have been passed over as cases of mild sore throat or nasal catarrh.
- (3) Many healthy "carriers" eventually develop the disease, unless steps are taken to prevent it.
- (4) Children of five to eight years are much more likely to become healthy "carriers" than definite clinical cases of Diphtheria; their brothers and sisters who are older are not so fortunate.
- (5) The general health of the "carrier" may determine whether he develops into a definite case of the disease.
- (6) More than 90 per cent. of our "carriers" have had enlarged tonsils or adenoids. Their removal is practically essential before one can hope to eliminate the organisms of the complaint. Oral sepsis favours their persistence.
- (7) Suitable local treatment will undoubtedly get rid of the "carrier" state.
- (8) It is necessary to search for the "carriers"; to isolate them as completely as possible when found; to prevent their direct or indirect association with susceptible individuals; and to take measures for rendering them harmless. It is the duty of all to assist us on these lines.

### E.—PREVALENCE OF AND CONTROL OVER TUBERCULOSIS.

The following Table shows that there were registered 24 deaths due to Phthisis, and 7 to other forms of Tuberculosis, the death-rate from Phthisis being 0·66, and the total Tuberculosis death-rate 0·86. The death-rate due to Respiratory diseases excluding Phthisis is 1·0. It is gratifying to note that the Tuberculosis death-rate during the last 23 years shows a progressive diminution, when averaged for quinquennial periods. It is now only one half of what it was 20 years ago.

#### DEATHS FROM TUBERCULOSIS DURING THE LAST 23 YEARS.

Year.	Estimated Population.	Phthisis.	Phthisis Death-rate.	Other Forms of Tuberculosis.	Totals.	Tuberculosis Death-rate.	Average Tuberculosis Death-rates
1890	28,148	37	1·32	12	49	1·38	1·77
1891	27,984	40	1·43	17	57	2·03	
1892	28,345	30	1·06	18	48	1·69	
1893	28,705	31	1·08	22	53	1·84	
1894	29,065	39	1·34	16	55	1·89	
1895	29,535	34	1·15	30	64	2·16	1·60
1896	29,895	25	0·83	21	46	1·54	
1897	30,255	25	0·82	11	36	1·19	
1898	30,615	21	0·68	20	41	1·35	
1899	30,975	40	1·29	15	55	1·77	
1900	31,335	20	0·63	24	44	0·85	1·24
1901	33,443	35	1·04	15	50	1·49	
1902	33,773	29	0·89	17	46	1·36	
1903	34,073	32	0·93	10	42	1·23	
1904	34,373	36	1·04	8	44	1·28	
1905	34,673	35	1·01	11	46	1·32	1·18
1906	34,973	28	0·80	8	36	1·03	
1907	35,273	35	0·99	8	43	1·22	
1908	35,573	20	0·56	14	34	0·93	
1909	35,873	43	1·19	7	50	1·39	
1910	36,173	28	0·77	11	39	1·08	0·90
1911	35,778	21	0·58	6	27	0·75	
1912	36,038	24	0·66	7	31	0·86	

Under the Public Health (Tuberculosis) Regulations, 1911, the number of notifications received was 69. Of these 19 belonged to the North Ward, 18 to the South, 16 to the East, and 16 to the West. As usual the majority of these refer to persons in the prime of life, no fewer than 55 being between the ages of 25 and 65, 44 of these being between 25 and 45 years of age.

The measures taken to control the disease have been on the same lines as in former years. Except in special cases the home of every case is visited, the general environment inspected, and advice given as to the precautions necessary for limiting infection. Any insanitary conditions are remedied, and desirable disinfection carried out.

The County Council are responsible for carrying out the Sanatorium provisions of the National Insurance Act, and arrangements have been practically completed for the establishment of a Tuberculosis Dispensary in the Borough. There ought to be little difficulty in providing suitable accommodation for Sanatorium patients at Frant Forest. The situation is ideal, and no great expense need be incurred in erecting the necessary shelters. If some such arrangement with the County Council could be made, it would be a great comfort both to the patients from this district and their friends, to be within reasonable reach of their homes. Such a project is well worth considering.

The movement for the eradication of Tuberculosis is now national, and much may be expected from the general co-ordination against the disease. Every improvement in cleanliness and ventilation, and in the avoidance of depressing influences tends to diminish active infection. If the "soil" is unsuitable there is less chance for the "seed" to germinate. But our efforts must be directed to the elimination of the "seed," as well as to raising the powers of resistance of the individual. It seems strange that the Public Health Committee should be entrusted with the supervision of the milk, of the byres in which the cows which produce it are housed, of the vendors who dispose of it, and of the consumers who use it; but that the Watch Committee should have the administration of the Order concerning Tuberculosis in cattle. The carcass of the tuberculous beast has to be condemned by the Medical Officer of Health, but the living animal suffering from the disease has to be controlled by the Police. The ineptitude of the Board of Agriculture in framing their Regulations transcends criticism; it betokens a standard of intelligence on their part which renders any appeal to common sense utterly futile.

## F.—INVESTIGATION OF OTHER DISEASES.

During the year there was no occasion for the special investigation of any disease other than that already referred to in Section D.

## G.—MEANS FOR PREVENTING MORTALITY IN CHILDBIRTH AND IN INFANCY.

The County Authority exercise the powers under the Midwives Act. I am of opinion that in a district like our own, where a whole-time Medical Officer of Health, supported by an efficient staff, which includes a most capable and conscientious Health Visitor, such powers might be delegated to the Local Sanitary Committee. I am aware that in the past such delegation has not been conducive, in some instances, to proper administration, but without exception the conditions have not been the same as now hold with ourselves. Our relations with the Midwives are most intimate, and we are actually on the spot. I therefore claim to be in a better position to administer the Act than the Central Authority at Maidstone.

The Notification of Births Act might well be adopted here. As a matter of fact there ought to be an amending order whereby the Registration of Births could be rendered compulsory within a shorter period than the law now demands. This would simplify matters considerably. In the absence of this it is very desirable that the Notification of Births Act be adopted. I do not consider, however, that the responsibility of notifying a birth should rest with the Medical Practitioner; this should be the duty of the parents.

On page 14 I have referred to the enterprise of Miss Thornton in establishing a Day Nursery or Crèche. This is conducted on most admirable lines, and is deserving of the highest commendation. No special measures have as yet been taken by the Health Committee, with the prime object of diminishing infantile mortality; but the fact that this has been reduced to a record of 43·8 per 1,000 born indicates, to some extent, the efficiency of the general measures for the promotion of the hygiene of the home, which is such an important factor in the protection of infant life.

## H.—VITAL STATISTICS OF THE DISTRICT.

**Population.**—The estimated population at the middle of 1912 was 36,038. The area of the Borough is 3,991 acres, and the number of persons per acre is 9. At the census of 1911 the total population at all ages was 35,703, and the number of inhabited houses 7,671, the average number of persons per house being 4·6.

**Births.**—There were 580 births registered as having taken place during the year within the Borough. After deducting 10, which should be credited to other districts, the nett represent a birth-rate of 15·8—exactly the same as in the previous year. There were 31 illegitimate births registered, or 5·4 per cent. of the total. In 1911 the percentage was 3·8 only, and in 1910 it was 3·1.

**Deaths.**—The total number of deaths registered in the district was 397. Of these 52 belonged to other districts. After their deduction, and the addition of the deaths of 53 residents which occurred elsewhere, the 398 nett deaths represent a death-rate of 11·0.

That we may have a fair idea as to the correct death-rate another correction has to be made, namely, that for age- and sex-distribution. Any population with an unusually large number of units at the extreme ends of life will have a higher death-rate than an average mixed community; and one having an unusual preponderance of females, a lower death-rate. In order, then, to make the death-rates of such places comparable with those of other places, corrections must be made for the incidence of age and sex. The Registrar-General gives factors for the principal populations, based upon these factors as ascertained at the previous census. When our death-rate is still further corrected for age- and sex-distribution, it is reduced to 9·55. This is the lowest rate on record for the Borough.

Since coming to Tunbridge Wells as your first whole-time Medical Officer of Health it has, on more than one occasion, been hinted to me that the Public Health administration of the Borough was now a somewhat expensive luxury. Let me try to show you what an efficient health service really means. Irrespective of the valuable asset represented by the well-deserved reputation of the town as a health resort, which largely depends upon the maintenance of the service some would decry, and neglecting the money value of the diminished sickness due to an

increased standard of general health, the lowered death-rate affords a means of estimating the annual saving produced by the Department of Public Health. If the crude death-rate of 1912 had remained the same as that of 1902 (13·1), the number of deaths would have been 472 instead of 397. Improved sanitary conditions and environments are the chief factors involved in the saving of these 75 lives. If the value of each one of these is estimated at only £150—based upon the wages of the most poorly paid labourer in the district—the capital gain to the community for the one year is £11,250. If this were more fully appreciated I am confident that we should hear less about the “extravagance” of new and approved methods of health administration.

**Population, Birth and Death Rates from 1902 to 1912.**

Year.	Estimated Population.	Birth-rate per 1,000.	Death-rate per 1,000.	Infantile Mortality.	Zymotic Death-rate.
1902	33,773	20·1	13·1	101·4	0·2
1903	34,073	19·2	12·3	76·1	0·4
1904	34,373	18·6	12·5	98·2	0·8
1905	34,673	18·4	12·4	73·5	0·2
1906	34,973	19·3	11·8	82·8	0·2
1907	35,273	16·8	13·6	73·9	1·1
1908	35,573	17·3	11·7	81·4	0·3
1909	35,873	17·2	13·2	59·8	0·5
1910	36,173	16·3	11·3	75·8	0·2
1911	35,778	15·8	11·5	86·4	1·0
10 years' Average ...		17·9	12·3	80·9	0·4
1912	36,038	15·8	* 11·0	43·8	0·3

\* When corrected for age- and sex-distribution this is reduced to 9·55.

Careful consideration of the above Table will show how very satisfactory the returns have been during the past year. I would particularly emphasize this in view of the fact that the measures taken to eradicate Diphtheria have a tendency to excite some degree of alarm in the minds of a few. The Borough has every reason to be congratulated upon its hygienic condition, as evidenced by its very low General Death-rate, its markedly diminished Zymotic Death-rate, and its record Infantile Mortality.

**Quarterly Death-Rate per thousand per annum for a period  
of Five Years.**

	1908	1909	1910	1911	1912
1st Quarter ...	13·3	18·1	13·7	14·2	13·2
2nd Quarter ...	11·5	13·8	12·0	11·4	10·9
3rd Quarter ...	10·1	10·3	8·4	12·0	9·5
4th Quarter ...	11·7	10·7	10·9	8·6	10·3

**Showing the Mortality at Several Ages for a period of Five Years.**

	1908	1909	1910	1911	1912
Deaths at under 1 year... ..	50	37	45	49	25
"  1 and under 5 ... ..	18	27	14	17	7
"  5 and under 15 ... ..	12	11	8	15	15
"  15 and under 25 ... ..	14	18	15	14	10
"  25 and under 65 ... ..	125	161	126	115	136
"  65 and upwards ... ..	196	222	201	205	205
Totals ... ..	415	476	409	415	398

**Showing the Number of Deaths at Ages beyond Sixty Years.**

Over 90 years of age ... ..	10
Under 90 and over 80 ... ..	59
Under 80 and over 70 ... ..	94
Under 70 and over 60 ... ..	74
Total ... ..	237

(Deaths at all ages, 398).

**Infantile Mortality.**—There were 25 deaths of infants below one year of age; this gives a mortality per thousand births of 43·8—the lowest on record. The average mortality for the previous ten years was 74·6.

Premature Birth and Congenital Defects are most conspicuous amongst the causes of death during the past year. Premature Birth has invariably figured largely in this connection. The adoption of the Notification of Births Act would materially strengthen our position with regard to the prevention of infantile mortality; and the institution of a school for mothers, in conjunction with the admirable institution so generously provided by Miss Thornton, in Silverdale Road, would undoubtedly prove of the utmost benefit.

**Causes of Infantile Mortality 1905—1912.**

	1905	1906	1907	1908	1909	1910	1911	1912	Total Deaths, 8 years.	Rate per 1,000 Births.
Marasmus ... ..	11	7	9	6	5	7	2	3	50	10·2
Premature Birth ... ..	8	17	10	10	9	15	9	7	85	17·4
Bronchitis ... ..	...	4	1	5	1	4	6	...	21	4·3
Pneumonia ... ..	3	2	2	3	3	2	3	2	20	4·1
Convulsions ... ..	4	3	3	2	5	1	2	1	21	4·3
Congenital Defects ... ..	...	...	2	5	2	1	3	5	18	3·6
Diarrhoeal Diseases ..	5	12	1	4	2	5	11	...	40	8·2
Whooping Cough ... ..	2	...	5	2	1	3	5	...	18	3·6
Overlaying ... ..	...	...	...	...	...	...	1	...	1	0·2
Measles ... ..	...	...	1	...	...	...	...	...	1	0·2
Non-Tubercular Meningitis	3	...	2	...	...	2	1	...	8	1·6
Tubercular Meningitis ..	1	2	...	...	...	1	...	1	5	1·0
Tubercular Peritonitis ...	1	...	...	1	...	...	...	...	2	0·4
Syphilis .. ... ..	...	1	1	1	...	...	...	...	3	0·6
Erysipelas ... ..	...	...	...	...	...	...	...	...	...	...
Other Causes ... ..	8	8	7	11	9	4	6	6	59	12·1
Total Deaths below 1 year	46	56	44	50	37	45	49	25	352	...
Rate per 1,000 Births ...	71·9	82·8	73·9	81·4	59·8	75·8	86·4	43·8	71·9	...



TABLE No. 1. Vital Statistics of Whole District during 1912 and Previous Years.

Year	Population 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 registered in the District.	of Residents registered in the District.	Under 1 year of Age.		At all Ages.	
			Number.	Rate.					Number.	Rate per 1,000 Nett Births.		Number.
1	2	3	4	5	6	7	8	9	10	11	12	13
1907	35,273	...	595	16.86	454	12.87	...	...	44	73.94	481	13.63
1908	35,573	...	615	17.3	436	12.3	...	...	50	81.4	415	11.7
1909	35,873	...	618	17.2	469	13.0	...	...	37	59.8	476	13.2
1910	36,173	...	593	16.3	425	11.7	...	...	45	75.8	409	11.3
1911	35,778	577	567	15.8	424	11.8	60	51	49	86.4	415	11.5
1912	36,038	580	570	15.8	397	11.0	52	53	25	43.8	398	11.0

NOTES.—This Table is arranged to show the gross births and deaths in the district, and the births and deaths properly belonging to it with the corresponding rates. For years before 1911 some of the corrected rates probably will not be available. The rates should be calculated per 1,000 of the estimated gross population. In a district in which large Public Institutions for the sick or infirm seriously affect the statistics, the rates in Columns 5 and 13 may be calculated on a net population, obtained by deducting from the estimated gross population the average number of inmates not belonging to the district in such Institutions.

\* In Column 6 are to be included the whole of the deaths registered during the year as having actually occurred within the district.

† In Column 12 is to be entered the number in Column 6, corrected by subtraction of the number in Column 8 and by addition of the number in Column 9. Deaths in Column 10 are to be similarly corrected by subtraction of the deaths under 1, included in the number given in Column 8, and by addition of the deaths under 1 included in the number given in Column 9.

‡ The Medical Officer of Health will be able, from the returns made to him by the local Registrar of Deaths, as well as from the quarterly lists furnished by the Registrar-General, to fill in Column 8 in accordance with the rule in the next paragraph below. The Registrar-General, either directly or through the County Medical Officer of Health, will supply the Medical Officer of Health with the particulars of deaths to be entered in Column 9; and all such deaths must be included in this Column, unless an error is detected, and its correction has been accepted by the Registrar-General. For Column 4 the Registrar-General will furnish to the Medical Officer of Health a Statement of the number of births needing to be added to or subtracted from the total supplied by the local Registrar.

§ "Transferable Deaths" are deaths of persons who, having a fixed or usual residence in England or Wales, die in a district other than that in which they resided. The deaths of persons without fixed or usual residence, e.g., casuals, must not be included in Columns 8 or 9, except in certain instances under 3 (b) below. The Medical Officer of Health will state in Column 8 the number of transferable deaths of "non-residents" which are to be deducted, and will state in Column 9 the number of deaths of "residents" registered outside the district which are to be added in calculating the net death-rate of his district.

The following special cases arise as to Transferable Deaths:—

(1) Persons dying in Institutions for the sick or infirm, such as hospitals, lunatic asylums, workhouses, and nursing homes (but not almshouses) must be regarded as residents of the district in which they had a fixed or usual residence at the time of admission. If the person dying in an Institution had no fixed residence at the time of admission, the death is not transferable. If the patient had been directly transferred from one such Institution to another, the death is transferable to the district of residence at the time of admission to the first Institution.

(2) The deaths of infants born and dying within a year of birth in an Institution to which the mother was admitted for her confinement should be referred to the district of fixed or usual residence of the parent.

(3) Deaths from Violence are to be referred (a) to the district of residence, under the general rule; (b) if this district is unknown, or the deceased had no fixed abode, to the district where the accident occurred, if known; (c) failing this, to the district where death occurred, if known; and (d) failing this, to the district where the body was found.

Area of District in Acres (land and inland water) 3,991; total population at all ages, 35,793; number of inhabited houses, 7,671; average number of persons per house,

**TABLE No. 2.**  
**Cases of Infectious Disease notified during the Year 1912.**

Notifiable Disease.	No. of Cases notified.							Total Cases notified in each locality (e.g., Parish or Ward) of the District.				Total Cases removed to Hospital.	
	At all Ages.	At Ages—Years.						North Ward.	South Ward.	East Ward.	West Ward.		
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.						65 and upwards.
Diphtheria, including Membranous Croup	91	1	21	55	4	8	2	—	23	21	26	21	82
Erysipelas	9	—	—	—	—	2	6	1	2	2	1	4	—
Scarlet Fever	53	1	12	33	4	3	—	—	6	1	28	18	50
Enteric Fever	4	—	—	1	1	1	1	—	1	1	2	—	2
Pulmonary Tuberculosis	69	—	—	2	9	44	11	3	19	18	16	16	—
Totals	226	2	33	91	18	58	20	4	51	43	73	59	134

The Accommodation provided for the treatment of Infectious Diseases is as follows :—

THE SANATORIUM (The Tunbridge Wells Isolation Hospital) situate in Tunbridge Wells ... .. Scarlet Fever ... 40 Beds.  
 Diphtheria ... .. 17 Beds.

THE GENERAL HOSPITAL, situate in Tunbridge Wells (the Authorities are under an Agreement at a contract price to treat all cases of Enteric Fever and cases of Diphtheria that require Surgical Treatment) ... .. All Beds required.

THE DISLINGBURY HOSPITAL, for Small-pox and Plague, situate at Capel in the Tunbridge Rural District, belonging to the Joint Hospital Board of the Tunbridge Wells Corporation, the Tunbridge Urban District Council, the Southborough Urban District Council, and the Tunbridge Rural District Council ... .. 20 Beds.

Causes of, and Ages at Death during Year 1912.

CAUSES OF DEATH.		Nett Deaths at the Subjoined Ages of "Residents" whether occurring within or without the District. (a)									Total Deaths whether of "residents" or "non-residents" in Institutions in the District. (b)
		All Ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
All Causes	Certified (c)	392	22	1	6	15	10	41	93	204	72
	Uncertified	6	3	...	...	...	...	2	1	...	...
1. Enteric Fever	...	1	...	...	...	...	...	1	...	1	1
2. Small-pox	...	...	...	...	...	...	...	...	...	...	...
3. Measles	...	1	...	1	...	...	...	...	...	...	...
4. Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...
5. Whooping Cough	...	...	...	...	...	...	...	...	...	...	...
6. Diphtheria and Croup	...	10	...	3	7	...	...	...	...	8	8
7. Influenza	...	4	...	...	...	...	...	1	3	1	1
8. Erysipelas	...	...	...	...	...	...	...	...	...	...	...
9. Phthisis (Pulmonary Tuberculosis)	...	24	1	...	...	3	15	3	2	1	1
10. Tuberculous Meningitis	...	4	1	1	2	...	...	...	...	...	...
11. Other Tuberculous Diseases	...	3	1	...	1	...	1	...	...	1	1
12. Cancer, Malignant Disease	...	50	...	...	...	...	4	19	27	14	14
13. Rheumatic Fever	...	1	...	...	1	...	...	...	...	1	1
14. Meningitis (See note (d))	...	1	...	...	1	...	...	...	...	1	1
15. Organic Heart Disease	...	50	1	...	...	3	3	17	26	8	8
16. Bronchitis	...	30	...	...	...	...	2	5	23	2	2
17. Pneumonia (all forms)	...	20	2	1	1	...	1	3	12	5	5
18. Other Diseases of Respiratory Organs	...	7	...	...	...	...	...	4	3	...	...
19. Diarrhoea and Enteritis (See note (e))	...	2	...	...	...	...	...	1	1	...	...
20. Appendicitis and Typhlitis	...	...	...	...	...	...	...	...	...	...	...
21. Cirrhosis of Liver	...	4	...	...	...	...	...	3	1	...	...
21a. Alcoholism	...	1	...	...	...	...	1	...	...	...	...
22. Nephritis and Bright's Disease	...	15	...	...	...	...	2	5	8	1	1
23. Puerperal Fever	...	...	...	...	...	...	...	...	...	...	...
24. Other Accidents and Diseases of Pregnancy and Parturition	...	2	1	...	...	...	1	...	...	1	1
25. Congenital Debility and Malformation, including Premature Birth	...	15	14	...	1	...	...	...	...	...	...
26. Violent Deaths, excluding Suicide	...	4	...	...	...	...	...	4	...	2	2
27. Suicide	...	1	...	...	...	...	1	...	...	...	...
28. Other defined Diseases	...	148	4	1	1	4	10	29	99	25	25
29. Diseases ill-defined or unknown	...	...	...	...	...	...	...	...	...	...	...
		398	25	1	6	15	10	41	95	205	72
Sub-Entries included in above figures.	14 (a) Cebro-spinal Meningitis	...	...	...	...	...	...	...	...	...	...
	28 (a) Poliomyelitis	...	...	...	...	...	...	...	...	...	...
	* Pneumonia	16	2	...	...	...	1	3	10	...	...

\* Sub-Entries should here be made for other deaths which it is desirable to distinguish, on account of their administrative importance or special interest, (e.g., any deaths from Anthrax, Typhus or Glanders, which have been included under 28, *Other Defined Diseases*; or deaths from Pneumonia other than Broncho-Pneumonia which have been included under 17, *Pneumonia (all forms)*).

NOTES TO TABLE III.

(a) All "Transferable Deaths" of residents, i.e., of persons resident in the district who have died outside it, are to be included with the other deaths in Columns 2-10. Transferable deaths of non-residents, i.e., of persons resident elsewhere in England and Wales who have died in the district, are in a like manner to be excluded from these columns. For the precise meaning of the term "transferable deaths" see footnote to Table I.

The total deaths in Column 2 of Table III. should equal the figures for the year in Column 12 of Table I.

(b) All deaths occurring in institutions for the sick and infirm situated within the district, whether of residents or of non-residents, are to be entered in the last column of Table III.

(c) All deaths certified by registered Medical Practitioners and all Inquest cases are to be classed as "Certified"; all other deaths are to be regarded as "Uncertified."

(d) Exclusive of "Tuberculous Meningitis" (10), but inclusive of Cebro-Spinal Meningitis.

(e) Title 19 should be used for deaths from Diarrhoea and Enteritis at all ages. (In the "Short list" deaths from Diarrhoea and Enteritis under 2 years are included under Title 19; those at 2 years and over being placed under Title 23).

TABLE No. 4.

## INFANT MORTALITY—1912.

Nett Deaths from stated Causes at various Ages under 1 Year of Age.

See Note (a).

CAUSE OF DEATH.		Under 1 Week	1-2 Weeks	2-3 Weeks	3-4 Weeks	Total under 1 Month	1-3 Months	3-6 Months	6-9 Months	9-12 Months	Total Deaths under 1 Year
All causes	Certified	8	5	2	1	16	...	1	2	3	22
	Uncertified	2	...	...	...	2	...	1	...	...	3
Small-pox ... ..		...	...	...	...	...	...	...	...	...	...
Chicken-pox ... ..		...	...	...	...	...	...	...	...	...	...
Measles ... ..		...	...	...	...	...	...	...	...	...	...
Scarlet Fever ... ..		...	...	...	...	...	...	...	...	...	...
Whooping-cough ... ..		...	...	...	...	...	...	...	...	...	...
Diphtheria and Croup ... ..		...	...	...	...	...	...	...	...	...	...
Erysipelas ... ..		...	...	...	...	...	...	...	...	...	...
Tuberculous Meningitis ... ..		...	...	...	...	...	...	...	1	...	1
Abdominal Tuberculosis (b) ... ..		...	...	...	...	...	...	...	...	...	...
Other Tuberculous Diseases ... ..		...	...	...	...	...	...	1	1	...	2
Meningitis (not Tuberculous) ... ..		...	...	...	...	...	...	...	...	...	...
Convulsions ... ..		...	...	...	...	...	...	...	...	1	1
Laryngitis ... ..		...	...	...	...	...	...	...	...	...	...
Bronchitis ... ..		...	...	...	...	...	...	...	...	...	...
Pneumonia (all forms) ... ..		...	...	...	...	...	...	...	...	2	2
Diarrhœa ... ..		...	...	...	...	...	...	...	...	...	...
Enteritis ... ..		...	...	...	...	...	...	...	...	...	...
Gastritis ... ..		...	...	...	...	...	...	...	...	...	...
Syphilis ... ..		...	...	...	...	...	...	...	...	...	...
Rickets ... ..		...	...	...	...	...	...	...	...	...	...
Suffocation, overlying ... ..		...	...	...	...	...	...	...	...	...	...
Injury at Birth ... ..		...	1	...	...	1	...	...	...	...	1
Atelectasis... ..		...	...	...	...	...	...	...	...	...	...
Congenital Malformations (c)... ..		1	2	2	...	5	...	...	...	...	5
Premature Birth ... ..		6	1	...	...	7	...	...	...	...	7
Atrophy, Debility and Marasmus ... ..		1	1	...	1	3	...	...	...	...	3
Other causes ... ..		2	...	...	...	2	...	1	...	...	3
		10	5	2	1	18	...	2	2	3	25

NETT BIRTHS IN THE YEAR—		NETT DEATHS IN THE YEAR OF—	
Legitimate ... ..	539	Legitimate Infants ... ..	24
Illegitimate ... ..	31	Illegitimate Infants ... ..	1

## NOTES TO TABLE IV.

- (a) The total in the last column of Table IV. should equal the total in Column 10 of Table I., and in Column 3 of Table III.
- (b) Under Abdominal Tuberculosis are to be included deaths from Tuberculous Peritonitis and Enteritis and from Tabes Mesenterica.
- (c) The total deaths from Congenital Malformations, Premature Birth, Atrophy, Debility and Marasmus, should equal the total in Table III. under the heading Congenital Debility and Malformation including Premature Birth.  
Want of Breast Milk should be included under Atrophy and Debility.
- (d) For reference to the meaning of any other headings, see notes attached to Table III.  
In recording the facts under the various headings of Tables I., II., III. and IV., attention has been given to the notes on the Tables.

TABLE

SHOWING THE RESULTS OF THE INVESTIGATION INTO THE CAUSES OF THE FAILURE OF THE

NO.	NAME OF THE VESSEL	DATE	PLACE	CAUSE OF FAILURE
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
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50				

# SCHOOL REPORT.

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## A.—GENERAL REVIEW OF THE HYGIENIC CONDITIONS PREVALENT IN THE SCHOOLS.

### *Surroundings, Ventilation, Lighting, Warming, Equipment and Sanitation.*

There are no "Provided" schools in Tunbridge Wells, but ample accommodation is allowed for in the "Unprovided" schools. These have been frequently visited by the School Medical Officers prior to my appointment, and by myself since then. The following notes give a general idea as to the condition of some of the schools, and the others will be reported upon at a later date. In all cases the town's water supply is laid on, and the drains connected with the municipal sewers.

**Rusthall Boys' School.**—This is ideally situated on the edge of the Common, but in close proximity to the churchyard. The Common is practically the playground, and nothing better could be desired. The asphaltting about the entrance of the school is, however, in a very unsatisfactory condition. The ventilation of the school is fairly good, but the lighting is distinctly poor. The massive stone mullions of the windows detract from their efficiency, and the obscure glass requires replacing with clear. Gas is at present used for artificial lighting, but the electric light is to be substituted at an early date. Most of the furniture is modern, and the older desks are being gradually replaced with new. Heating is effected by slow combustion stoves, and these appear to be satisfactory. The sanitary conveniences are of the pedestal type, with flushing cisterns, and are in good condition. Two washing basins are provided, not of a very high order, being cased in wood. A common drinking cup is provided. There are four cloak-rooms, one being very indifferent, but the others quite good. They are not heated, and there is no provision for drying damp garments. There is accommodation for 277 boys, but the number on the books is only 230. The ecclesiastical type of architecture is certainly in keeping with the church, but does not come up to modern ideas of what a

school should be. The redeeming feature is the Common, which is admirably adapted for open-air classes, and full advantage is taken of the facilities it offers. I do not approve of the brick dust-pit, without a cover; a sanitary dust-bin is preferable.

**Rusthall Girls' School.**—This is one of the finest schools of its size that I have ever visited. The grounds are spacious, and beautifully kept, the profusion of well laid out flower beds being particularly charming. The ventilation is good, as is also the lighting, but I cannot understand why it should be necessary to employ muffled glass in the lower portions of the windows; this would be better removed. The artificial lighting is by incandescent gas—a mistake, in my opinion. The system of heating is by hot water, the service being excellent throughout, cloak-rooms included. The equipment is, of course, quite up-to-date. The sanitary conveniences are the best possible—hygienic pedestals, with flushing tanks and chain pulls. I am decidedly in favour of the latter, as in a borough where the water-carriage system is general, there is a distinct educative advantage in having the non-automatic system of flushing, the children being trained at an early age to use these contrivances in an intelligent manner. The lavatory basins, four in number, are good, but the common drinking cup has survived. Each girl has her own pencils and pens, which is most desirable. I have visited this school on many occasions, at all hours, and have always found the place spotlessly clean; it is most admirably cared for. There is accommodation for 300 girls, but the number on the books is about 240. One side of the school should be provided with sun-blinds. These could be fitted externally at comparatively little cost, and would add considerably to the comfort of both teachers and scholars.

**Rusthall Infant School.**—The playground of this school is in a very bad condition, the surface being loose and stony, and distinctly dangerous where little ones are concerned. The dust raised when the children are romping about is also very objectionable. The ventilation of the rooms is fairly good, but the lighting leaves much to be desired, in one room especially. Obscure glass is, again, very much in evidence, but in the worst-lighted room I understand that dormer windows are to be provided. Electric light is used for artificial lighting, but the old gas fittings remain, and are

unsightly dust-traps. The heating is by means of slow-combustion stoves. The general equipment is good. The sanitary conveniences are of the hopper type, cased in with wood, and are very objectionable. The brick pavement about the w.c.'s is in a very bad condition; in wet weather the children have to paddle through pools of water to get to the offices. The latter are much too near the windows of the class rooms. The boys' urinals are insufficiently flushed, and the wooden partition is unsatisfactory. Three lavatory basins are provided, too high to be of any use. The cloak rooms are very indifferent, and no provision is made for heating them, or for drying the clothes of the children. The class-room for the "Special" Class is most unsatisfactory; it is not at all suitable for this purpose. In one of the rooms the platform might be removed. There is accommodation for 226, but the average attendance is about 195. The school is not kept in a sufficiently cleanly condition, the caretaker being probably underpaid. It requires a thorough cleansing and re-decorating. I am of the opinion that as an Infants' School the building ought to be "scrapped"—it is not worth spending money upon.

**St. Mark's Schools.**—The district in which these schools are situated is very beautiful, but the immediate surroundings could be improved upon. The asphaltting about the playground is very defective, and the playgrounds themselves are in bad condition, being loose and dusty; the wooden fence dividing the Boys' from the Girls' is dilapidated in parts. In the Infants' School one room is very bright and airy, and well ventilated. In the other room the lighting is poor. One window could be easily enlarged, as provision is really made for doing so. I cannot understand the affection displayed for dormer windows, when there is ample room for those of the ordinary type. The cloak-rooms in all the departments are anything but good, with no provision for heating them. In the Girls' School the muffled glass in the north window should be removed. The ventilation is fairly good, but might be better; the enormous height of the open roof does not, by any means, improve the character of the ventilation. The small room is very badly lighted, and must have a very deleterious effect upon the eyesight. The w.c.'s in all departments are of the "trough" pattern. Such a type, in a town like Tunbridge Wells, is an abomination, and I hope the Managers will be able to abolish them at an early date. All the



sanitary offices are too near the school buildings, and are execrably ventilated. The boys' urinals in the senior school, on the other hand, are very good indeed, and well kept. The heating in all departments is by means of stoves, and the artificial lighting by incandescent gas mantles. There is no provision for drying the damp clothes of the children, and a common drinking cup is in use, although many children bring their own. The general equipment is good, but the structural defects of the building must detract from the efficiency of the School.

**St. Luke's Infant School** has a fine open playground in capital condition. The trees bordering the premises are a pleasing feature, but those on the north side of the school are far too close to the windows, and cut off a large proportion of the light. These ought to be taken up. All the rooms are bright and pleasant, and the ventilation is good. With the exception of the room darkened by the foliage of the trees referred to, the lighting is satisfactory, but it would be better still if all the muffled glass were replaced with clear. Artificial lighting is by means of incandescent gas, and the heating by open fire grates, which are apparently quite satisfactory. There are two modern lavatory basins, quite suitable for infants, but the children are apparently not permitted to wash their hands or use the towel. The latter, by the way, is so fixed as to be quite out of their reach. I trust that there must be some misconception about the regulations in force with regard to the washing. Of all districts in the borough this is the one where the necessity for washing frequently and well should be inculcated at an early age. There is no use in having beautiful washing basins merely to be looked at and not to be used; the idea is quite ridiculous. There is no provision for drinking. The cloak-rooms are not heated, but very spacious. Lead pencils are interchangeable, and are never disinfected. The children use chalk largely. This is very dusty, and, taken into consideration with the fact that washing and drinking are discouraged, surely not a proper thing to use to any extent. The sanitary conveniences are of the best pedestal type, and kept in excellent condition. The boys' urinals are not allowed to be used; the little ones use the pedestals instead. I think this a very sensible idea, as the seats of these pedestals have lateral insets only of wood, and there is no danger of soiling. The consequence is that the boys' offices are absolutely free from any smell whatever, even in the hottest weather.

In close proximity to the school a person keeps fowls for marketing purposes, and these occasionally are the cause of a nuisance. Steps ought to be taken to put an end to the practice, as he cannot carry on a business of that description without offence to the neighbours. Accommodation for 192, and average attendance 154.

The schools of **St. Barnabas**, situated in a somewhat densely-populated portion of the borough, are comparatively modern, having been built in 1896. The playgrounds are spacious, and asphalted, but the surface is defective in parts. These defects are to be remedied during the vacation. In that attached to the Girls' and Infants' schools there is a soup kitchen which, in the winter months, is much appreciated by the needy. On the other side of the school wall a manure heap is said to be objectionable at times. On no occasion have we, however, had reasonable grounds for complaint on inspection. The sanitary appliances of all the departments are of the pedestal type, with flushing cisterns, and are sufficient in number and efficient. The boys' urinals are in excellent condition and well flushed with constantly-running water. Sanitary dustbins with covers are provided. The building throughout is heated with slow-combustion stoves, and in winter they are not as satisfactory as they might be. The electric light has been installed, and the old gas-fittings might reasonably be removed. Their retention on the score of a possible failure of the electric light is scarcely justified, and they simply harbour dust. The cloak-rooms generally are spacious, but no special provision is made for drying damp clothes. In the Infants' school the rooms are well ventilated and well lighted, but improvements would be effected by the removal of the obscure muffled glass. The gallery at one end of the large room should be removed; the steps are far too deep, in fact, dangerous. The gallery in one of the other rooms might also be removed, although it is not so objectionable as the former. The two lavatory basins provided for the infants are much too high, and common drinking mugs are in evidence. The pencils used in this department are not interchangeable during the session, but ought to be well disinfected before being redistributed at the beginning of a new session. There is accommodation for 235 infants, and the average attendance is about 130.

In the upper school there is accommodation for 146 boys, and the average attendance is about 130. The Board of Education

requirements may be satisfied, but as a matter of fact the school is over-crowded. Far too many boys are packed into the small room, and the large room is anything but ideal. An additional screen is badly required here; neither teachers nor taught can show their best work when one teacher has to talk against another, as has to be done in this room. In the Boys' school all pencils are interchangeable—a most undesirable practice. The premises require re-decorating in parts. The sanitary offices on the boys' side are very unsatisfactory. The urinals can never be wholesome, although they are well flushed. The seats of the w.c.'s are habitually stood upon, and are in such a condition that one cannot be expected to use them in a legitimate manner without a thorough cleaning first. The supervision over this part of the school is not satisfactory. The offices are, by the way, much too near the class-rooms; they ought to have been built at the other end of the playground.

**King Charles School for Boys.**—This school very properly enjoys a wide reputation—pupils attending it from districts many miles from Tunbridge Wells—and from an educational point of view its reputation is fully maintained. Structurally, however, it possesses many defects. It is situated in a very confined quarter of the town, and its playground is wholly inadequate; fortunately, the close proximity of the Common compensates for the deficiency. The ventilation of the building is fairly good, but the lighting could not well be worse. One room is top-lighted only, and all of the rooms are so indifferently provided in this respect that the effect upon the eyesight must be very detrimental. The glazing is, doubtless, very picturesque, but tinted, obscure glass is not a proper material to use for educational premises. The artificial lighting is by electricity, and is excellent. The heating is by means of open fireplaces and Tortoise stoves. With the exception of that in two class-rooms all the furniture is modern. The floors are covered with pine sawdust. This idea is excellent, the resin serving to agglutinate the particles of dust, with marked benefit to the atmosphere; the latter has a tendency, however, to be somewhat close. I would suggest that the sawdust be renewed more frequently, and, as the quality naturally varies, that it be steeped in some disinfectant before use. A little calcium chloride added to the disinfecting solution would keep the sawdust hygroscopic, and would increase its capacity for keeping down the dust. The lavatory accommodation

is inadequate. The w.c.'s are of the best pedestal type, but there might be more of them. The urinals are under a glazed roof; in a confined school of this kind they might be abolished, and the pedestals used instead. The school premises are in good decorative repair. The accommodation is sufficient for 240, and the average attendance is quite up to this. As a matter of fact the popularity of the school results in its being distinctly overcrowded.

**Murray House School.**—This school, for Girls and Infants, would be ideally situated, being on the top of the hill, were it not for its incongruous surroundings. It is hemmed in with property of a very miscellaneous type, much of which ought really to be removed. The surface of the playground is good, but the disused stables and dilapidated sheds on the south side, and the uninhabitable buildings on the west are detrimental to the interests of the institution. If the public were appealed to I am sure that the Trustees would obtain sufficient support to enable them to secure this old property, and throw the additional space thus provided into the school grounds. The ancient structure on the west side of the school is undoubtedly antique, but it has not one other single thing to be said in its favour; it ought to be demolished, or, at all events, transported to some far-off spot.

A portion of the premises is quite new, and these rooms are light and airy. Obscure glass is again used in the lower panes of the windows. The cloak room is good, but there are only two wash basins of a very inferior type; heating is effected by means of two gas radiators of which I do not approve. The old schoolroom is very badly lighted; this might be improved if the obscure glass were removed. The furniture is quite up-to-date, but the cupboard accommodation is insufficient. The w.c.'s are of the pedestal type, with flushing cisterns, but are too near the class-rooms; the boys' urinals might profitably be abolished. These offices, by the way, are kept in a very indifferent condition; the caretaker requires supervision. The teachers' room is in the basement, and is damp and unwholesome. Part of the school building (the old house portion) is let off to a tenant, and the playground is used for the drying of the domestic washing. This school will never be quite satisfactory as long as this arrangement exists. There is accommodation for 100 girls and 46 infants, and the average attendance is 133.

**St. John's Girls' School** is comparatively modern but badly planned. It is situated in a populous district, and, together with the Boys' School, is somewhat cramped on that account. The playground is in good condition except along the side and front, where the surface is very faulty; I understand that this is to be remedied during the vacation. The first class-room is very light and airy, and is heated with a Tortoise stove. The large room is very poorly lighted at one end. This is due to the new class-room, recently added, from which a borrowed light is now obtained. Matters would be improved by the substitution of clear glass for the obscure in this borrowed light. The third room is well lighted except under the window, the sill of which is far too high; this ought to be lowered, and another window in the N.W. wall is very necessary. The latter will shortly be provided. The fourth (new) room is very pleasant, light, and well ventilated. Several of the rooms would be better if sunshades were provided; these could readily be fixed outside. The cloak room proper is light and well ventilated, and fairly spacious. A second small cloak room is provided. There is only one lavatory basin in each, neither of them is heated, and the clothes hooks are much too near together. The w.c.'s are of the most modern sanitary type, with wood insets and separate flushing cisterns. If the four cottages between the Institute and this school could be acquired, this would materially improve the premises. A stable in the vicinity is occasionally a decided nuisance. The furniture is quite 20 years old, and requires renewal. There is accommodation for 185, and the average attendance is 175.

**St. John's Boys' School** abuts directly upon the street, and is a quaint muddle of architecture. The large room is very badly lighted indeed—the windows being ludicrously too small, and obscure glass in the lower sashes making matters still worse. It is just as poorly ventilated as it is lighted. The second half of the second room has the same defect in the lighting. As far as the school premises are concerned, the old school house is an obstructive building. The furniture is quite new. The playground is in good condition; the w.c.'s are of the pedestal type, with separate flushing cisterns, but the urinals are very insanitary. This is probably one of the worst school buildings in the district. There is accommodation for 225, and the average attendance is 210.

**General Conclusions.**—When we consider that such an important part of a child's life is spent on school premises, and that school attendance is compulsory from the age of 5 to 14 years, it is our obvious duty to render such premises as perfect as local circumstances will permit. The school environment must be in harmony with the hygienic teaching of to-day, and with the ideals of an all-round education of the child.

From the foregoing criticisms it might be gathered in what respects some of our schools are lacking. That every class-room should have an abundant supply of fresh air, a maximum amount of daylight, and, for some hours during the day, direct sunlight, is theoretically admitted; and yet in almost all our schools I have had to draw attention to the fact that instead of encouraging the admission of light efforts have been made to exclude it. I trust that before long the use of obscure glass will be the exception and not the rule.

Lavatory accommodation must be ample if a high standard of cleanliness in schools is to be arrived at. We are certainly wanting in this respect. The sanitary conveniences are generally very good indeed. With one exception in the schools reported upon, pedestal closets and separate flushing cisterns are general; I do hope the one exception will do away with the present abominable system without delay. Where pedestals are in general use, I fail to see the necessity for urinals in the boys' departments. Where urinals are provided the extensive soiling surface invariably present makes it well nigh impossible to keep these places sweet and clean. I am aware that, according to the Board's regulations, 10ft. of urinal must be provided for every 100 boys; but if sufficient accommodation is arranged for in the shape of pedestals, I cannot see that they could reasonably object to a system which is decidedly preferable. Some of the schools require new sanitary dustbins; these, of course, will be furnished immediately.

The common drinking cup which is prevalent in all our schools is very objectionable at the present time. Several forms of drinking sprays are now on the market. They are not expensive to instal, and it would be a relief to see them here. The same reason which suggests the abolition of the common drinking cup urges the necessity of greater care in the use of pens and pencils. Each child should have his own, and should keep them in a suitable case. They

should not be collected at the end of a lesson, and bundled indiscriminately together. More frequent lessons on personal hygiene might also be given, as the presence of a few "carriers" of Diphtheria or other germs would matter little if the children were thoroughly trained to abstain from those little civilities, which imply the gift or loan of articles which have been previously soiled by even a temporary sojourn in the owner's mouth.

The majority of the homes of the children attending some schools are not provided with baths. Is it too much to hope that we may in the near future have spray baths in these schools? In the meantime could we not do more with the Municipal Baths? In the higher Standards the art of swimming is encouraged. This is most admirable, but the public swimming bath is surely not expected to perform the functions of ablution. And yet, it does. I would take the opportunity of expressing my admiration of the Corporation Swimming Baths. The covered Bath is one of the finest in the country. It is 90ft. long, 36ft. wide, and has a capacity of 99,000 gallons. The number of bathers frequenting it borders upon 36,000 every year. I am constantly visiting the premises, and cannot speak too highly of the satisfactory manner in which they are kept. I am told that the cost of filling the bath is £7 10s. od. It seems rather an expensive item, but after all it is only a matter of paying out of one pocket to place into another; and if the Baths Committee could see their way to make arrangements with the Water Committee for the more frequent changing of the water, the whole community would reap the benefit. The open air Swimming Bath adjoins the Grosvenor Recreation Ground. Its length is approximately 260ft., and the average width 75ft. This is open to the public from May to September.

Finally, I would direct the attention of those concerned to matters aesthetic in our schools. The schools should be beautiful. Our teachers do their best to make them so, because they realize the power for good things beautiful possess in the training of the child. Every caretaker should look upon herself as an important member of the teaching staff; slovenliness in cleaning the school is as demoralizing to herself as it is to the children in attendance. The scale of remuneration of the caretakers, by the way, is not satisfactory; it verges upon the parsimonious, and ought to be substantially increased.

## B.—CO-RELATION OF THE SCHOOL MEDICAL SERVICE WITH THE PUBLIC HEALTH SERVICE.

### *Organization and supervision of Medical Inspection, and methods of Inspection adopted.*

As the School Medical Officer is also Medical Officer of Health, the School Medical and Public Health services are in perfect co-relation.

Previous to the end of the school year in July, 1912, the actual work of Medical Inspection was done by three part-time Medical Officers. Since that date the duties have been performed by myself alone, as your School Medical Officer. The School Nurse weighs and measures the children, and performs the preliminary testing of the children's vision, her observations being checked by the School Medical Officer. The inspection registers are kept on the school premises, being removed only for such a time as will enable the Clerk to make summaries at the office.

In addition to the duties performed at the inspections on the school premises, the School Nurse follows up all cases for which treatment is recommended, and visits the homes of children excluded from school on the score of sickness, where such children are unable to attend at the central offices, and are not otherwise provided for. Children remitted for special examination are usually re-examined at the central offices, which are better provided with appliances for the purpose. Children excluded from school on account of Ringworm, or any other contagious condition of a similar nature, or as being "carriers" of Diphtheria, also attend at the central offices on special days, for the purpose of undergoing examination with a view to certifying them as in a fit state to be re-admitted. At all these examinations both the School Nurse and myself are present. From the end of July to the 31st of December, 1,340 special examinations and re-examinations were made.

The occurrence of an outbreak of Diphtheria necessitated many special visits to schools for the purpose of "swabbing" the throats of "contacts." The number of children so "swabbed" was 950.



- (1) *The extent to which the Board's Schedule of Medical Inspection has not been followed.*

The Schedule of the Board of Education of the 23rd of January, 1908, has been adhered to.

- (2) *The assistance given to the School Medical Officer by the School Nurse, Managers of Schools, Teachers, Attendance Officer, and other persons.*

The School Nurse makes the necessary preparations for the inspection; assists in undressing and dressing the children; weighs and measures them; makes observations as to the cleanliness of the head, body and clothing; makes provisional tests of the acuity of vision; assists in "swabbing" suspicious throats; makes out a card for each child found defective; "follows up" such cases as are necessary; keeps records of the cases so followed up; and scours the district for Hospital Tickets on behalf of those parents, in poor circumstances, who are quite willing to have their children's defects remedied, if they can obtain the means. During the year she paid 1,650 visits to homes.

The Managers of the various schools place every facility in their power at our disposal, to make the inspections as pleasant as possible to all concerned.

The Teachers are largely responsible for the effectiveness of the inspections. They keenly realize the importance of the inspection; single out cases for special inspection; notify actual or suspected cases of infectious or contagious disease; exclude children who are not in a proper condition to attend school, and place us into communication with them; ensure the non-attendance of children excluded by the School Medical Officer until such time as they can furnish a re-admission notice supplied by him; and make such provision as they can for any special attention during school hours for children specified by him. It is impossible to over-estimate the value of the co-operation of the Teachers, and their services are fully appreciated both by the parents and the School Medical staff.

The Attendance Officer keeps us in touch with children away from school on medical grounds, and, where medical certificates cannot be furnished, remits such children to the School Medical Officer for special examination.

The various Hospitals, Dispensaries, Care Committees, Charity Organization Society, those interested in the "boarded out" Homes, the Chief Constable, the Inspector for the Society for the Prevention of Cruelty to Children, and the many friends amongst the subscribers who furnish the School Nurse with tickets for treatment or relief, all help in the necessary "following up," in one way or another.

(3) *Methods adopted for securing the presence of parents at the Inspection.*

The parents are advised by post of the proposed Inspection, and are invited to attend. The majority do so, and any defects are duly pointed out. Should the parent or guardian not be present, the School Nurse visits the child's home, where defects exist, and explains the position, volunteering such assistance, where necessary, as she can supply. During the year 506 parents or guardians (a percentage of 67·2, as compared with 70·7 in the previous year) availed themselves of the invitation to attend the inspection of their children.

Re-inspection of the defective children is carried out both at the schools and at the central offices, by the School Medical Officer, to determine to what extent any suggestions have been carried out. Summaries of the following-up of cases brought forward from the year 1911, and of those discovered during 1912, are found in Tables IX. and X. in the Appendix.

(4) *The extent to which disturbance of School arrangements was involved by the Inspection.*

The Inspections always take place on the school premises, during the school hours, except at the following schools :—

St. Peter's Boys' and Girls'.  
Rusthall Infants'.  
St. John's Boys' and Girls'.  
Varney Street.

The Board of Education have sanctioned, as a temporary arrangement, the holding of the ordinary Medical Inspection elsewhere than on the school premises in the cases of the above-mentioned schools, and the inspections have been conducted at the following places :—

SCHOOL.		PLACE OF INSPECTION.	
St. Peter's Boys' and Girls'	... ..	St. Peter's Parish Room.	
Rusthall Infants'	... ..	Rusthall Parish Room.	
St. John's Boys' and Girls'	... ..	St. John's Parish Room.	
Varney Street	... ..	Trinity Parish Room.	

Examinations conducted on the school premises have been held either in the Head Teacher's room, or in one of the Class Rooms. Some disturbance of school arrangements is inevitable, wherever the Inspection takes place, and in some instances the conditions are such as to necessitate special examinations elsewhere. In the latter cases as much as possible of the routine inspection was done on the school premises, and the remainder at the central offices.

### C.—EXTENT AND SCOPE OF MEDICAL INSPECTION.

(1) *The number of visits paid to Schools and Departments.*

The number of visits paid to the Schools for routine inspections is 94, as compared with 132 last year. In addition to these, numerous visits have been paid for the purpose of special inspections—both at the special request of the Teachers, to advise on matters relating to school hygiene, and particularly in connection with the cases of Diphtheria occurring at some of the schools; 38 special visits were called for in the taking of "Swabs." Sixty-two visits to school Departments were made by the School Medical Officer, either during or out of school hours, for the purpose of inspecting their sanitary condition. The total number of visits was 194.

(2) *The principle on which the children have been selected for inspection.*

As in former years, the inspections according to the Schedule have been limited to:—

- (1) Children admitted to Public Elementary Schools.
- (2) Children leaving Public Elementary Schools.
- (3) Children specially indicated by the Authorities of their respective Schools as requiring inspection, including 39 so-called "Defective" children and children singled out by myself at the time of my visits to the Schools, as presenting conditions requiring immediate investigation.

In addition to the children inspected according to the Schedule, many absent from school were sent up to the central offices for special examination, for the purpose of obtaining a medical certificate in accordance with the regulations of the Education Committee; and the "carrier" cases, referred to elsewhere, attended regularly to be "swabbed," no "carrier" being permitted to return to school until three consecutive negative swabs had been obtained from the throat. The total number of examinations made under the "special" order was 1,340. From 167 "carriers" 933 additional swabs were taken.

I am of the opinion that instead of the "leavers" being inspected prior to their removal from the schools, it would be better to arrange for their examination at least twelve months earlier. One

would then be in a better position to keep them under supervision until obvious defects can be remedied. As soon as time will permit, however, I hope to inspect, according to the Schedule, every child in the schools, and not restrict the examination to entrants, leavers and specials. It is very desirable that this should be done.

(3) *The number of children inspected.*

The number of children inspected, according to the Schedule, during the year was 753 (381 boys and 372 girls), as compared with 980 (519 boys and 461 girls) last year. The "specials," however, are not included in these numbers for the year 1912. Table I. of the Appendix shows the number classified for age at date of inspection, and for sex (see page 96).

When comparing the number of children inspected during 1912 with the number inspected during the previous year, it is only fair to bear in mind the very exceptional circumstances prevailing. Whilst it is true that only 753 were inspected *according to the Schedule*, a very large number of "special" examinations was called for. The following is a complete list of all:—

Examinations according to the Schedule	...	...	753
Examinations of Defective Children	...	...	39
Re-examinations of "specials," including those of			
115 brought forward from 1911; those of			162
referred in 1912; and others (see page 71)	...	...	1340
Children "swabbed" at school or elsewhere	...	...	950
			<hr/>
Total inspections	...	...	3082
			<hr/>

Of the above 2,290 examinations can be legitimately credited to the "following up" of cases, and to these should be added 1,650 visits paid by the School Nurse to the homes, or a total of 3,940.

(4) *The number of children referred for subsequent or further examination.*

All children suffering from defects which were notified to the parents were referred for further examination, but the number it was found possible to re-examine, exclusive of 167 "carriers" of Diphtheria germs, was 162. In addition, 39 defective children were

specially examined, and 115 suffering from defects disclosed in the previous year's inspections were re-examined. From the 167 "carriers" 933 swabs were taken besides the initial ones, or 1,100 in all.

(5) *The number of children in respect of whom directions were given for treatment of defects, including a classified statement of such defects.*

DEFECTS.	BOYS.	GIRLS.	TOTAL.
Defects of clothing and foot-gear ...	18	8	26
Nutrition ... ..	22	32	53
Uncleanliness of head ... ..	14	64	78
Defects of eyes or vision ... ..	37	39	76
Ear conditions ... ..	27	22	49
Enlarged tonsils ... ..	27	26	53
Adenoids ... ..	24	10	34
Defective teeth (three or more) ...	160	154	314
Defects of heart or circulation ...	11	13	24
Other defects ... ..	48	48	96
	388	416	804

The above table only refers to those cases discovered in the routine inspections at the schools during the year.

(6) *The average time per head occupied by Inspection.*

The average time taken up by the examination of each child was about seven minutes, but this was often exceeded when the parents were present.

## D.—GENERAL REVIEW OF THE FACTS DISCLOSED BY MEDICAL INSPECTION.

The Appendix contains a tabular statement of the results of the Inspection for the year 1912.

### (1) *Heights and Weights.*

The average heights and weights recorded in Table II. of the Appendix are doubtless interesting, but they are of relatively little value. The numbers of children examined are too small to present data upon which to base any generalisation; and the lack of a standard weight of clothing at the time of weighing the children, throughout the country, militates against the value of any comparison between our own and the results obtained in other areas.

Height and weight undoubtedly form an important indication of the physical condition of a child, and it is desirable to obtain "standards" from groups educated under similar conditions. Any marked inco-ordination between the height and weight of a child, after making due allowance for the age, sex, and seasonal differences in development, may be indicative of a critical period in the child's life-history, and surely requires investigation. It may point to insufficient food or clothing, excessive expenditure of energy in mental work, or the onset of some disease.

During the first twelve years of life boys are somewhat taller than girls of the same age. At about twelve and a half years the girls begin to grow faster than the boys, and during their fourteenth year are about one inch taller than boys of the same age. I find that the average girl in Tunbridge Wells begins to outstrip the average boy twelve months earlier than in the Midlands. The comparative study of heights and weights will be both interesting and valuable as our statistics multiply.

### (2) *Nutrition.*

The estimate of the state of nutrition of a child is a difficult matter, involving many considerations. The relation of the weight to the height is undoubtedly helpful, but is not alone sufficient to indicate the child's condition. One has to consider the child as a whole, and to note whether the different systems are working together

with that harmony which characterizes a child obviously in good condition. If the digestive, excretory, circulatory, and nervous systems are in effective working order, with the resulting brightness and sprightliness of healthy youth, there is little cause to worry on the score of mere shortage in height and weight.

During the year, 22 boys (5·8 per cent.) and 32 girls (8·6 per cent.) were noted as being obviously below normal. The percentage is slightly lower than that of the previous year, and as time goes on it will probably be still further reduced. It has still to be realized by many that this condition is more frequently due to improper, rather than to insufficient food, and that septic conditions of the mouth, neglect, and other preventable causes, are also largely responsible for innutrition.

### (3) *Clothing and Footgear.*

The state of the clothing and footgear found among the children was a trifle less satisfactory than in the previous year. Some 4·7 per cent. of the boys, and 2·1 per cent. of the girls were considered to be insufficiently or improperly clad, presenting a total of 3·4 per cent. as compared with 3·16 per cent. of last year. Amongst some of the parents there is a lack of knowledge of the hygienic value of clothing. More children are overloaded with clothing than under-clothed.

### (4) *Cleanliness.*

No school education is complete which does not teach children the necessity for a clean skin, and unless the habit of cleanliness has been engendered, one of the mainsprings of self-respect has been lost. I have previously referred to one school where cleanliness of the person is not particularly encouraged, and that school is situated in the very district where such is most necessary. A child whose head or body is in a verminous condition acts as a focus of infection as regards the other children. During the year 14 boys and 60 girls were verminous. The condition of the children I have sometimes to take to the Sanatorium reveals an appalling state of affairs in some parts of the town. If 74 children are found to be verminous amongst a total of 753 inspected, how many would be discovered if every child could be inspected? The poorer the school the greater the necessity for the provision of baths, and as it is morally certain



that no such provision can be expected at the homes, surely the Borough might consider the feasibility of helping the less prosperous schools to establish spray baths. These are not a luxury but a necessity. Four of the girls examined had Ringworm of the scalp. I had to exclude from one school a whole family of boarded-out children suffering from verminous eczema. These are not the children of Tunbridge Wells, but poor souls brought over from the slums of London as a "charity." Every other similar home with which I am acquainted is, I am glad to say, absolutely above suspicion, the children being well kept, and the houses spotlessly clean.

No prosecutions were instituted against parents under the Prevention of Cruelty to Children Act, or the Children Act of 1908. The "extreme measure of prosecution" is apparently seldom or never resorted to. This is certainly not because such is not needed.

(5) *Eyes.*

The percentage of children suffering from visual defects (worse than  $\frac{6}{6}$ ) was 13.2 % in the case of boys, and 13.6 % in the case of the girls. The following is a summary of the visual defects:—

		BOYS.		GIRLS.		TOTAL.
Both eyes affected	...	20	...	22	..	42
Right eye affected	...	5	...	5	...	10
Left eye affected	...	5	...	5	...	10
		—		—		—
		30		32		62
		—		—		—

The total numbers of children tested were 226 Boys and 236 Girls.

Children under six years of age were not tested for visual defects.

The following is a summary of the external diseases of the eyes:—

		BOYS.		GIRLS.		TOTAL.
Blepharitis	... ..	2	...	2	...	4
Conjunctivitis	... ..	1	...	0	...	1
Strabismus	... ..	3	...	5	...	8
Iarsal Cyst	... ..	1	...	0	...	1
		—		—		—
		7	...	7		14
		—		—		—

(6) *Ears and Hearing.*

There were 18 cases of defective hearing, obviously due to the presence of Adenoids and Enlarged Tonsils, and 31 other cases of defect. Twelve Boys and 9 Girls were suffering from accumulations of wax; and 5 Boys and 5 Girls had a discharge from one or both ears. Several children in the Infants' Schools were from time to time excluded on account of the latter condition, irrespective of the above.

(7) *Tonsils and Adenoids.*

Twenty-four Boys and 10 Girls were found to be suffering from Adenoids at the time of inspection; and 27 Boys and 26 Girls from enlarged Tonsils. Very many more of both sexes were found to have diseased Tonsils when being "swabbed." A large proportion of these were successfully operated upon, when the parents realized how very difficult it was to keep such throats in a reasonably healthy condition. The percentages for the last four years are as follows:—

Adenoids—		1909.	1910.	1911.	1912.
Boys ...		12.2	6.7	4.04	6.3
Girls ...		7.0	5.2	3.6	2.7
Enlarged Tonsils—					
Boys ...		10.2	5.7	5.7	7.1
Girls ...		9.6	7.6	3.9	6.9

The adverse effects due to the presence of the above conditions, and the necessity for immediate treatment, surgical or otherwise, have been accentuated in previous Reports.

(8) *Teeth.*

It is now universally acknowledged how seriously defective are the teeth of the children throughout the country, and how exceptional it is to find other than very young children with complete sets of healthy teeth.

The condition of the teeth varies, amongst other things, with the age. All the temporary teeth are usually erupted by the age of three, and at six the most important tooth in the mouth—the first permanent molar—makes its appearance. Between six and eight

years the temporary central incisors are shed, and replaced by permanent teeth, and these are shortly followed by the upper laterals. The lower centrals and lower laterals come next. The temporary molars, if good, are gradually lost from eight to eleven years of age, when the canine and second bicuspid appear, and at twelve the second molar.

A careful study of Table VI. shows this is quite conformable with the routine described above, the percentage of children with decayed teeth being reduced to the minimum at the time of eruption of the twelve-year-old molar. It then begins to rise again.

The necessity for some form of conservative treatment is freely admitted, and arrangements are in progress for making suitable provision in the Borough. In the meantime the rudiments of dental hygiene should be kept before the children. The distribution of the special notice calling attention to the care and cleansing of the teeth, and the exhibition of the larger copies of the notice on the school walls soon lose their effect. If a child were to appear at school with an unwashed face the inevitable reproof from the teacher is sufficient, in the majority of cases, to prevent a repetition of the offence. The same might more frequently be tried with reference to the teeth. It is surprising to find that the girls take less pride in their teeth than the boys. As they become older they will probably know better.

	BOYS.	GIRLS.
No Decayed Teeth ...	30·2 per cent.	26·6 per cent.
Number of Defective Teeth—		
1 ...	11·2	12·6
2 ...	16·3	19·4
3 ...	7·4	10·5
4 ...	14·2	9·7
5 ...	8·4	8·0
6 and over ...	12·1	13·2

If the teeth were examined with the aid of a dental mirror it would probably be found that not more than 5 per cent. of the children possess teeth requiring no attention at all.

#### (9) *Heart and Circulation.*

Five boys and 4 girls were found to be suffering with valvular disease of the heart, and 6 boys and 9 girls with anæmia or

feeble circulation. The attention of the teachers is particularly drawn to these cases, and suggestions given as regards the character and amount of recreation most suitable for each individual.

(10) *Lungs.*

Of the 14 children with some affection of the lungs at the time of inspection there were 10 with Bronchitis, 1 with slight Pulmonary Catarrh, 1 with Tuberculosis of the Lungs, 1 possibly suffering from the same condition, and 1 with Pleurisy.

(11) *Nervous System.*

Seven children presented nervous symptoms at the time of examination. Of these 3 had Chorea, 2 Infantile Paralysis, 1 Facial Spasm, and 1 was an epileptic. At the special examination of defectives additional cases of the latter affection were disclosed.

(12) *Tuberculosis.*

Among the tubercular cases found were 5 with enlarged and tubercular glands, and 2 doubtful. Of the former 1 was undoubtedly suffering from Pulmonary Tuberculosis, and 1 was suspicious, as already noted.

(13) *Deformities.*

Of the 26 children with some form of deformity, Scoliosis was evident in 11 cases. Rickets was responsible for 4 cases.

(14) *Infectious or Contagious Diseases.*

On account of Scarlet Fever 31 children (including contacts) were excluded from the schools. Diphtheria was responsible for 132 exclusions (including contacts). None of these were discovered at the time of the inspection, although 1 doubtful Scarlatina was isolated, and 1 with Chicken-pox.

The number of children with Ringworm is decidedly less than that of last year, 35 cases being excluded as against 65 in 1911. As usual the condition was more prevalent among the girls (21) than the boys (14). Of these, 4 cases were discovered during the routine inspections, the others being found as the result of special examination in suspected cases, and during the periodical visits of the School Nurse.

**E.—RELATION OF HOME CIRCUMSTANCES AND  
SOCIAL AND INDUSTRIAL CONDITIONS  
TO THE HEALTH AND PHYSICAL CONDITION  
OF THE CHILDREN.**

Tunbridge Wells is an exceptionally healthy town in a prosperous condition. The unfortunate, the improvident, and those suffering from chronic industrial debility are, of course, to be found everywhere. We have a few of the latter, and their presence amongst us is reflected by the condition of their children. These excepted, the children attending our Elementary Schools cannot be surpassed as regards their general health and fitness.

It is the "exceptions," however, who must claim most of our attention. Much of the misery in the poorer quarters of the town is due to ignorance and carelessness. A good deal is due to pure laziness. I feel that it is hopeless to reclaim many of the parents; but the schools—with their brightness, cleanliness, social attractions and general educative influences—may reasonably be expected to captivate the youngsters, render them dissatisfied with the undesirable in their home conditions, and strive for something better. The active sympathies of our Schools, Parish Rooms, Men's and Women's Societies, and movements such as the Church Brigade and Boy Scouts, are doing an incalculable amount of good in the Borough, and the harvest is certain. The settlement of the "blind-alley occupation" question is probably the most pressing problem of the moment.

**F.—REVIEW OF THE METHODS EMPLOYED OR  
AVAILABLE FOR THE TREATMENT OF DEFECTS.**

The agencies which exist in the Borough for meeting the medical requirements of school children, correspond probably with those which are usually available in towns of this size. They are (1) private medical practitioners charging private fees; (2) the Provident Dispensary and medical clubs, which provide medical treatment at small contract rates; (3) the General Hospital, the Eye and Ear Hospital, and the Homœopathic Hospital, which give

indoor and outdoor treatment in suitable cases; (4) the Poor Law Medical Officer, for the very poorest; (5) a limited number of qualified dentists, and a number of irregular practitioners who carry on dental work without being qualified.

In spite of all these agencies some of the most common defects are not yet adequately provided for. There are practically no means available for the conservative treatment of the teeth, as far as the majority of the children are concerned; and as more visual defects are disclosed a corresponding difficulty will be met with in dealing with these. Many nose and throat cases are treated at the General Hospital and at the Eye and Ear Hospital, but if all children requiring treatment have to be taken in hand, these charitable institutions cannot be expected to perform such a service gratuitously for the public. Lastly, there remains the very large group of "minor ailments," which are responsible for more absentees than probably all others put together. Verminous conditions, running ears, ringworm, superficial sores, and similar conditions, are always to be met with in certain parts of the Borough, and really do demand urgent attention.

I see no difficulty in making provision for all the above cases. At the central offices there is accommodation to spare for the fitting up of a special department for the treatment of most of these ailments. We have specialists in the town who would gladly help forward any scheme for the amelioration of the physical defects of the school children, but it is only right that they should be consulted in the matter. A small cleansing station could be established, and the other minor ailments might readily be undertaken by the School Medical Staff. The outlay involved would be really very moderate, and special grants are now offered by the Board of Education for the treatment of children on lines approved by them. A scheme would have to be formulated and submitted to the Board for official sanction, and I recommend that this be done.

## G.—REVIEW OF ACTION TAKEN TO DETECT AND PREVENT THE SPREAD OF INFECTIOUS DISEASES.

Details of the administrative measures taken to detect and prevent the spread of Diphtheria will be found on pages 38 to 44. Regulations as to the Notification of Communicable Diseases, and the exclusion of affected parties from school, are reproduced herewith. As some misconception still exists as to the special regulations in respect of "sore throats," I would take this opportunity of recapitulating the chief points to be observed:—

- (1) If there is any reason to believe that a child is suffering from a sore throat, he must be excluded from school immediately, and the School Medical Officer notified of the fact. If the child is well enough, he might be sent to the School Medical Officer to report his own case.
- (2) The Parents or Guardians should be recommended to consult the Family Practitioner, who will doubtless take a "swab." If they are not in a position to do this, the School Medical Officer will arrange for a "swab" to be taken.
- (3) Children who have been in contact with a person suffering from Diphtheria must be excluded from school and not re-admitted without a Re-admission Notice, signed by the School Medical Officer. This will not be granted until three consecutive negative "swabs" have been obtained from the throat and nose.
- (4) No child will be discharged as cured from the Diphtheria Ward of the Sanatorium until three consecutive negative "swabs" have been obtained. Such a child will spend a further period at home or elsewhere, until quite convalescent; but a School Re-admission Notice will not be granted until other three consecutive negative "swabs" have been secured.

- (5) Such articles as pencils and pen-holders, known to have been used by any child suffering from Diphtheria, should be sent without delay to the Public Health Department for disinfection. If these have been collected with those used by other children all of them must be disinfected before re-distribution.
- (6) Instruction in Hygiene should have special reference to the personal relations of the children to one another. Efforts should be made to discourage the borrowing of handkerchiefs, pens and pencils, and other articles which might serve to convey infection from one child to another.

The cure of a "carrier" is difficult or impossible to hasten, and in the meantime thorough local treatment is probably the most useful measure that can be applied. Throat brushes and local antiseptics have been provided, free of charge, to those who cared to avail themselves of them; and the taking and examination of "swabs" have, of course, also been arranged for gratuitously by the Public Health Committee. Throughout the year Antitoxin has been provided free to all classes of patients.

## NOTIFICATION OF COMMUNICABLE DISEASES.

### I.--Children actually suffering from infectious or Contagious Disease.

When children are known or suspected to be suffering from Infectious or Contagious Disease (Whooping Cough, Measles, German Measles, Chicken-pox, Scarlet Fever, Diphtheria, Membranous Croup, Mumps, Typhoid Fever, Erysipelas, Small-pox, Impetigo, Ring-worm, Pediculosis) a notification on the prescribed form is to be sent by the Head Teacher to the Public Health and School Medical Department for the use of the School Medical Officer and the Medical Officer of Health. In some of the above cases (Scarlet Fever, Diphtheria, Membranous Croup, Typhoid Fever, Erysipelas and Small-pox) notification will be received independently by the Medical Officer of Health from the Medical Practitioner attending the case.



Enquiries will then be made by the Officials of the Department at the house of the patient, and an Exclusion Notice sent to the Parents or Guardians of the child, and to the Head Teacher of the School attended by the Patient or by any children in the house concerned, stating what child or children must be excluded from School.

When the infected house has been disinfected a Re-admission Notice will be served on the same parties. No child from an infected house is to be re-admitted to School until this notice has been received. It is to be noted that the date of re admission is fixed in accordance with the Regulations of the Board of Education, and the child cannot be re-admitted prior to this. On the other hand, the presence of complications may necessitate a longer period of exclusion on medical grounds. In such a case a Medical Certificate is required.

## **II.—Children in contact with persons suffering from Communicable Disease.**

The same Regulations apply as to Exclusion and Re-admission of children living in the same house as a Patient suffering from any Infectious or Contagious Disease, subject to the exceptions specified below.

- (1) TYPHOID FEVER or ERYSIPELAS.—No exclusions need take place, but notification of the existence of such cases should be reported in the usual way.
- (2) MEASLES or WHOOPING COUGH. —All younger children who have not had the disease, and all who are attending Infant Schools, whether they have had the disease or not, should be excluded during the period of exclusion of the patient. Children who have had the disease, attending Schools other than Infant Schools, need not be excluded.

Where Measles is known to have occurred among Scholars, careful watch should be kept for Premonitory Symptoms in other children. Any affected should be immediately excluded and notified in the usual way.

- (3) CHICKEN-POX or MUMPS.—Only those children in the house who are suffering from the complaint need be excluded, except in the case of Chicken-pox, when all children of the same family must be excluded from the Infants' School during the period of exclusion of the patient.
- (4) Where cases of SCARLET FEVER or DIPHTHERIA are known to have occurred in the neighbourhood, all children suffering from sore throat or swollen Glands should be immediately excluded and notified in the usual way.
- (5) RINGWORM, SCABIES, IMPETIGO, PEDICULOSIS.—Children living in the same house but not affected need not be excluded.

The names of excluded children must be entered weekly on the "Summary of Children Absent through Infectious Disease."

If a Certificate be given by a Medical Practitioner that children may be permitted to return to School this should be reported to the Public Health and School Medical Department without delay, and instructions awaited before admitting the children.

Any Notice from the above Department regarding Exclusion from or Re-admission to School should be shown to each Head Teacher in the School, so that all the School Departments may act in concert; and the attention of the School Attendance Officer should be drawn to such Notice.

The prevention of infectious disease in our Schools is based upon attention to the individual child, and much can be done by the teachers on preventive lines. It often happens that they are more observant of the mood of a child than the parents; and some knowledge on their part of the premonitory symptoms of the various infectious diseases is very desirable. The following is a useful summary of these disorders:—

## SUMMARY OF INFECTIOUS DISEASES.

DISEASE.	INCUBATION PERIOD.	PREMONITORY SYMPTOMS.	DAY OF ILLNESS ON WHICH RASH APPEARS.	PERIOD OF EXCLUSION FROM SCHOOL.	QUARANTINE PERIOD.
MEASLES ... ..	12 days (7-21)	Severe cold in the head, coughing, sneezing, running at the eyes and nose, shivering, feverishness, headache.	4th day	4 weeks and until all cough has disappeared.	(See Note)
SCARLET FEVER ...	3 days (1-7)	Sore throat, vomiting, shivering, hot dry skin, headache.	24 hours— 2 days.	6 weeks, until peeling has finished, and there is no discharge from ears or nose.	14 days
GERMAN MEASLES	14 days (10-21)	Cold, coughing, sneezing, enlarged glands, blotchy rash, somewhat like both measles and scarlet fever.	1st day	3 weeks.	21 days
DIPHTHERIA ...	2 days (1-7)	Sore throat, shivering, stiff neck, general lassitude, white patches on side and back of throat.	No rash	6 weeks and until microscopic examination shows throat free from diphtheria bacilli.	Until diphtheria bacilli are proved absent.
WHOOPING COUGH	9 days (5-14)	Fits of coughing, gradually developing into characteristic whoop, often followed by vomiting.	No rash	6 weeks and after all cough has ceased.	(See Note)
MUMPS ... ..	17-19 days (4-21)	Stiffness, pain and tenderness in jaws, especially on the left side, swelling in neck below ear.	No rash	3 weeks if all swelling has subsided.	(See Note)
CHICKEN-POX ...	12-14 days (10-20)	As a rule no premonitory symptoms before the appearance of the rash, which consists of red spots rapidly turning into blisters.	1st day	3 weeks and until all the scabs have fallen off.	(See Note)
SMALL-POX ...	12 days (10-14)	Headache, shivering, feverishness, vomiting, pains in back.	3rd day	Until all scabs have fallen off.	15 days

INCUBATION PERIOD is the period that elapses, from the exposure of the patient to infection, until the first symptoms of the disease make their appearance. The figures in parenthesis in the second column indicate the shortest and longest possible incubation periods. QUARANTINE PERIOD is the period of time during which a person who has been exposed to the infection of a particular disease should be isolated or kept under observation.

H.—REVIEW OF THE METHODS ADOPTED, AND THE ADEQUACY OF SUCH METHODS FOR DEALING WITH BLIND, DEAF, MENTALLY OR PHYSICALLY DEFECTIVE AND EPILEPTIC CHILDREN UNDER THE ACTS OF 1893 & 1899.

Under the provisions of the Elementary Education (Blind and Deaf Children) Act, 1893, the School Medical Officer examined, on the 30th October, 1912, a girl aged about 7 years (a scholar attending Rusthall Infants' School), and as a result of such examination the Borough Education Committee sent the child to the Barclay Home and School for Blind and Partially Blind Girls, Wellington Road, Brighton, on the 8th January, 1913, and the Board of Education's consent has been obtained to the payment of £30 per annum to the institution in respect of the maintenance, education and clothing of such child. The present circumstances of the parent of the child do not permit him to make any contribution towards the maintenance of the child in the Home.

ELEMENTARY EDUCATION (DEFECTIVE AND EPILEPTIC CHILDREN) ACT, 1899.

The School Medical Officer has been approved by the Board of Education for the purposes of section 1 (3) of the Elementary Education (Defective and Epileptic Children) Act, 1899.

In accordance with the provisions of the *Elementary Education (Defective and Epileptic Children) Act, 1899*, I held a special examination in December, 1912. Thirty-nine children were presented for examination. Of these, 4 were found to be physically defective, 5 epileptic, 19 subnormal from various causes, and 11 mentally defective.

The four physically defective are exceptionally bright children, and are only backward on account of their physical defects. One is suffering from an incurable condition of the nervous system, namely, pseudo-hypertrophic paralysis. A second has a hopeless congenital heart abnormality (patent foramen ovale). The third is a cripple, with a tuberculous knee; and the fourth is an example of a rare condition known as dextro-cardia. Obviously special measures are required to deal with cases such as these, simply on account of their physical deficiencies.

For practical purposes epileptic children may be classified into three groups :—(1) sane ; (2) mentally deficient ; (3) insane. Some degree of mental deficiency is always associated with epilepsy, especially when the disease has persisted for some years ; but all five children of this class can be regarded as sane, and treated as such. Of these, one, a boy, has not had a fit for twelve months, and is certainly improving. He is very mischievous and spiteful, however, and takes advantage of the lack of discipline at home. Another boy is on the verge of being actually mentally defective ; his mother is undoubtedly of weak intellect. A third boy has been kept under the influence of bromides for  $4\frac{1}{2}$  years. In spite of this he has a fit every morning between 9 a.m. and 10 a.m. Two girls, each of the age of 10 years, are also subject to "fits." One of them, however, shows signs of improvement, and in the other hysterical tendencies have a great deal to do with the trouble. When fits occur infrequently or out of school hours, children so affected can usually attend the ordinary elementary school ; but when the fits are more frequent and occur during school hours, it is very undesirable that they should attend the ordinary school. Some special provision ought to be made.

Of the 19 children whom I prefer to classify as "subnormal," 11 are boys and 8 are girls. It is quite probable that at a later date it may be necessary to relegate some of these to the "defective" class, but in the meantime one is justified in hoping for material improvement. The backwardness is due to various causes, such as irregular school attendance on medical grounds, neglected adenoid conditions, etc. In one case the backwardness is solely due to the very defective eyesight of the child, and when the hospital treatment which is absolutely necessary at present will permit, arrangements will probably have to be made for special instruction in a school for the blind. For the majority of these children there is a reasonable expectation that they may be sufficiently educated to support themselves.

Of the 39 children examined I have classed 11 as "not being imbecile, and not merely dull and backward, are by reason of mental defect incapable of receiving proper benefit from the instruction in the ordinary Public Elementary Schools ; but are not incapable, by reason of such defect, of receiving benefit from instruction" in such special classes in schools as are mentioned in the Act previously cited.

The question is—"What is to be done for these children?" All of them can undoubtedly receive benefit from suitable training; but none of them are ever likely to be able to compete on equal terms with their normal fellows, or to manage themselves and their affairs with ordinary prudence. No amount of education or training can transform a mentally deficient child into a normal one. Nothing can certainly be expected from the methods and curriculum of the ordinary elementary school; a separate class or school is really necessary.

A special class for such children is provided at the Rusthall Infants' School, under a capable and sympathetic teacher. The small room set apart for the work is, however, in no respects suitable, and the wonder is that any results can be achieved at all. The fact that progress is being made is solely due to the indomitable perseverance of the governess. Seven of these children are boys, the oldest being the age of twelve years; of the four girls the eldest is eleven. The problem of how best to cater for them is an urgent one. In the first place more suitable premises are essential; and then comes the question of how to deal with the older ones, for obviously those of eleven and twelve are too old to be classed with those of five and six years.

I.—INSTRUCTION IN HYGIENE & TEMPERANCE—  
PHYSICAL OR BREATHING EXERCISES—OPEN-  
AIR SCHOOLS.

**Hygiene and Temperance.**—Permission was again granted to Mr. Charles Harvey, the Secretary and School Lecturer of the Kent Band of Hope Union, to visit the Public Elementary Schools in the Borough for the purpose of giving lessons on Temperance from the Board of Education syllabus. The necessary arrangements were made by him, with the permission of the Borough Education Committee, direct with the Head Teachers.

A print of the syllabus of lessons on Temperance, issued by the Board of Education, for scholars attending Public Elementary Schools is in the possession of each Head Teacher of the Public Elementary Schools in the Borough.

**Physical or Breathing Exercises.**—A copy of the revised syllabus of Physical Exercises for Public Elementary Schools, issued by the Board of Education, is in the hands of each Head Teacher in the Public Elementary Schools in the Borough.

In addition to the instruction afforded in the Schools and playgrounds connected with the Schools, the Borough Education Committee have made arrangements for the use of the following buildings in order to afford better facilities for the giving of physical exercises to the school children :—

Byng Hall for St. John's School scholars.

St. Peter's Parish Room for St. Peter's School scholars.

Drill Hall for Grosvenor School scholars.

St. James' Parish Room Gymnasium for St. James' School scholars.

St. Mark's Parish Hall for St. Mark's School scholars.

Corn Exchange for King Charles' School scholars.

**Open Air Schools.**—The schools at Rusthall frequently have lessons in the open air. The Boys' School, especially, is particularly well-situated for this purpose, the classes being held on the Common when weather permits.

**J.—ACCOUNT OF MISCELLANEOUS WORK, SUCH  
AS THE EXAMINATION OF SCHOLARSHIP  
CANDIDATES, PUPIL TEACHERS, OR TEACHERS  
OF ANY GRADE.**

The examination of Scholarship Candidates, Pupil Teachers, or Teachers, does not form part of the duties of the School Medical Officer of the Borough.



## APPENDIX.

### TABLE I.—NUMBER OF CHILDREN INSPECTED.

Age—Years.	3		4		5		6		7		8		9		10		11		12		13		14		15		Total.
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
...	1	1	78	58	76	77	22	40	6	16	15	9	12	8	6	5	8	2	3	3	7	13	140	144	1	2	381
Totals	2	2	136	153	62	62	22	22	24	24	20	20	11	11	10	10	6	6	6	6	20	284	284	3	3	753	

### TABLE II.—AVERAGE HEIGHTS AND WEIGHTS.

Age. Years.	No. of Children examined.	Heights.		Weights.		No. of Children examined.	Heights.		Weights.	
		Inches.	Centimetres.	Pounds.	Kilograms.		Inches.	Centimetres.	Pounds.	Kilograms.
3	1	40	101.6	41	18.6	1	37	94.0	33	15.0
4	78	38	96.5	36	16.3	58	37	94.0	34	15.4
5	76	40	101.6	38	17.2	77	41	104.2	38	17.2
6	22	41	104.2	39	17.7	40	42	106.7	41	18.6
7	6	47	119.4	50	22.7	16	44	111.8	45	20.4
8	15	47	119.4	50	22.7	9	46	116.9	53	24.0
9	12	50	127.0	58	26.3	8	51	129.5	55	24.9
10	6	53	134.6	64	29.0	5	50	127.0	56	25.4
11	8	54	137.2	76	34.5	2	55	139.7	76	34.5
12	3	54	137.2	71	32.2	3	55	139.7	73	33.1
13	13	57	144.7	83	37.6	7	59	149.9	86	39.0
14	140	58	147.3	87	39.4	144	60	152.4	91	41.3
15	1	61	154.9	87	39.4	2	62	157.4	—	—
	381					372				

TABLE III.—CLOTHING, NUTRITION, CLEANLINESS.

## BOYS.

<i>Age.</i>	3	4	5	6	7	8	9	10	11	12	13	14	15	16	<i>Total.</i>
<i>Number Examined.</i>	1	78	76	22	6	15	12	6	8	3	13	140	1	—	381
DEFECTS OF															
Clothing and Footgear ...	—	1	3	1	—	3	2	—	1	—	—	7	—	—	18
Nutrition ...	—	4	6	1	—	1	2	—	2	—	1	5	—	—	22
Cleanliness and ... } ... Head	—	2	3	2	—	1	1	—	1	—	—	4	—	—	14
Condition of Skin } ... Body	—	2	3	1	—	—	—	—	—	—	—	2	—	—	8
<i>Totals</i> ...	—	9	15	5	—	5	5	—	4	—	1	18	—	—	62

## GIRLS.

<i>Age.</i>	3	4	5	6	7	8	9	10	11	12	13	14	15	16	<i>Total.</i>
<i>Number Examined.</i>	1	58	77	40	16	9	8	5	2	3	7	144	2	—	372
DEFECTS OF															
Clothing and Footgear ...	—	3	3	2	—	—	—	—	—	—	—	—	—	—	8
Nutrition ...	—	6	4	4	3	3	4	1	1	—	—	6	—	—	32
Cleanliness and ... } ... Head	—	9	8	10	3	2	2	1	—	—	3	26	—	—	64
Condition of Skin } ... Body	—	3	1	2	1	1	—	—	—	—	—	2	—	—	10
<i>Totals</i> ..	—	21	16	18	7	6	6	2	1	—	3	34	—	—	114

TABLE IV.—VISION AND HEARING.  
BOYS.

<i>Age.</i>	3	4	5	6	7	8	9	10	11	12	13	14	15	16	<i>Total.</i>
<i>Number Examined.</i>	1	78	76	22	6	15	12	6	8	3	13	140	1	—	381
<i>DEFECTS.</i>															
Eyes { External ...	—	3	1	1	—	—	—	—	—	1	—	1	—	—	7
{ Vision ...	—	—	—	—	1	2	4	—	3	—	—	20	—	—	30
{ Disease ...	—	1	—	2	—	2	2	—	1	—	1	8	—	—	17
Ears { Hearing ...	—	2	1	—	—	2	1	—	1	—	—	3	—	—	10
<i>Totals</i> ...	—	6	2	3	1	6	7	—	5	1	1	32	—	—	64

GIRLS.

<i>Age.</i>	3	4	5	6	7	8	9	10	11	12	13	14	15	16	<i>Total.</i>
<i>Number Examined.</i>	1	58	77	40	16	9	8	5	2	3	7	144	2	—	372
<i>DEFECTS.</i>															
Eyes { External ...	—	—	1	1	1	2	1	—	—	—	—	—	1	—	7
{ Vision ...	—	—	—	—	2	1	3	—	—	1	1	24	—	—	32
{ Disease ...	—	2	1	—	1	—	—	1	1	—	1	7	—	—	14
Ears { Hearing ...	—	2	—	—	2	—	—	—	1	—	—	3	—	—	8
<i>Totals</i> ...	—	4	2	1	6	3	4	1	2	1	2	34	1	—	61

TABLE V.—TONSILS AND ADENOIDS.  
BOYS.

<i>Age.</i>	3	4	5	6	7	8	9	10	11	12	13	14	15	16	<i>Total.</i>
<i>Number Examined.</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...
DEFECTS.															
Nose and Throat { Tonsils	—	4	6	1	1	1	1	2	—	—	1	10	—	—	27
Adenoids	—	6	7	3	1	2	—	2	1	—	—	2	—	—	24
Glands...	—	1	1	—	—	—	—	—	—	—	—	1	—	—	3
<i>Totals...</i>	—	11	14	4	2	3	1	4	1	—	1	13	—	—	54

## GIRLS.

<i>Age.</i>	3	4	5	6	7	8	9	10	11	12	13	14	15	16	<i>Total.</i>
<i>Number Examined.</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
DEFECTS.															
Nose and Throat { Tonsils	—	7	6	2	—	1	1	—	—	—	1	8	—	—	26
Adenoids	—	5	1	1	1	—	—	—	—	—	—	2	—	—	10
Glands...	—	—	—	—	1	—	—	—	—	—	—	4	—	—	5
<i>Totals...</i>	—	12	7	3	2	1	1	—	—	—	1	14	—	—	41

NOTE.—Only marked cases of these defects are included in the above table.

TABLE VI.—TEETH.

Table showing number of Decayed Teeth found among the children examined.

BOYS.

Age.	3	4	5	6	7	8	9	10	11	12	13	14	15	Total.
<i>Number Examined.</i>	1	78	76	22	6	15	12	6	8	3	13	140	1	381
Number of Defective Teeth—	0	34	24	5	1	4	2	—	1	1	3	39	—	115 = 30.2%
"	1	6	5	1	—	1	3	—	—	—	1	27	—	44 = 11.2%
"	2	8	11	3	1	1	1	1	2	—	3	30	1	62 = 16.3%
"	3	6	5	5	—	—	1	—	1	—	1	9	—	28 = 7.4%
"	4	12	4	1	2	6	3	1	1	1	4	19	—	54 = 14.2%
"	5	3	10	1	—	1	1	1	2	—	1	12	—	32 = 8.4%
"	6 and over	9	17	6	2	2	1	3	1	1	—	4	—	46 = 12.1%
<i>Totals ...</i>	1	78	76	22	6	15	12	6	8	3	13	140	1	381

GIRLS.

Age.	3	4	5	6	7	8	9	10	11	12	13	14	15	Total.
<i>Number Examined.</i>	1	58	77	40	16	9	8	5	2	3	7	144	2	372
Number of Defective Teeth—	0	29	17	4	—	1	1	1	2	2	2	38	1	99 = 26.6%
"	1	5	7	6	2	1	1	1	—	—	1	23	—	47 = 12.6%
"	2	8	13	8	3	2	1	2	—	—	1	33	1	72 = 19.4%
"	3	3	5	2	2	—	—	1	—	—	1	25	—	39 = 10.5%
"	4	6	9	5	2	1	—	—	—	—	—	13	—	36 = 9.7%
"	5	4	6	6	1	2	3	—	—	1	1	6	—	30 = 8.0%
"	6 and over	3	20	9	6	2	2	—	—	—	1	6	—	49 = 13.2%
<i>Totals ...</i>	1	58	77	40	16	9	8	5	2	3	7	144	2	372

TABLE VII.—HEART AND CIRCULATION.

## BOYS.

<i>Age.</i>	3	4	5	6	7	8	9	10	11	12	13	14	15	<i>Total.</i>
<i>Number Examined.</i>	1	78	76	22	6	15	12	6	8	3	13	140	1	381
DEFECTS.														
Heart and Circulation { Valvular ...	—	1	1	—	—	—	—	—	—	—	—	3	—	5
Other Defects ...	—	2	—	—	—	—	—	—	—	—	1	3	—	6
<i>Totals</i> ...	—	3	1	—	—	—	—	—	—	—	1	6	—	11

## GIRLS.

<i>Age.</i>	3	4	5	6	7	8	9	10	11	12	13	14	15	<i>Total.</i>
<i>Number Examined.</i>	1	58	77	40	16	9	8	5	2	3	7	144	2	372
DEFECTS.														
Heart and Circulation { Valvular ...	—	—	—	1	—	—	1	—	—	—	—	2	—	4
Other Defects ...	—	—	—	1	1	—	2	—	—	—	—	5	—	9
<i>Totals</i> ...	—	—	—	2	1	—	3	—	—	—	—	7	—	13

TABLE VIII.—OTHER DEFECTS.

BOYS

Age.	Number Examined.															Total.
	3	4	5	6	7	8	9	10	11	12	13	14	15			
Speech ...	—	2	1	1	—	1	—	—	—	—	—	—	—	—	5	
Mental Condition ...	—	—	—	—	—	2	—	—	—	—	—	—	—	—	2	
Lungs ...	—	—	1	1	—	—	—	—	1	—	—	—	—	—	3	
Nervous System ...	—	—	1	—	—	—	—	—	—	—	—	2	—	—	3	
Tuberculosis ...	—	—	—	—	—	—	—	—	—	—	—	3	—	—	3	
Rickets ...	—	2	1	1	—	—	—	—	—	—	—	—	—	—	4	
Deformities, Spinal Diseases, etc.	—	1	5	1	—	—	—	—	—	—	—	5	—	—	17	
Infectious Acute Diseases ...	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	
Other Diseases ...	—	2	2	1	—	1	—	—	1	—	—	2	—	—	10	
<i>Totals</i> ...	—	7	11	5	—	4	—	—	2	—	—	13	—	—	48	

GIRLS.

Age.	Number Examined.															Total.
	3	4	5	6	7	8	9	10	11	12	13	14	15			
Speech ...	—	—	—	1	—	1	—	—	—	—	—	—	—	—	2	
Mental Condition ...	—	—	—	1	—	1	—	—	—	—	—	—	—	—	2	
Lungs ...	—	4	3	—	—	—	—	—	—	—	1	2	—	—	11	
Nervous System ...	—	—	3	—	—	—	—	—	—	—	—	1	—	—	4	
Tuberculosis ...	—	—	—	—	2	—	—	—	—	—	—	2	—	—	4	
Rickets ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Deformities, Spinal Diseases, etc.	—	—	2	—	—	2	—	—	—	—	—	3	—	—	9	
Infectious Acute Diseases ...	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	
Other Diseases ...	—	3	2	—	2	—	—	—	—	—	—	7	—	—	15	
<i>Totals</i> ...	—	7	11	2	5	4	3	—	—	—	1	15	—	—	48	

TABLE IX.—SUMMARY OF THE FOLLOWING-UP OF CASES  
BROUGHT FORWARD FROM 1911.

## BOYS.

Disease or Defect.	Total.	Untreated.	To be Re-examined.	Treated.				Carried forward.	No. on Exclusion Register (if any).	Left School.	Entered on Special Register.	Treated.	Wearing Glasses.	Total.
				Medical Advice Obtained.	Cured.	Improved.	Unchanged.							
Adenoids ...	11	—	—	2	2	—	6	—	1	—	—	—	11	
Tonsils ...	15	—	—	5	3	—	4	—	3	—	—	—	15	
Ears (Hearing) ...	6	—	—	—	2	1	1	—	2	—	—	—	6	
Eyes (Vision) ...	12	—	—	—	1	—	2	—	3	—	—	6	12	
" (Disease) ...	2	—	—	—	—	—	1	—	2	—	—	—	2	
Ringworm... ..	3	—	—	—	2	—	1	—	—	—	—	—	3	
Heart ... ..	1	—	—	1	—	—	—	—	—	—	—	—	1	
Scoliosis ... ..	2	—	—	1	—	—	—	—	1	—	—	—	2	
Glands ... ..	3	—	—	—	—	—	2	—	1	—	—	—	3	
Anæmia ... ..	2	—	—	1	—	—	—	—	1	—	—	—	2	
Bronchitis ... ..	1	—	—	—	—	—	1	—	—	—	—	—	1	
Other Diseases ...	1	—	—	—	—	—	—	—	1	—	—	—	1	
<i>Totals...</i>	59	—	—	10	10	1	17	—	15	—	—	6	59	



TABLE IX.—(continued).—BROUGHT FORWARD FROM 1911.

## GIRLS.

Disease or Defect.	Total.	Untreated.	To be Re-examined.	Treated.				Carried forward.	No. on Exclusion (if any).	Left School.	Entered on Special Register.	Treated.	Wearing Glasses.	Total.
				Medical Advice Obtained.	Cured.	Improved.	Unchanged.							
Adenoids ...	7	—	—	2	2	—	—	1	2	—	—	—	7	
Tonsils ...	10	—	—	2	5	—	—	1	4	—	—	—	10	
Ears (Hearing) ...	7	—	—	3	1	—	—	—	3	—	—	—	7	
Eyes (Vision) ...	13	—	—	1	—	—	—	—	5	—	1	6	13	
" (Disease) ...	1	—	—	—	—	—	—	—	—	—	—	—	1	
Ringworm... ..	5	—	—	—	4	—	—	—	1	—	—	—	5	
Tuberculosis ...	1	—	—	—	—	—	—	—	—	—	1	—	1	
Scoliosis ...	3	—	—	2	1	—	—	—	—	—	—	—	3	
Glands ...	1	—	—	—	—	—	—	1	—	—	—	—	1	
Goitre ...	3	—	—	2	—	—	—	—	—	—	—	—	3	
Anæmia ...	2	—	—	1	—	—	—	—	1	—	—	—	2	
Nasal Obstruction ...	1	—	—	1	—	—	—	—	—	—	—	—	1	
Other Diseases ...	2	—	—	1	—	—	—	1	—	—	—	—	2	
<i>Totals...</i>	56	—	—	15	11	1	—	4	16	—	2	7	56	

TABLE X.—SUMMARY OF THE FOLLOWING-UP OF CASES FOUND DEFECTIVE  
AT ROUTINE INSPECTIONS DURING 1912.

## BOYS.

Disease or Defect.	Total.	Untreated.	To be Re-examined.	Treated.				Carried forward.	No. on Exclusion Register (if any).	Left School.	Entered on Special Register.	Treated.	Classes.	Total.
				Medical Advice Obtained.	Cured.	Improved.	Unchanged.							
Enlarged Tonsils	23	—	—	4	3	—	—	9	—	7	—	—	—	23
Adenoids ...	16	—	—	3	4	—	—	9	—	—	—	—	—	16
Glands ...	4	—	—	—	1	—	—	2	—	1	—	—	—	4
Eyes (Disease)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
" (Vision)	34	—	—	2	—	—	—	14	—	8	—	10	—	34
Ears (Disease)	2	—	—	1	—	—	—	—	—	1	—	—	—	2
" (Hearing)	12	—	—	4	2	—	—	3	—	2	1	—	—	12
Anæmia ...	2	—	—	—	—	—	—	1	—	1	—	—	—	2
General Debility...	2	—	—	—	1	—	—	1	—	—	—	—	—	2
Rickets ...	2	—	—	—	—	—	—	2	—	—	—	—	—	2
Chorea ...	1	—	—	—	—	—	—	1	—	—	—	—	—	1
Heart ...	3	—	—	—	—	—	—	1	—	—	—	—	—	3
Scoliosis ...	4	—	—	2	—	—	—	1	—	—	—	—	—	4
Teeth ...	1	—	—	1	—	—	—	—	—	—	—	—	—	1
Eczema ...	—	—	—	—	—	—	—	3	—	—	—	—	—	—
Boil...	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Scarletina (doubtful)	1	—	—	—	1	—	—	—	—	—	—	—	—	1
Scabies ...	1	—	—	—	1	—	—	—	—	—	—	—	—	1
Bronchitis...	1	—	—	—	—	—	—	—	—	1	—	—	—	1
Goitre ...	2	—	—	—	2	—	—	—	—	—	—	—	—	2
Tuberculosis	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Incontinence	5	—	—	2	—	—	—	2	—	1	—	—	—	5
Ringworm...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pleurisy ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Catarrh (Pulmonary)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<i>Totals</i>	116	—	—	20	15	—	—	48	—	22	1	10	—	116

TABLE X.—(continued).  
GIRLS.

Disease or Defect.	Total.	Untreated.	To be Re-examined.	Treated.				Carried forward.	No. on Exclusion Register (if any).	Left School.	Entered on Special Register	Treated.	Classes.	Total.
				Medical Advice Obtained.	Cured.	Improved.	Unchanged.							
Enlarged Tonsils	17	—	—	2	1	—	—	9	5	—	—	—	—	17
Adenoids	12	—	—	2	—	—	—	9	1	—	—	—	—	12
Glands	3	—	—	—	—	—	—	2	1	—	—	—	—	3
Eyes (Disease)	3	—	—	1	1	—	—	2	1	—	—	—	—	3
" (Vision)	26	1	—	3	—	—	—	8	9	—	—	5	—	26
Ears (Disease)	12	—	—	1	2	1	—	4	4	—	—	—	—	12
" (Hearing)	4	—	—	2	—	—	—	2	2	—	—	—	—	4
Anæmia	4	—	—	—	—	—	—	2	—	—	—	—	—	4
General Debility	4	—	—	—	—	—	—	—	—	—	—	—	—	4
Rickets	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chorea	1	—	—	1	—	—	—	—	—	—	—	—	—	1
Heart	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Scoliosis	3	—	—	—	—	—	—	—	—	—	—	—	—	3
Teeth	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Eczema	3	—	—	1	1	—	—	—	1	—	—	—	—	3
Boil	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarletina (doubtful)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scabies	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bronchitis	3	—	—	—	2	—	—	1	—	—	—	—	—	3
Goitre	1	—	—	—	—	—	—	—	1	—	—	—	—	1
Tuberculosis	2	—	—	—	—	—	—	1	1	—	—	—	—	2
Incontinence	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Ringworm	4	—	—	—	—	—	—	—	1	—	—	—	—	4
Pleurisy	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Catarrh (Pulmonary)	1	—	—	—	—	—	—	1	—	—	—	—	—	1
<i>Totals</i>	102	1	—	13	7	1	—	42	29	1	—	5	102	

