[Report 1917] / Medical Officer of Health, Torquay Borough.

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BOROUGH OF TORQUAY.

ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR 1917.

BY

THOMAS DUNLOP, M.B., C.M., D.P.H.

TOGETHER WITH THE

Annual Reports of the Sanitary Inspectors

AND

Meteorological Observer.

BOROUGH OF TORQUAY, 1917.

Area of the Borough, 3,906 acres.

Rateable value, £207,101.

Population—Census (1901), 33,625.

„ (1911), 38,772.

Registrar General's Estimate.

„ „ „ (1916), 31,540.

„ „ „ (1917), 30,685.

Number of separate occupiers—Census (1911), 8,459.

Density of Population, 7·8 persons per acre.

Corrected death rate, 1917, 18·0 per 1,000. Average for previous five years, 14·5 per 1,000.

Birth rate, 11·7 per 1,000. Average for previous five years, 13·4 per 1,000.

Infantile mortality, 1917, 64·8. Average for previous five years, 92·0.

Death rate from zymotic diseases, ·13 per 1,000.

Mean annual temperature, 50·2.

Hours of bright sunshine recorded, 1,716.

Total rainfall, 25·5 inches.

BOROUGH OF TORQUAY.

ANNUAL REPORT

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Medical Officer of Health

For 1917.

To his Worship the Mayor, and to the Aldermen and Councillors of the Borough of Torquay.

GENTLEMEN,

I beg to present my Annual Report on the health of the inhabitants, and the sanitary circumstances of the Borough of Torquay.

The matter in the report has been curtailed as much as possible, but in view of the constant enquiries made by persons thinking of Torquay as a residence, certain details of our Sanitary condition have to be recorded

I have to thank the members of the Sanitary Committee and of the Town Council for their kindness and support throughout the year, also the Chief Officers of the Borough and Inspectors for their ever-ready assistance.

I am, Gentlemen,

Your obedient Servant,

THOMAS DUNLOP.

THE BOROUGH.

Physical Features and General Characters.

The Borough is situated on a promontory being surrounded by the sea on three sides. This promontory is formed by hilly ridges, running N.E. and S.W. It rises in places about 450ft. above sea level. Thus a large proportion of the district is protected from the cold winds of North and East.

Geology.

The higher areas are composed of Lower Devonian grit and slates and of the Middle Devonian limestone. In the St. Mary-Church and Chelston areas are found rocks of the Permian formation consisting of beds of Breceia—a conglomerate—and sandstone of a deep red colour. There is very little clay in any portion of the district.

METEOROLOGY.

Full details of the Meteorology of the Borough will be seen in the appended Annual Report of Mr. F. March, F.R. Met. Soc., M.P.S., Borough Meteorologist, but the following resumè of the climatic conditions may be of interest:—

	1913.	1914.	1915.	1916.	1917.
Highest Maximum Temperature	76·0	79·1	73·4	79·7	77.3
Lowest Maximum ,,	30·3	29·1	27·1	27·0	24.9
Mean Maximum ,,	58·1	58·3	56·9	56·8	55·5
Mean Minimum ,,	47·4	47·1	45·7	46·2	44·9
Mean of Maximum and Minimum	52·8	52·7	51·3	57·5	50·2
Difference from Average	1·5	1·4	—	0·3	1·1
No. of days on which rain fell	176	173	188	194	173
Total fall in inches	33·17	38·30	41·43	41·53	25·5
No. of hours of bright sunshine	1526·1	1796·2	1704·2	174·2	1716

CLIMATE.

Briefly the winter climate may be described as mild and equable—from its position, it is in most parts, protected from North and East winds. The most important feature is the large amount of sunshine experienced during the winter months.

In summer, the fallacy that Torquay is exceptionally hot has long been exploded, statistics show that on the hottest days the temperature here is five to ten degrees lower than that recorded in London. From its insular position, it is invariably fanned by wind from the sea or Dartmoor in the rear. In fact, it is an ideal holiday resort.

WATER SUPPLY.

The water supply of the Borough is derived from an upland surface gathering ground about fifteen miles from Torquay, on the borders of Dartmoor. The area of the gathering ground is about 2,241 acres, of which the corporation are the owners, all farms and inhabited buildings have been cleared from the gathering ground, thus preventing any menace to the purity of the supply. The water also undergoes filtration

Quality of the Water.

Professor Percy Franklin, after visiting the gathering ground and examining samples of the water, both chemically and bacteriologically, reported as follows :—

"A source of water supply which, in respect of freedom from suspicion, ranks with the best upland surface supplies in the Kingdom. The water also contains such a small amount of lime and magnesia salts that it possesses all the well-known advantages of very soft water, whilst its slightly alkaline reaction prevents it from having any solvent power on lead."

The water is chemically analysed each month, the following is a typical example of the results :—

Physical Characters	
Colour	very pale straw colour
Turbidity	none
Odour	none
Deposit	none
Chemical Results expressed in parts per 100,000	
Total Solids	7·1
Chloride of Sodium	1·6
Hardness	1·7°
Nitrates	·065
Nitrites	nil
Free Ammonia	Trace
Organic ,,	·006
Oxygen absorbed (in 4 hours at 80°)	·104

From this it will be seen, besides being a remarkably soft water, it is free from organic or metalic impurities.

SEWERAGE.

The sewage of the whole district, and most of the storm-water, is conveyed to the main sewer in Fleet Street. That of the low-level system, which comprises the area covered by the Strand, Torbay Road, Vaughan Parade, Victoria Parade, Beacon Hill, George Street, and Swan Street being pumped into the main sewer. The main sewer is seven feet in diameter, and runs from Fleet Street to Hope's Nose, a distance of almost two miles. The outfall is at such a level that the sewage is discharged at all states of the tide. No method of treatment is adopted, as the flow of current is out towards mid-channel beyond Berry Head, and does not under any circumstances return towards the bay.

Sanitary Arrangements of Houses

Practically all the the houses are provided with water closets and with waterwaste preventors. The majority of large houses have been examined and possess Corporation Sanitary Certificates.

Collection and Disposal of House Refuse.

House refuse is removed by the employees of the Corporation under the Surveyor's Department. In most parts of the town it is removed once a week, but in certain parts twice. It is carted to the destructor works in Upton Valley, and there consumed. The destructor is a " Warner Perfectus " of six cells.

All new houses and in houses where Sanitary Certificates are required, suitable sanitary galvanised iron ash bins must be provided.

Elementary Schools.

Matters pertaining to the schools are dealt with in the Report to the Education Authority.

Population and Social Condition.

Torquay is essentially a residential town and health resort:—There are no manufactories in the district.

It is quite impossible to give the correct estimate of the population, but the Registrar General utilising figures from the National Register has calculated the population for the year as 30,685, and this figure has been utilised in preparing our death

rates. As all Military deaths are excluded it is considered this should give a fairly correct estimate. The exclusion of the large proportion of the young male population, who are called up for Military Service, must intensify the effect of the age and sex distribution, which even in normal times shows a larger proportion of females and persons of advanced ages than the country as a whole and as it is impossible to estimate the population in age and sex groups, and the standardising factors dependent on them, these disabilities must remain insoluble.

BIRTHS

As the births registered include those whose parents are soldiers and sailors, the Registrar General advises that our birth rate should be calculated on an estimated population of 34,205.

The total births registered during the year were 401—males 198; females 203; being 58 less than in 1916. Of these 30 were illegimate against 42 the previous year.

	Boys.	Girls.	Illegitimate.
First Quarter	53	61	5
Second ,,	44	45	6
Third ,,	43	41	5
Fourth ,,	53	49	3
Totals	193	196	19

The Ward distribution is as follows :—

	Boys.	Girls.	Illegitimate.
Torre	22	29	1
Waldon	10	11	3
Upton	31	35	—
Ellacombe .	40	51	8
Strand	18	12	2
Torwood	10	10	1
St. Mary-Church ..	23	19	3
Babbacombe ..	23	13	—
Chelston	16	16	1
*Totals	193	196	19

*These figures only account for a total of 389 births. The remaining 12 were registered in outside areas but as the parents belonged to Torquay, the births are transferable here.

The birth rate for the Borough is equal to 11·7 per 1,000 per annum, and is the lowest yet recorded. That for England and Wales during 1917 was equal to 17·8 per 1,000 which is also a record.

In view of this constant decline in the birth-rate, the Sanitary Authority of the Borough is taking every possible step to conserve the life of the infant population. To this end they adopted the notification of Births Act in July 1915, and appointed a Health Visitor, and have since April 1917 taken over the responsibility of an Infant Welfare Centre.—(for further information on this latter vide remarks on Infantile Mortality on page 13).

The notification of Births Act, requires that the Medical Officer of Health shall be informed of every birth within 36 hours of its occurrence, the father if resident in the house or anyone in attendance on the mother, at the time being responsible.

During the year out of the 389 births registered by the Registrar of Births, 369 were notified to me in accordance with the Act, 196 being notified by the Medical Attendants and 173 by Certificated Midwives—In 18 cases an official letter was sent to parents, pointing out their neglect in not notifying, and the necessary information was obtained by return of post. Two births notified by an Uncertified Midwife were dealt with by the County Council and resulted in legal proceedings.

VACCINATION.

Owing to the necessity for curtailing the report I have ommitted the usual table giving the results of vaccinations for a series of years—The figures for the Torquay Sub-Registration District furnished by the courtesy of Mr. Drew Edwards. the Vaccination Officer are :—

1916.	Total births	474
	Successfully Vaccinated	176
	Insusceptible of Vaccination	2
	Certificate of Conscientious Objectors ..	223
	Died Unvaccinated	41
	Postponed by Medical Certificate ..	10
	Removed to other areas	16

The above figures record the same old story. This yearly increase in the number of unvaccinated persons is likely, in view of an outbreak of small-pox, to have disastrous consequences on a health resort such as Torquay.

INFECTIOUS DISEASES.

Under the Torquay Harbour and District Act 1886, provision was made for the compulsory notification of the dangerous infectious diseases. It also contained similar clauses to those in the Infectious Diseases Prevention Act 1890, which rendered its adoption unneccessary.

During the year, 176 notifications were received and were composed of :—

Diphtheria	13
Erysipelas	8
Scarlet Fever	7
Enteric Fever	1
Ophthalmia Neonatorum	1
Cerebro-Spinal Fever	1
Measles	145
Total	176

Excluding Measles, this a highly satisfactory record.

Besides the above 123 cases of Pulmonary Tuberculosis were notified and 33 of other forms of Tuberculosis.

Cases Isolated in Hospital.

Excluding the 145 cases of Measles, 18 of the remaining 31 were treated in the Isolation Hospital being :—

12 of Diphtheria
5 of Scarlet Fever
1 of Cerebro-spinal Fever

This latter patient was a New Zealand Soldier awaiting his discharge.

Disinfection of rooms after infectious sickness is thoroughly carried out free of cost to ratepayers. All bedding is removed and disinfected in a Thresh Steam Disinfector.

Small-Pox.

No cases were notified. In the event of its occurance the Cockington Isolation Hospital is kept ready for the reception of cases without delay.

Enteric Fever.

Only one case was notified and there was definite evidence of the consumption of cockles within the incubation period. The patient was treated in the Torbay Hospital.

Puerperal Fever.

There were no cases of this disease.

Diphtheria.

Only 13 cases occured, the lowest number recorded for many years past. Of this number 12 or 92% were removed for treatment in the Isolation Hospital. Two cases terminated fatally.

Bacteriological Examinations.

Mr. Quant, of the South Devon Chemical and Bacteriological Laboratory, reports that during the year he examined specimens as follows :—

Diphtheria.	71	Positive	6
		Negative	56
		For freedom from infection	9
Enteric Fever	..	Widal test, 1 negative	
Tubercular Sputum	..	49 examinations	
For Meningococci	..	2	

In the Laboratory attached to the Health Department we have examined 78 specimens from inflamed or suspicious throats of children attending the elementary schools. Ninety-eight specimens of pathological conditions in diseased animals were also examined.

Scarlet Fever.

Only seven cases were notified, which is an exceptionally low number, five of which were removed. There were no fatal cases.

Cerebro-Spinal Fever.

One case, a New Zealand soldier, was notified, the diagnosis was somewhat doubtful. He was removed to hospital and eventually recovered.

Ophthalmia Neonatorum.

One case occurred.

ISOLATION HOSPITAL REPORT.

For the year ending March 31st, 1917.

At the end of the financial year, 1916, there were four patients in the hospital. From that date till March 31st, 1917, 33 new cases were admitted, making a total of 37 patients treated during the year. The number of the various diseases treated compared with the previous year, are as follows :—

	1915-16	1916-17
Scarlet Fever	48	16
Diphtheria	76	16
,, Carriers ...	2	2
Observation	1	3
Totals	127	37

The patients were under treatment a total of 1,055 days, an average of 28·5 days each. The average stay of scarlet fever cases was 41·3 days, and that of diphtheria 19·1.

The cost of working during the twelve months was £708 3s. 9d. as against £1402 13s. 10d. in the previous year.

VITAL STATISTICS.

The total deaths registered in the Borough in 1917 was 568, from which we exclude 86, those of persons transferable to other sanitary areas and added 80 deaths of Torquay inhabitants who died outside the district.

The net deaths were 562, males 243 and females 319. This is an increase of 20 over that for 1916. Taking the population as 30,685 as estimated by the Register General, the death rate is equal to 18·3 per 1,000 per annum. That for England and Wales during the same period was 14·4 per 1,000. This is an exceptionally high figure and is due for the most part to the extreme cold weather during the spring months, which was very fatal to old people, also it must be remembered that under present conditions it has been impossible to estimate a factor to correct

our population for age and sex distribution and so make it comparable with that of the country as a whole.

		Percentage of Total Deaths.
26 were under one year of age	equals	4·65
2 were 1 year and under 2 years	,,	0·35
4 were 2 years and under 5 years... ...	,,	0·70
16 were 5 years and under 15 years... ...	,,	2·90
14 were 15 years and under 25 years ...	,,	2·45
59 were 25 years and under 45 years ...	,,	10·50
145 were 45 years and under 60 years ...	,,	25·80
296 were 65 years and over	,,	52·65
562 at all ages		100·00

It will be seen that 296 or 52·65 of the total deaths, were of persons of 65 years and upwards.

Infantile Mortality.

The deaths of 26 infants under 1 year of age were registered against 43 in 1916. As there were 401 births registered the Infantile Mortality is equal to 65 per 1,000 births. The rate for England and Wales for 1917 was equal to 97 per 1,000 births.

The following table shows the principal causes of death among infants during the past five years :—

	1917	1916	1915	1914	1913
Measles	—	1	3	—	—
Whooping Cough ...	—	2	1	3	4
Diarrhœa	2	2	3	3	7
Tubercular Diseases ...	2	—	1	2	1
Bronchitis	2	2	8	5	6
Pneumonia	4	5	6	6	11
Premature Birth / Congenital Defects	8	18	10	9	14
Accidents	—	—	—	1	3
All other causes ...	8	13	9	16	12
Totals	26	43	41	45	58

Fuller particulars, giving exact details as to cause of death and the age stated in weeks and months under one year, are given in Table IV., page 24.

This is the lowest mortality yet recorded.

Conservation of Infants Life.

In furtherence of the efforts of the Sanitary Authority in this direction, the Lady Health Visitor, Nurse Mylan, has continued her duties of birth investigation and re-visiting of infants, and has now made the position of Health Visitor an essential part of the work of Sanitary Department. I cannot too strongly emphasise the importance I attach to the work, and there is no doubt that the supervision must tend to the Welfare of the Infants. Nurse Mylan also attends the Welfare Centre and helps with the work there and can render much assistance to the Medical Attendant by her knowledge of the home circumstances of the families:—

During the year she has made

325	Birth investigations
2,476	Re-visits
32	Antenatal Visits
15	Visits to cases of Tuberculosis
10	Visits to Measle cases
Total 2,858	

The Infants Welfare Centre.

After several conferences the Sanitary Authority, in April 1917 took over the responsibility of this Centre, which was previously worked by a Committee of the Queen's Jubilee Nursing Association. The Medical Officer of Health is now responsible to the Maternity and Infant Welfare Committee, to which are co-opted five ladies. The Centre is open every Friday afternoon from 2.30 to 4.30 p.m. All children are weighed and are examined by the Medical Attendant, a loose leaf register being kept of all cases. During each meeting a short talk or demonstration on matters pertaining to hygiene or Infants Welfare is given. The Centre has been moderately well attended, however owing to the extent of the Borough and the hilly nature of the district the Council are contemplating the formation of other centres for the convenience of mothers in other areas.

A successful Baby Week was held in July, when various lectures, demonstration, etc. were given daily, a Baby show was held on the Wednesday, when prizes were given to various classes of infants.

By their continued interest in the welfare of the infants' the Mayor and Mayoress have done much to stimulate this work. Through the instrumentality of the Mayor, a supply of sugar was obtained at a time of much scarcity, which enabled children to receive an adequate supply.

The Causes of Death.

The Local Government Board Table III. on page 22 gives the causes and ages at death.

Deaths from Zymotic Diseases.

The seven principle zymotic disease are small-pox, measles, whooping cough, scarlet fever, diphtheria, fevers (typhus, enteric, continued) and diarrhœa. Only four deaths from such diseases were registered. This is quite a record. The zymotic death-rate is therefore equal to ·13 per 1000.

Influenza accounted for 25 deaths, of whom more than half were aged 65 and upwards.

Measles became epidemic in character towards the end of the year, it was mild in nature and as the weather remained open no deaths were registered.

Tuberculosis.

During the year 214 notification of Pulmonary Tuberculosis were received, these refer however to only 123 cases or notifications under Form A, that is the primary notification of the case. Of the remaining 91 notifications 51 were under Form C—admission to—and 40 under form D.—discharge from a public institution. There were also 33 notifications of other forms of Tubercular disease. Of the cases of Pulmonary Tuberculosis fourteen were discharged soldiers and two were sailors.

Fifty-nine deaths were registered from Pulmonary Tuberculosis, of these eighteen were transferable to other areas, and seven deaths of Torquay residents occurred outside the Borough giving a net total of 48 deaths. The death-rate is therefore equal to 1·5 per 1,000 per annum.

The following table gives the age and sex at death :—

Age period		1—5	5—15	15—25	25—45	45—65	over 65	Totals.
Residents	Males	—	—	2	14	4	—	20
	Females	—	2	4	13	2	—	21
Visitors	Males	—	—	2	9	4	—	15
	Females	—	—	2	—	—	1	3
Totals		—	2	10	36	10	1	59

A detailed list of notifications is forwarded each week to the County Medical Officer of Health and they are subsequently forwarded to the District Tuberculosis Officer.

As a means of avoiding unnecessary overlapping of visits and irritation of patients, an arrangement has been made with that official that visits from the Sanitary Department would only be made in such cases as he considered it advisable, and he would periodically send us copies of the particulars of family history and home surroundings of the patients for entry in our registers. The names of all Elementary School children living in such houses are also sent, these are entered on special cards so that the children may be examined at the regular visits of the School Medical Officer.

Free disinfection of rooms and bedding is carried out after death or removal of patients from houses in the Borough.

Cancer, Malignant Disease.

There were 53 deaths registered from the above cause. The age and sex distribution is as follows :—

Age period	under 30	30—35	35—45	45—55	55—65	65—75	over 75	Totals
Males	—	—	—	2	2	7	8	19
Females	—	—	3	9	9	7	6	34
Totals	—	—	3	11	11	14	14	53

The death rate is equal to 1·7 per 1,000 per annum. In a disease such as cancer the age and sex composition of the population has a marked effect, and where it is impossible to calculate a factor for correction our death rate must to some extent appear above the adverage.

SANITARY WORK, 1917.

As Mr. Watson is still on Active Service the work in this department has been carried on by two Sanitary Inspectors, Mr. C. MacMahon and Mr. G. Body, who have been fully occupied with only the most essential work. In consequence of the recommendation of the Local Government Board, to which attention as already been drawn, only a brief summary of the work done will be given this year.

Inspection of Meat and Slaughter Houses.

The whole of this work is under the supervision of Mr. Body, and even under the difficult position now prevailing as regards the supply of meat, has been carried out in the same satisfactory manner as in the past.

The following table gives some idea of the work done :—

Number of Carcases Examined in the Differnt Slaughter-Houses in the Borough.

No.	Bullocks.	Cows.	Heifers.	Sheep.	Pigs.	Calves.	Lambs	Total.
1.	8	6	1	6	22	—	—	4
2.	14	22	3	279	16	—	4	338
3.	5	19	2	141	15	2	—	184
4.	19	62	12	335	39	7	10	484
Abattoir	168	252	98	3704	254	204	225	4905
5.	—	—	—	376	—	—	30	406
	215	362	116	4687	346	213	270	6209

DISEASED OR UNSOUND FOOD DESTROYED.

Organs.	Diseases.											
	Tuberculosis.	Flukes.	Cirrhosis.	Abscess.	Cysts and Water Bladders	Strongyli.	Inflammation.	Pleurisy.	Injury.	Actinomycosis.	Unsound, &c.	Totals.
Bullocks: Lungs ..	1	—	—	—	—	—	—	—	—	—	—	1
Livers ..	1	43	6	8	—	—	—	—	—	—	—	58
Tongues ..	—	—	—	—	—	—	—	—	—	1	—	1
Heads.. ..	—	—	—	—	—	—	1	—	—	—	—	1
Carcases	—	—	—	—	—	—	—	—	—	—	—	—
Cows: Lungs ..	10	—	—	1	3	—	4	—	—	—	—	18
Livers.. ..	7	133	40	7	—	—	—	—	—	—	13	200
Heads.. ..	1	—	—	—	—	—	—	—	—	2	—	3
Tongues ..	1	—	—	—	—	—	—	—	—	1	—	2
Heifers: Lungs.. ..	1	—	—	—	—	—	2	—	—	—	—	3
Livers.. ..	1	11	1	3	—	—	—	—	—	—	—	16
Tongues ..	—	—	—	—	—	—	—	—	—	—	—	—
Heads.. ..	1	—	—	—	—	—	—	—	—	1	—	2
Carcases ..	—	—	—	—	—	—	—	—	—	—	1	1
Sheep: Lungs.. ..	—	—	—	12	—	433	3	—	—	—	—	448
Livers.. ..	—	241	—	433	6	—	1	—	—	—	—	681
Pigs: Lungs.. ..	1	—	—	—	—	—	4	—	—	—	—	5
Livers.. ..	—	—	5	—	1	—	—	—	—	—	—	6
Heads.. ..	21	—	—	—	—	—	—	—	—	—	—	21
Carcases ..	—	—	—	1	—	—	—	—	—	—	5	6
Other Organs:												
Mesenteries	7	—	—	—	—	—	1	—	—	—	1	9
Spleens ..	3	—	—	—	—	—	1	—	—	—	—	4
Stomachs ..	3	—	—	—	—	—	2	—	—	—	—	5
Miscellaneous	9	—	—	7	—	—	8	—	8	—	7	39
Calfs: Carcases ..	—	—	—	1	—	—	—	—	1	—	—	2
Other Foods	—	—	—	—	—	—	—	—	—	—	1	1
Totals ..	68	428	52	472	10	433	27	—	9	5	28	1533

DISEASED OR UNSOUND FOOD DESTROYED. 1917.

	tons.	cwts.	qrs	lbs.
Voluntary surrendered (approximate weight)	2	6	2	20
Surrendered after Inspection (approximate weght)	1	12	2	18
Seized		1	2	20
	4	1	0	2

Samples of Food taken for Analyses.

This work is carried out by County Police. Through the courtesy of Superintendent Crooks, I am enabled to summarise as follows :—

Ninety-six samples were taken, and all except fifteen were samples of milk. Nine cases were found below the normal standard and proceedings were taken against the Vendors, convictions were obtained in six instances.

As is our usual practice 18 samples of milk were examined in our own laboratory. Where these were found below the standard the attention of the police was drawn to it.

Milk Supply.

There are 84 registered dairymen and cow-keepers in the Borough. Their premises are inspected twice a year. Most of the above receive milk from farms situated outside. These farms are also inspected, usually twice a year, but owing to the exigencies of the times, they were only inspected once last year. Through the scarcity of labour farmers experienced some difficulty in giving the cowsheds their usual limewashings. A register is kept of all these farms so that in case of necessity the source of milk in every instance can be traced.

Factory and Workshops.

As far as possible the factories and workshops in the district are visited. Many have had to be closed through shortage of labour. The usual House Office table is omitted this year.

Bakehouses.

There are 34 bakehouses, which are regularly visited.

Common Lodging Houses.

There are now only three Common Lodging Houses, several have been closed owing to the want of customers. They are regularly inspected.

Port Sanitary Work.

Except for Government vessels, there is almost a complete absence of shipping. No infectious sickness has occurred.

The following table gives a resume of work carried out by the Inspectors during the year :—

Housing & Town Planning Act and Public Health Acts.

Tabular Statement of Work Done in 1917.

Houses inspected	175
Houses visited	195
Dirty premises limewashed and cleansed	86
Rooms disinfected	96
Cases of overcrowing abated	—
Defective floors repaired	31
Water supply laid direct from main to tap over sink	20
Defective yards re-paved	37
Lighted and ventilated rooms	15
R. W. P.'s and gutters repaired	55
Nuisances from keeping fowls and animals	5
Ashbin provided for house refuse	28
Roofs repaired	23
Smoke tests applied	230
Water ,, ,,	56
New sets of house drains laid	26
Defective house drains repaired	26
Old masonry drains found and abolished	7
Intercepting traps with fresh air inlets fixed	22
Old "Mason's" and other old type of traps abolished	20
Inspection chamber to drains built	28
Drains ventilated at head of system	16
New sanitary conveniences with water supply fixed	27
Soil pipes fixed outside buildings and ventilated	23
Iron and brick traps removed and earthenware gullie fixed	52
Waste pipes from baths, lavatories and sinks trapped	28
Choked drains cleared	32
Defective W.C. cisterns repaired or new provided	38
W.C.'s repaired and cleaned	15
Glazed sinks fixed	17

Miscellaneous.

Offensive accumulations removed	52
Nuisances from stables and manure pits abated	7
Miscellaneous	69
Re-visits in connection with above work	415
Legal notices	13
Preliminary notices served	38
Letters and communications in connection with the work of the department	452
Verbal notices	6
Written complaints	35
Verbal complaints	48
Slaughter-houses	890
Butchers' Shops	1081
Butchers' Carts	147
Fish Quay	50
Railway Siding	6
Market	52
Other shops	591
Dairies and Cowsheds	223
Number of vessels inspected	8
Houses closed as unfit for human habitation	7

TABLE I.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1917 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.			
		Uncorrected Number.	Nett.						Under 1 year of age		At all ages.	
			Number.	Rate.	Number.	Rate.	of Non-Residents registered in the District.	of Residents not registered in the District.	Number.	Rate per 1,000 Nett Births	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1912.	39000	560	571	14·6	485	12·4	58	52	52	91	479	12·2
1913.	39250	530	535	13·6	495	12·6	45	71	58	108	521	13·2
1914.	39440	533	542	13·1	482	12·2	44	54	45	83	492	12·4
1915.	32520	482	490	12·4	543	16·6	59	92	41	83·6	576	17·7
1916.	31540	449	459	13·3	554	17·2	65	53	43	93·7	542	17·2
1917.	30685	389	401	11·7	562	18·3	88	80	26	64·8	554	18·0

TABLE II.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1917.

NOTIFIABLE DISEASE.	Number of Cases notified.								Total cases notified in each locality.									Total cases removed to hospital
	At all ages.	At Ages—Years.							Torre	Waldon	Upton	Ellacombe	Strand	Torwood	S. Marych.	Babc'mbe	Chelston	
		Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and upwards										
Small-pox ..	—	—	—	—	—	—	—	—	-	-	-	-	-	-	-	-	-	—
Cholera ..	—	—	—	—	—	—	—	—	-	-	-	-	-	-	-	-	-	—
Diphtheria, incl'd'g Membranous croup	13	—	1	6	4	2	—	—	-	-	3	2	2	1	3	2	-	12
Erysipelas ..	8	—	—	—	1	5	2	—	2	-	-	2	-	-	1	-	3	—
Scarlet fever ..	7	—	1	5	1	—	—	—	3	1	-	-	-	-	-	1	2	5
Enteric fever ..	1	—	—	—	—	1	—	—	1	-	-	-	-	-	-	-	-	—
Typhus fever ..	—	—	—	—	—	—	—	—	-	-	-	-	-	-	-	-	-	—
Relapsing fever ..	—	—	—	—	—	—	—	—	-	-	-	-	-	-	-	-	-	—
Continued fever ..	—	—	—	—	—	—	—	—	-	-	-	-	-	-	-	-	-	—
Puerperal fever ..	—	—	—	—	—	—	—	—	1	-	-	-	-	-	-	-	-	—
Cerebro-spinal Meningitis ..	1	—	—	—	—	1	—	—	-	-	-	-	-	-	1	-	-	1
Poliomyelitis ..	—	—	—	—	—	—	—	—	-	-	-	-	-	-	-	-	-	—
Opthalmia Neonatorum	1	1	—	—	—	—	—	—	-	1	-	-	-	-	-	-	-	—
Pulmonary Tuberculosis ..	123	—	3	5	30	69	16	—	26	9	16	25	5	8	7	21	6	—
Other form of Tuberculosis ..	33	1	5	9	9	8	1	—	11	1	4	2	4	3	3	3	2	—
Measles ..	145	4	9	55	42	29	6	—	35	10	12	13	21	9	10	7	28	—
Totals ..	332	6	19	80	87	115	25	—	78	22	35	44	32	21	25	34	41	18

Isolation Hospital or Hospitals, Sanatoria, &c.:—Borough Sanatorium, Newton Road, outside the Borough, and Cockington Isolation Hospital for small-pox.

Total available beds for general Infectious Diseases, 16. Two Diseases can be concurrently treated.

TABLE III. DEATH REGISTERED DURING THE CALENDAR YEAR 1917, CLASSIFIED BY AGE AND CAUSE.

(see Notes next page).

CAUSES OF DEATH.	Net deaths at the subjoined ages of Residents whether occurring within or without the District (a).									Total Deaths whether of Residents or non Residents in Public Institutions in the District
	All ages.	under 1	1 and under 2	2 and under 5	5 and under 15.	15 & under 25.	25 & under 45.	45 & under 65.	65 & upwards	
All causes { Certified (c)	552	24	2	4	16	14	58	144	290	62
All causes { Uncertified	10	2	—	—	—	—	1	1	6	—
Enteric Fever ..	—	—	—	—	—	—	—	—	—	—
Small-pox	—	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	—	—	—	—
Scarlet Fever ..	—	—	—	—	—	—	—	—	—	—
Whooping-cough ..	—	—	—	—	—	—	—	—	—	—
Diphtheria & croup	2	—	—	—	2	—	—	—	—	1
Influenza	25	2	—	1	1	—	4	5	12	2
Erysipelas ..	1	—	—	—	—	—	—	—	1	—
Phthisis (Pulmonary Tuberculosis) ..	48	—	—	—	2	7	27	11	1	17
Tuberculous Meningitis	4	1	—	—	—	1	2	—	—	1
Other tuberculous diseases	11	—	1	—	3	2	2	2	1	3
Cancer, malignant disease ..	53	—	—	—	—	—	3	22	28	—
Rheumatic Fever ..	3	—	—	—	—	—	—	1	2	6
Meningitis (*See* note *d*)	4	—	—	2	2	—	—	—	—	—
Organic Heart Disease	60	—	—	—	—	1	3	21	35	—
Bronchitis ..	45	1	—	—	—	1	—	10	33	2
Pneumonia (all forms)	27	3	—	1	3	—	2	8	10	1
Other diseases of respiratory organs	11	1	—	—	—	—	2	4	4	—
Diarrhœa and Enteritis (*See* note *e*)	2	2	—	—	—	—	—	—	—	—
Appendicitis and Typhlitis ..	4	—	—	—	—	—	1	3	—	1
Cirrhosis of liver ..	2	—	—	—	—	—	—	—	2	2
Alcoholism ..	2	—	—	—	—	—	—	1	1	1
Nephritis & Bright's disease	10	1	—	—	—	—	1	4	4	—
Puerperal fever ..	—	—	—	—	—	—	—	—	—	—
Other accidents and diseases of Pregnancy and Parturition	1	—	—	—	—	—	1	—	—	—
Congenital Debility and Malformation, including Premature Birth ..	11	10	—	—	1	—	—	—	—	—
Violent Deaths, excluding Suicide ..	15	2	—	—	—	—	2	7	4	6
Suicides	1	—	—	—	—	—	1	—	—	—
Other Defined Diseases	202	3	1	—	2	2	8	44	142	19
Diseases ill-defined or unknown ..	18	—	—	—	—	—	—	2	16	—
	562	26	2	4	16	14	59	145	296	62

NOTES TO TABLE III.

The classification and numbering of Causes of Death are those of the "Short List" on page XXV. of the Manual of the International List of Causes of Death.

(*a*) All "transferable deaths" of residents *i.e.*, of persons resident in the district who have died outside it, are *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 like manner to be excluded from these colums. For the precise meaning of the term "transferable deaths" *see* foot note 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 occuring in institutions for the sick and infirm situated within the district, whether of residents or of non-residents, are entered in the last column of Table III.

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

(*d*) Exclusixe of "Tuberculous Meningitis" (10), but inclusive of Cerebro-spinal Meningitis.

(*e*) Title 19 is used for deaths from Diarrhœa and Enteritis at all ages. (In the "Short List" deaths from Diarrhœa and Enteritis under two years are included under Title 19; those at 2 years and over being placed under Title 28.)

N.B.—Deaths of soldiers and sailors occuring in hospitals and institutions in the district are excluded from the total number of deaths registered in the district, and such deaths are in like manner excluded from column 11 of Table III.

TABLE IV.

INFANT MORTALITY DURING THE YEAR 1917.

NET DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER ONE YEAR OF AGE.

CAUSE OF DEATH.		Under 1 Week.	1—2 Weeks.	2—3 Weeks.	3—4 Weeks.	Total under 1 Month.	1—3 Months.	3—6 Months.	6—9 Months.	9—12 Months.	Total Deaths under One Year.
ALL CAUSES.	Certified ..	7	2	-	1	10	6	2	3	3	24
	Uncertified ..	1	-	-	-	1	1	-	-	-	2
Small-pox		-	-	-	-	—	-	-	-	-	—
Chicken-pox		-	-	-	-	—	-	-	-	-	—
Measles		-	-	-	-	—	-	-	-	-	—
Scarlet Fever		-	-	-	-	—	-	-	-	-	—
Whooping Cough		-	-	-	-	—	-	-	-	-	—
Diphtheria and Croup ..		-	-	-	-	—	-	-	-	-	—
Erysipelas		-	-	-	-	—	-	-	-	-	—
Tuberculous Meningitis ..		-	-	-	-	—	-	1	-	-	1
Abdominal Tuberculosis..		-	-	-	-	—	-	-	-	-	—
Other Tuberculous Diseases		-	-	-	-	—	1		-	-	1
Meningitis *(not Tuberculous)*		-	-	-	-	—	-		-	-	—
Convulsions		-	-	-	-	—	-	-	-	-	—
Laryngitis		-	-	-	-	—	-	-	-	1	1
Bronchitis		-	-	-	-	—	1	-	-	1	2
Pneumonia (all forms) ..		-	-	-	-	—	1	-	2	1	4
Diarrhœa		-	-	-	1	1	1	-	-	-	1
Enteritis		-	-	-	-	—	-	-	-	-	—
Gastritis		-	-	-	-	—	-	-	-	-	—
Syphilis		-	-	-	-	—	-	-	-	-	—
Rickets		-	-	-	-	—	-	-	-	-	—
Suffocation, overlying ..		-	-	-	-	—	-	-	1	-	1
Injury at Birth		-	-	-	-	—	-	-	-	-	—
Atelectasis		1	-	-	-	1	-	-	-	-	—
Congenital Malformations ..		1	-	-	-	1	1	-	-	-	1
Premature Birth		5	2	-	-	7	-	-	-	-	—
Atrophy, Debility, and Marasmus			-	-	-	—	-	-	-	-	—
Other Causes		1	-	-	-	1	2	1	-	-	3
		8	2	-	1	11	7	2	3	5	15

Net Births in the year { legitimate - 378. illegitimate - 23.

Net Deaths in the year of { legitimate infants 21, illegitimate infants 5.

BOROUGH OF TORQUAY.

Meteorological Report

FOR THE YEAR 1917,

WITH EXTREMES AND COMPARISON WITH AVERAGES OF PRECEDING YEARS.

26th YEAR OF ISSUE.

BY

FREDERICK MARCH, M.P.S.

Borough Meteorologist.

OBSERVATORY AND INSTRUMENTS

The Observatory is organised and maintained by the Town Council, and is under the supervision of the Meteorological Office, London.

The several Barometers, Thermometers, and Rain Gauges have been verified at Kew Observatory, and are regularly examined by an Inspector on the staff of the Meteorological Office. Readings are all corrected for instrumental errors.

The Hygrometrical Results are deduced from the daily morning readings of the Dry and Wet Bulb Thermometers by means of Glaisher's Tables.

The averages for sunshine are the result of 18 years', for Temperature and Rainfall of 41 years', and for Pressure of 33 years' observations.

The following are the instruments and appliances in regular use, those marked with an asterisk being the property of the Torquay Natural History Society, and lent by them to the town :—

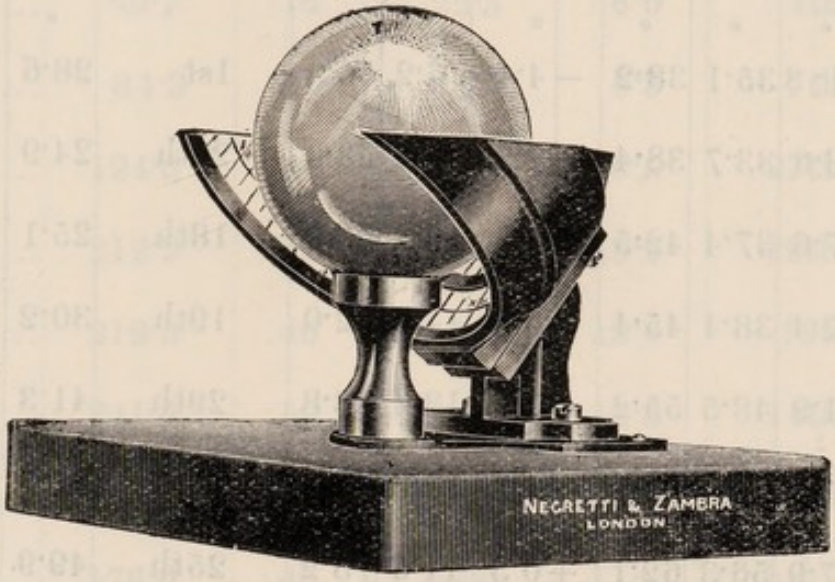
* The **Barometer** is a Fortin Standard, and is read twice daily, at 9 a.m. (local time) and at about 5 p.m. All readings are reduced to 32° F. and mean sea level, and are thus comparable with readings similarly reduced

* An **Aneroidograph**, by Richard Freres, gives in graphic manner the alternations of pressure.

Two double-louvred **Stevenson's Screens**, each containing **Dry** and **Wet Bulb**, and **Maximum** and **Minimum Thermometers.** The instruments are of

standard make (Negretti & Zambra), and are so placed that the bulbs of the hygrometer are four feet above the level of the ground. One of these sets has been working throughout the year at Cary Green, where the published temperatures have been taken ; the other in the Princess Gardens.

The **Rain Gauges** are of copper, by Casella, and of the Snowdon pattern. They are placed : one on Cary Green, one in the Princess Gardens, with the upper edges 12 inches above the level of the ground.



A third *Stevenson's Screen, also double-louvred, has been in position in the Princess Gardens, and has held a *Thermograph, or Self-recording Thermometer, and an Ozonometer.

The **Grass Minimum** is placed in the Princess Gardens an inch above the ground.

The **Sunshine Recorder** is situated on the covered shelter at the southern end of the Pier deck, and is a Curtis' Improved Campbell-Stokes instrument, by Negretti & Zambra, fitted with a 4-inch spherical lens of crown glass, working on the principle of the burning-glass.

SHADE TEMPERATURES

Taken at 9 a.m. (Local Time)

1917.	Maximum *mean.*	Minimum *mean.*	Max. & Min. *mean.*	Difference from Average.	Range *mean.*	Highest.	Date.	Lowest.	Date.
	°	°	°	°	°	°		°	
Jan. ...	41·3	35·1	38·2	−4·4	6·2	56·0	1st	28·6	17th
Feb. ...	43·0	33·7	38·4	−4·3	9·3	53·0	20th	24·9	5th
March .	47·6	37·4	42·5	−1·7	10·2	56·2	18th	25·1	8th
April ..	52·4	38·4	45·4	−3·0	14·0	62·0	19th	30·2	4th
May...	61·9	48·5	55·2	+1·6	13·4	73·8	29th	41·3	8th
June...	65·6	53·8	59·7	+1·2	11·8	77·3	18th	47·7	4th
July ...	67·9	56·3	62·1	+0·3	11·6	73·2	25th	49·9	11th
Aug....	66·0	56·1	61·1	−0·6	9·9	72·2	5th	51·6	1st
Sept...	64·6	53·8	59·2	+0·9	10·8	74·1	8th	47·6	30th
Oct. ...	55·9	44·4	50·2	−2·3	11·5	67·0	2nd	34·4	28th
Nov....	54·6	45·8	50·2	+2·9	8·9	61·7	21st	36·0	26th
Dec. ...	44·9	35·9	40·4	−3·7	8·8	54·3	1st	27·9	19th
Year	55·5	44·9	50·2	−1·1	10·6	77·3	Jun. 18th	24·9	Feb. 5th

DURATION OF BRIGHT SUNSHINE

In hours and tenths of an hour,

As recorded by the Campbell-Stokes' Standard Instrument.

1917.	Total Bright Sunshine.	Percentage Actual of Possible.	Difference from Average.	Greatest Amount in one day.	Date.	Sunless Days.
	Hours.	%	Hours.	Hours.		
January ...	40·7	16	− 22·3	6·0	4th	13
February ...	84·3	31	− 4·9	8·3	7th	9
March	124·8	34	− 10·3	10·5	27th	7
April	212·9	52	+ 27·6	13·2	29th	0
May	219·5	46	− 7·0	13·4	19th	3
June.....	241·8	50	+ 23·8	14·8	14th	2
July.....	197·4	41	− 43·2	13·3	21st	0
August.....	176·6	40	− 41·0	11·2	18th & 31st	3
September..	133·6	36	− 34·1	12·3	7th	5
October ...	128·7	39	+ 19·0	9·3	28th	4
November..	68·1	26	− 14·2	6·8	15th	9
December..	88·0	37	+ 32·4	6·8	3rd & 5th	7
Year...	1716·4	39·0	− 75·2	14·8	June 14th	62

RAINFALL

In inches and hundredths.

1917.		Total Amount.	Difference from Average.	Rainy Days.		Greatest fall in 24 hours.	Date
				Days of 0·01 and upwards	Days of 0·04 and upwards		
January ...	C. G.	1·02	−2·16	11	7	0·26	7th
,,	P. P.	1·02		11	7	0·28	15th
February ...	C. G.	0·76	−2·17	10	6	0·38	19th
,,	P. P.	0·73		10	6	0·38	19th
March	C. G.	3·47	+0·74	17	12	0·99	11th
,,	P. P.	3·19		17	12	0·93	11th
April	C. G.	1·47	−0·71	12	10	0·32	1st
,,	P. P.	1·44		12	10	0·30	1st
May.....	C. G.	1·71	−0·24	11	8	0·51	20th
,,	P. P.	1·72		11	8	0·52	20th
June.....	C. G.	2·43	+0·33	16	10	0·68	5th
,,	P. P.	2·53		16	10	0·78	5th
July	C. G.	1·88	−0·33	13	9	0·49	24th
,,	P. P.	1·99		13	10	0·44	24th
August.....	C. G.	5·09	+2·38	24	16	0·76	27th
,,	P. P.	5·03		24	16	0·74	27th
September	C. G.	1·65	−0·54	10	4	0·72	1st
,,	P. P.	1·60		9	3	0·71	1st
October ...	C. G.	3·74	−0·40	26	19	0·61	29th
,,	P. P.	3·43		26	20	0·58	29th
November	C. G.	1·09	−2·49	13	6	0·59	3rd
,,	P. P.	1·06		13	7	0·54	3rd
December	C. G.	1·19	−3·12	11	5	0·46	1st
,,	P. P.	1·22		11	5	0·50	1st
Year.....	C. G.	25·50	−8·71	174	112	0·99	Mar. 11th
,, ...	P. P.	24·96		173	114	0·93	Mar. 11th

HUMIDITY, CLOUD, OZONE, AND WIND.

1917.	Humidity.			Cloud	Ozone. Percentage of possible.			Wind.
	Dry Bulb *mean.*	Wet Bulb *mean.*	Relative Humidity.	Cloud *mean* 1 to 10.	*Mean* Daily Amount.	Greatest Daily Amount	Least Daily Amount.	Prevailing Quarters.
	°	°	%		%	%	%	
January	37·5	35·9	86	8·0	42	75	10	N.W.
February	38·1	36·5	86	6·0	28	60	10	N.W.
March ...	42·4	40·0	81	7·5	49	95	10	N.W., S.E. & S.W.
April ...	46·8	42·3	69	4·5	55	70	30	N.W.
May	55·7	51·5	74	6·0	51	80	10	E.
June.....	60·9	56·4	73	6·0	47	90	10	E. & S.E.
July	61·8	57·9	77	7·0	37	70	10	S.E.
August...	61·6	57·9	78	7·0	45	60	30	W.
Sept. ...	59·3	56·8	84	6·5	35	60	10	S.W.
October	50·5	47·9	82	6·0	45	80	10	N.W.
Nov.... ...	50·0	47·7	84	7·0	43	80	10	N.W.
Dec.	39·9	37·7	82	5·0	38	60	10	N.W.
Year...	50·4	47·4	79	6·4	43	95	1 0	N.W.

BAROMETRIC PRESSURE

In inches and thousandths.

Reduced to 32° F. and Sea Level.

1917.	*Mean* of Month.	Difference from Average.	Highest Reading.	Lowest Reading.	Extreme Range of Pressure.
January	29·951	−0·112	30·396	29·165	0·231
February	30·147	+0·174	30·477	29·769	0·608
March	29·857	−0·071	30·700	29·105	1·595
April	29·985	+0·062	30·576	29·189	1·387
May	29·977	+0·011	30·341	29·551	0·790
June.....	30·052	+0·042	30·327	29·595	0·732
July	30·092	+0·089	30·327	29·738	0·589
August.....	29·786	−0·190	30·098	29·106	0·992
September	30·121	+0·078	30·429	29·780	0·649
October	29·860	−0·085	30·330	29·056	1·274
November	30·213	+0·283	30·653	29·515	1·138
December	30·332	+0·409	30·626	29·505	1·121
Year	30·031	+0·056	30·700	29·056	1·644