# Contributors

Bognor Regis (England). Urban District Council.

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# BOGNOR URBAN DISTRICT.

# ANNUAL REPORT

OF THE

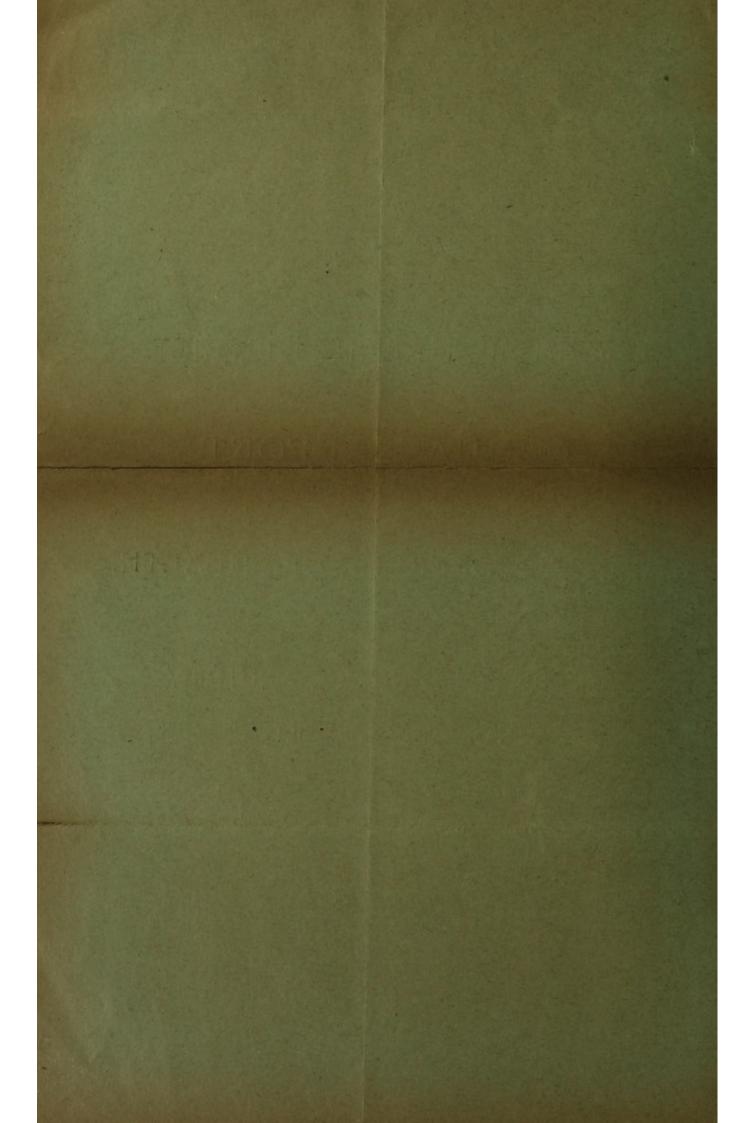
# MEDICAL OFFICER OF HEALTH.

AND

# CLIMATOLOGICAL SOCIETY

# FOR THE YEAR 1915."

COLEMAN & MUNDAY, PRINTERS, BOGNOR.



#### TO THE CHAIRMAN AND MEMBERS OF THE BOGNOR URBAN DISTRICT COUNCIL.

### GENTLEMEN,

I beg to lay before you my 26th Annual Report on the health and sanitary condition of the Urban District of Bognor for the year ended 31st December, 1915.

The area of the District is 865 acres and contains about 2092 inhabited houses.

During the last five years the increase in the number of inhabited houses has been as follows :

In	1911	there	were	1885	Inhabited	Houses.
,,	1912	,,	"	1994		,,
33	1913	,,	**	2037	"	,,
,,	1914	,,	"	2084	,,	"
"	1915	,,	,,	2092	,,	,,

31 plans of new buildings and alterations to old buildings were approved by the Council. 10 buildings were erected during the year and 4 are in course of erection.

### ESTIMATE OF CIVIL POPULATION, 1915.

The war has made it impossible to adhere to the methods of estimation of local and national populations hitherto in use. Men of military age have been largely drafted to military training centres or sent abroad with the army, and the remainder of the adult male population, as well as, to a lesser extent, the female population, has migrated on an unprecedented scale into areas other than those in which it was enumerated at the last census.

Under these circumstances estimates of local populations based on the census returns were clearly inadmissible, and it became necessary to search for a substitute. Fortunately this was ready to hand in the shape of the National Register, which referred to a date only six weeks removed from that for which estimates were required, viz., the middle of the year 1915. No doubt this does not form a perfect record as it is known that a number of persons escaped registration. From investigations however which have been made in another connexion it appears that the defects in the register taken as a whole are not on such a scale as to affect seriously the estimates of the population based upon it. By the method described below it was possible to derive from these returns estimates of the civil population only of each administrative area on August 15th. No attempt has been made to increase these by allowance for members of the fighting forces because, apart altogether from the difficulty of ascertaining the average military population of each district during the year, experience has shown that under present circumstances only civilian deaths can be tabulated for local areas. If military deaths were to be included they would have either to be dehited to the area in which they occurred, a course which would render the death rates of districts containing large military hospitals meaningless, or to the area of residence. An attempt made to pursue the latter course has had to be abandoned owing to military authorities having been unable to furnish to the registrars the necessary information. It has been found necessary therefore to limit the tabulation of deaths by local areas to deaths of civilians, and under these circumstances the civilian population is obviously the proper one to use for the calculation of death rates.

An additional advantage in the use of National Register populations is that these consist of habitual residents in each locality and not merely of the persons who happened to be present therein on a certain date. The deaths tabulated from the year 1911 onwards are also those of habitual residents only, and therefore the use hitherto of populations which in certain cases included very large institutional elements chiefly composed of non-residents introduced in these cases serious errors into the rates calculated from them, as pointed out in the Registrar General's Annual Reports. This source of error now of course disappears for the time being, and in such districts an unavoidable break in the continuity of the previously misleading rates will result. In any case however the maintenance of continuity is under present circumstances obviously impossible, and it is felt that the present estimates will furnish death-rates calculated to indicate as nearly as may be the health conditions of the civil population.

The method by which the estimates of civil population have been derived from the National Register returns may now be described.

The ratio of the total population less the males aged 15 to 65 years to the number of females aged 15 to 65 years at the date of the census was calculated for each administrative area, and this ratio was applied to the number of females on the National Register; the resulting product plus the number of males aged 15 to 65 years on the National Register was taken to be the number of the Civil population of the district. A small adjustment was necessary in order to make the sum of the estimates for the several districts equal to the estimate for the Country as a whole made on same basis. Further the population in institutions was not registered and this (taken to be the same in the aggregate for England and Wales as at census date) together with a number of persons of no fixed abode were distributed evenly over the whole Country. These two adjustments raised the original estimates by about one per cent.

The question of the population to be used for the calculation of birth rates has also required consideration. The births registered are not only those of the children of civilians, and the estimates of civil population therefore form an unsuitable basis for the calculation of birth-rates. It is impossible to frame any estimate that would give reliable birth-rates, and it is suggested, therefore that the birth-rates for 1915 be based upon the existing estimates of total population for 1914. These will sometimes be seriously in error owing to extensive migration having occurred. Although in such cases the Registrar General does not possess the local information necessary for applying any correction, it is not suggested that this fact need preclude medical officers of health from making use of their opportunities in this direction.

Difficulties, which will probably prove insoluble, remain as to estimation of populations in sex and age groups and the standardizing factors dependent upon them. Moreover the present method of estimation will obviously not apply to 1916 or subsequent years, unless the National Register is effectively kept up to date or further enumeration made. Nothing can at present be decided as to these matters.

By the direction therefore of the Registrar General the death rate for the District is calculated on the estimate of the National Register which gives the estimate of the population of the Urban District of Bognor as 7673. I do not consider that this estimate at all adequately represents the population of Bognor. By the census of 1911 the population was then 8142; and since that date there has been an increase of 209 in the number of inhabited houses. The birth rate is calculated on the estimate of the population for 1914, returned as 8779.

	Males.	Females.	Total
January	5	10	15
February	4	6	10
March	3	4	7
April	3	7	10
May	1	3	4
June	4	2	6
July	5	5	10
August	4	9	13
September	3	2	5
October	4	5	9
November	5	3	8
December	3	6	9
	44	62	106
	and the second se		

The gross number of deaths during the year was 106, viz :--44 males and 62 females. These deaths were distributed over the 12 months as follows :---

Included in this number are nine deaths of non residents which occurred in the District.

I have received from the County Medical Officer the names of six Bognor residents who died in the Royal West Sussex Hospital or in the Workhouse Infirmary during the year, and of one Bognor resident whose death occurred outside the Urban District of Bognor. These deaths, in accordance with the instructions of the Local Government Board, are not included in the figures used in arriving at the death rate of the District, but they are included in Table III which deals with deaths at the various ages of residents whether occurring in or beyond the District.

The total number of deaths, and the death rates since the increase of the area of the District, which took place on 1st October, 1900, are as follows :---

	Total.	Rate.
1901	66	10'5
1902	80	12'4
1903	76	11'4
1904	82	11.9
1905	71	10.9
1906	66	9.0
1907	75	10.0
1908	69	8'9
1909	103	13.0
1910	78	9.6
1911	96	11.7
1912	106	12.6
1913	102	11'8
1914	108	12'3
1915	106	13'8

The estimated death rate as calculated on the estimate of the National Register is 13'8 per

The various ages at which death occurred during the year under report were as follows :--

U	nder	1 ye	ar			9
1	year	and	unde	r 5	years	3
5	years		33	15	,,	6
15	,,	"	"	25	"	0
25	59	,,		45		11
45		"	"	65		26
65	,,	"	**	80	,,	37
80	"	and	over			14
						106

The ages of death of those of 80 years and upwards were as follows :---

1	at	82
3	,,	83
1		84
2	.,	86
2	••	87
2	,,	89
1	,,	93
1	.,,	94
1	,,,	95

The chief causes of death at the various ages will be found in Table III.

During the year there were in the District, as stated above, nine deaths of Infants under one year of age which gives an Infantile Mortality Rate, as calculated on the Estimate of the National Register of 1'1 per 1000 general population, and 68'1 per 1000 births registered.

These were distributed over the 12 months as follows :---

	Males.	Females.	Total.
January	_	1	1
February	1	1	2
March	-	_	-
April	1	-	1
May	-	-	-
June		-	-
July	2	_	2
August	1	-	1
September	_	-	-
October	1	1	2
November		-	_
December	-	-	
	6	3	9
		and the second sec	

Under the Infectious Diseases Notification Act, 1889, adopted by your Council in 1891, I have received 44 notifications, viz :--Scarlet Fever 14, Diphtheria 26, Cerebro-Spinal Fever 1, Erysipelas 3.

The totals notified during the last 10 years were as follows :---

1906	 35	1911	 43
1907	 38	1912	 22
1908	 33	1913	 17
1909	 17	1914	 11
1910	 46	1915	 44

The above notified cases were spread over the 12 months as follows :--

	Scarlet Fever.	Diphtheria.	Cerebro Spinal Fever.	Erysipelas.
January		2	-	1
February	1		-	1
March	-	-	-	-
April	3	-	1	
May	5	-	-	-
June	2	-	-	-
July	-	-	-	1
August		7	-	-
September	1	7	-	-
October	-	7		-
November	2	3	- *	-
December		-		-
	14	26		3

Eight of the cases of Scarlet Fever and seven of the cases of Diphtheria were "imported" cases; the infections being brought by visitors into the town.

Eleven of the cases of Scarlet Fever and twelve of the cases of Diphtheria were removed to the Isolation Hospital ; of these there were no deaths from Scarlet Fever but three from Diphtheria.

The accommodation at the Isolation Hospital provides 12 beds for Scarlet Fever patients namely, 6 male and 6 female; and 12 beds for Diphtheria patients, namely, 6 male and 6 female; this accommodation is ample under present circumstances.

Disinfection of premises occupied by patients suffering from notifiable diseases was carried out to the satisfaction of the Sanitary Authority in all cases.

Under the Public Health (Tuberculosis) Regulations, 1912, which requires notification of all cases of Tuberculosis, and which came into force 1st February, 1913, I have received 14 certificates which were classified as follows :---

	Males.	Females.
Pulmonary	3	3
Non-pulmonary	5	3

A dispensary is provided at Chichester for the treatment, when necessary, of these cases.

There is no accommodation for these cases in the Urban District of Bognor.

The number of births registered in the District was 130; namely, 79 males and 51 females.

This gives a birth-rate, calculated on the estimate of the population for 1914, of 15'0 per 1000 estimated population.

	Males.	Females.	Total
January	4	3	7
February	3	3	6
March	6	4	10
April	8	5	13
May	7	2	9
June	5	7	12
July	10	4	14
August	5	7	12
September	7	3	10
October	7	6	13
November	8	5	13
December	9	2	11
	79	51	130

The births were distributed over the 12 months as follows :---

The figures for the previous five years were as follows :---

	Males.	Females.	Total.	Rate.
1910	58	72	130	16'0
1911	81	71	152	18'5
1912	65	63	128	15.2
1913	76	73	149	17'3
1914	78	85	163	18'5

1911	 	11
1912	 	8
1913	 	8
1914	 	8
1915	 	6

I have drawn special attention to these figures as, in spite of certain rumours to the contrary, there have been a smaller number of illegitimate births in the District than in previous years.

Under the notification of Births (extension) Act of 1915, provisional arrangements have been made under a scheme formulated by the West Sussex County Council whereby a Nurse already working in the town under the auspices of the Sussex County Nursing Association, as School Nurse, Tuberculosis Visitor, and Health Visitor, receives from the County Medical Officer of Health a list of the births notified, with instructions therein as to visiting the Mothers, and she in return submits periodical reports to the County Medical Officer. The suggestion is being considered as to whether the same Nurse could be employed in visiting cases of Measles notified under the Notification Act, and cases of Whooping-cough coming under my observation. The work, however, being in its infancy I am unable to report as to what the ultimate outcome will be so far as regards the results.

The duty of the Health Visitor is tactfully and judiciously to advise the mother as to the care and general management of the baby, as to sleep, clothing, feeding, &c. Leaflets containing concise instructions have been prepared, and are left with the mother.

Four visits are required from the nurse in the case of normal and healthy children, and more frequent visits for weakly children. When ceasing to visit a healthy infant the Health Visitor should ask the mother to communicate with her if the baby ceases to thrive at any future time.

The duty of the Health Visitor is also to observe any sanitary defect and to report the same to the Medical Officer of Health on the special form provided.

I am glad to state that, in view of the very small Infant Mortality Rate and the healthiness generally of the children of Bognor, the services of the Health Visitor would seem to be less frequently required than in districts which are more crowded and unhealthy. There are cases, however, and especially of sickly and weakly children, where the services of the Health Visitor could be extremely helpful.

The Sea fishing forms the principal industry of the town, and no trade is carried on which could have any prejudicial influence on the public health. For years the locality has been a resort for persons seeking rest and restoration to health.

The aspect of Bognor is almost due South; it is sheltered from the East and North-east winds by the South Downs. The air is remarkably pure, balmy, and bracing, having the mildness of the Southern, and the dryness of the East Coast. The surface soil is gravelly and very porous, the roads dry rapidly after rain. Fogs are rare, and in summer few days occur without breezes tempering the heat. The prevailing wind is South-west. Snow is rarely seen and when it falls it disappears rapidly. The sands decline gradually from the parade, constituting a safe play ground for children. At high tide the sea reaches up to the parade, the foreshore thus getting well washed twice daily.

The Water supply of the town is ample in quantity and still maintains its high standard of purity as shewn by the accompanying report. It is drawn from deep wells at the foot of the downs about 7 miles distant, where there is a pumping station which fills a covered service reservoir on the side of the hill, from which the water falls by gravitation to the town.

The Company have improved their supply by laying a New Supply Main through Walberton and Yapton, which joins on to the Felpham Mains. This gives more pressure, (which was needed), to the Bognor Main; and it also gives the additional security that, should the Main in the Shripney Road be at any time broken or unusable, the water could still reach the town by way of Walberton, Yapton and Felpham.

> THE LABORATORY, 11, BILLITER SQUARE, LONDON, E.C.

REPORT ON A SAMPLE OF WATER RECEIVED FROM F. J. MARTIN. ESQ., ON BEHALF OF THE BOGNOR WATER COMPANY, BOGNOR.

The sample was quite clear and had a very faint blue tint. Its composition, in parts per 100,000, was found to be as follows :---

Chlorine	2.30
Sulphuric Acid (SO3)	0'88
Nitrie Acid (N2O5)	1.82
Phosphorie Acid	None
Free Ammonia	0'0011
Albuminoid Ammonia	0'0018

Oxygen absorbed	from permanganate at	88°F. in 15 mins.	0.013
Ditto	ditto	4 hrs.	0'025
Total solids drie	d at 212°F.		32'96
Loss on Ignition			3'04
Appearance of a	olids on heating		No visible change.
Hardness-Pern	nanent		4'3
" Tem	porary		22.4
" Tota	1		26.7

BACTERIOSCOPIC EXAMINATION :--

B. Coli-not detectable in 36 cubic centimetres.

The composition of the supply has remained unchanged since the date of the last analysis. Its quality is in every way perfectly satisfactory.

### OTTO HEHNER.

The milk supply is chiefly imported from the neighbouring farms. DAIRIES, COW SHEDS AND MILK SHOPS ORDER.

The scheme, inaugurated by the Council in 1912, under which a Veterinary Surgeon was appointed to make periodical inspections of the Dairies, Cowsheds, Milk Shops, and Slaughterhouses of the Town, has been successfully and satisfactorily carried out during the past year. The Veterinary Inspector reports that the Cow-keepers and Dairymen have now been educated to the necessity of employing sanitary methods and ensuring cleanliness. From the Annual Report of the Inspector it is evident that the improvements, which have been mentioned in my previous reports have not been allowed to relapse ; and it is interesting to learn that so far as tuberculosis is concerned there has been a marked decrease in the number of cases discovered in the herds during the year under report. It is also gratifying to learn that the Cow-keepers and Dairymen have fallen in with the suggestions made to them, and have striven, to their utmost, to meet the requirements which, in the interests of cleanliness and sanitation, have been submitted to them by the Inspector.

The following Extract from the last quarter's report may be interesting :-

"I am glad to state that there has been a minimum of sickness amongst these herds; and during the quarter I have not had to reject a single animal as being tuberculous; neither have I found any indurated or diseased udders."

During the Christmas killing of the fat stock in the Town, I visited the slaughter-houses and can only compliment the butchers on the method and dispatch with which the slaughtering was carried out. I have also examined from time to time, the meat intended for human consumption, but have not discovered any unfit for human food.

#### MAINTENANCE OF LIVE STOCK ORDER.

On the 25th of August, a letter was received from the Board of Agriculture, enclosing a Memorandum upon the subject of this Order, and the restriction of slaughtering in-calf and in-pig animals and of calves; and asking that copies of the Memorandum and Order might be forwarded to the various Auctioneers, &c., and to the owners of slaughter-houses, with a request to them to take note thereof. The Clerk reported that he had handed the copies of the Memorandum to the Veterinary Inspector, asking him to deliver the same to the persons mentioned.

Samples.	Number Analysed.	Genuine.	Adulterated.
New Milk	11	9	2
Preserved Crean	n 3	3	-
Olive Oil	l	-	1
Cocoa (loose)	1	1	<u>·</u>
Flour	3	3	-
Spirits	1	1	
Coffee	1	1	-
Butter	2	2	-
Sausages	1	1	-
	24	21	
	and the second se		

Under the Sale of Food and Drugs Act, 24 samples were taken during the year for the purpose of analysis by the Public Analyst.

No fish, fruit, or other foods have been condemned during the year.

The sanitary condition of the premises where foods are prepared, stored, or exposed for sale is satisfactory.

There are no underground bakehouses in the district.

#### SEWAGE WORKS.

The work in connection with the construction of the Sewage Pumping Station and Sewage outfall remains at a standstill, owing to the litigation which has arisen between the Contractor and the Council; and I regret to say that, even if the litigation were at an end, it would be impossible for the Council to carry on the work while the war is in progress; as, at the request of the Local Government Board, the Council has stopped all expenditure on constructional works. The present sewerage system has, however, during the year, again worked very well; and, with the exception of one or two cases of flooding of basements in Park Road and Park Terrace during very heavy rainfall, there have been no complaints made to me on the matter. The construction of a new surface water drain in Park Road has been decided upon by the Council, and it is hoped that when this has been completed the cause for complaint will be remedied.

During the past year special attention has been given to the collection of House Refuse and so carefully has the work been done that very few complaints of non-removal have been made. During the early spring, bills were issued to all householders urging them to kill all flies and on no account to allow any heaps of filth or rubbish, wherein flies could possibly breed, to remain on their premises. These bills were also posted on all public posting stations.

Sanitary dustbins, with covers, have been provided where necessary.

The Destructor, which has been working since October, 1911, still continues to be working satisfactorily. During the year under report, 3163 loads of refuse have been burnt; and 88 loads of clinkers, 16 loads of ashes, and 1 load of dust have been used in road construction. The sale of 216 loads of ashes to brickmakers has realised £32 8s.; of ashes sold to private people, other than brickmakers, 11/-; of clinkers £4 13s. 6d.; and of bottles £16 19s. 10d.; Total £54 12s. 4d. It is satisfactory to note that there have been no complaints concerning the smoke from the chimney. During the year 71 Nuisances were reported to the Sanitary Authority. In 32 of these cases notices were served for the abatement which have all been complied with. The other 39 cases were dealt with without it being necessary to serve notices. The defects were as under:--15 defects in house drainage; 1 defect in other drainage; 51 houses without proper dustbins; 2 complaints as to burning garden rubbish; 1 insanitary yard at rear of house; 1 pig-wash tub without cover.

Two cases of overcrowding were reported which were dealt with.

The Public Elementary Schools are supplied with town water and are in a sanitary condition. During the vacations they are thoroughly cleansed and disinfected.

The Public Elementary Schools have been closed by the order of the County Medical Officer of Health on account of illness for the following periods:—Bognor (South Bersted) from April 15th to April 30th,—two weeks—for measles; Bognor Council (Infants') from April 23rd to May 21st, —four weeks for measles; Bognor (Roman Catholic) from June 24th to July 9th—two weeks—for measles; Bognor Council (Infants') from July 7th to end of term—four weeks—for measles; Bognor (Nyewood) from November 2nd to November 16th—two weeks—for diphtheria and sore throats.

A special School Medical Officer is appointed by the County Council for the inspection of the children in the Public Elementary Schools.

The Factories on the Register at the end of the year, under the supervision of the Council are 11 in number and are classified as follows :---

Steam Laundry	1	Printers	2
Stone Mason	1	Shoemakers	1
Forage Contractors	2	Motor Works	4

In every one of these a copy of the Factory Acts is hung in a conspicuous position.

The Workshops on the Register at the end of the year were 77 in number and are classified as follows :---

Bakehouses	10	Dressmakers	14
Tailors	6	Laundries	5
Carpenters	9	Shoemakers	7
Plumbers	5	Coach Builders	2
Horse Farriers, &c.	4	Watchmakers	4
Undertakers & Cabinet Makers	4	Cycle Manufacturers	4
Harness Makers	2	Brick Makers	1

All the above Factories and Workshops have been inspected during the year.

Systematic inspection of the District have been made from time to time, or as occasion required, by myself, or the Sanitary Inspector. Regular monthly reports of the work have been laid before the Sanitary Committee. Besides this general supervision, I have paid 38 special visits in cases where required.

The scavenging and watering of the streets under the control of the Council have been thoroughly and systematically carried out. The work in this department is greatly increased during the summer months. Although the day excursions were abandoned on account of the war, the number of visitors to the Town during the summer months was in excess of former years. During the past year very few road repairs have been undertaken in order to economise as much as possible. Fortunately, when the war broke out, most of the highways were in a thorough state of repair and needed little attention. The tarring of the road surfaces during the summer months was again undertaken; but owing to the shortage of labour the Town Surveyor was unable to do as much as in former years. Granite Chippings are used almost exclusively for dusting over the tarred surface; when rolled in by a steam roller the results are in every way satisfactory. Distilled tar has been exclusively used for this work with much better effect than when crude tar is used. The surface is more durable and better able to withstand the traffic during the winter months. Except in one or two narrow roads, where the vehicular traffic is concentrated in one spot, there has not been any churning up of the tar into black mud. This I attribute to the use of distilled tar.

### HOUSING AND TOWN PLANNING ACT.

Owing to the shortage of labour, and the advance in price of all building materials, the Urban Council have not enforced the provisions of this Act. Although the work has not been altogether stopped, only those properties that were in a very bad condition have been dealt with. The Sanitary Inspector reported upon 15 houses, under Section 15; of these 3 were condemned as being unfit for habitation and closing orders were made; to the remaining 12, the owners carried out the most important and necessary repairs.

The owners of 18 houses complied with the notices that had been served on them; of these 3 belonged to the Urban Council. The defects found were leaky roofs, damp walls, brick or stoneflagged floors in living rooms; insufficient ventilation and light; defective drainage; and unpaved yards.

The Council's progressive housing scheme has been retarded by the war; and, in consequence, no workmen's dwellings have been erected during the year. A provisional agreement was entered into between the Council and the owner of a piece of land in Sheepwash Lane in the near vicinity to the other cottages already erected, for the purchase of land upon which it was proposed to erect 100 cottages to be let at 5/6 a week. Application was then made to the Local Government Board for sanction to borrow money; but owing to the financial stress of the times the Board requested that the scheme might be delayed until after the war. The agreement therefore has not been carried into effect but will receive further consideration when the times have become more normal.

Another scheme of which the Council has been compelled to defer consideration is the conversion of the Rock Gardens property into Winter Gardens and Pavilion. The property, as it will be remembered, was purchased in June, 1914; and the scheme includes pulling down the houses on the land, laying out pleasure grounds, and erecting a pavilion for band performances and other entertainments. Owing to the war, however, the matter remains in abeyance; and, in the mean-time the Council has renovated the property and let it on short leases.

The Hut Sites on the Beach have continued to be let during the year, but at an increased rental of £2 12s. 6d. each. This has brought in a rental of £228 8s. 0d.

During the summer a Military Camp was pitched on the Football Ground.

I received a letter from the Local Government Board, asking me to assist the local military authorities with reference to the water supply, disposal of refuse, drainage and conservancy arrangements, and the control of infectious diseases. I therefore met one of the Local Government Board Inspectors and inspected the camp, with the result that active co-operation was generally arranged. The assistance given by the Local Authority has been acknowledged by the Army Council who considered it to have been invaluable in safeguarding the health of the troops, and in preventing the spread of infectious disease.

About October the Soldiers were moved from the camp to winter quarters in the Princess Mary Convalescent Home, and the Queen's Hall. The additional sanitary work required in connection with this removal was carried out by the Council.

On the 15th October, at the Meeting of the Sanitary Committee, the Clerk reported that it had come to his knowledge that the Military Authorities proposed erecting earth closets for the accommodation of the 9th Hants. Territorials who were to be billeted at this Hall, and that thereupon he had interviewed the Colonel of the Regiment and suggested that with the approval of the Authorities he would ask the Sanitary Committee to construct water closets at the Council's expense less the amount which the Contractor was to have charged for removing and re-fixing the earth closets which had been fixed at the camp, the Council recouping themselves for this expense by charging the Military Authorities a sum equal to that which would have been charged by a Contractor for the removal of refuse from the earth closets.

The Assistant Surveyor submitted an estimate of the cost of the erection of the waterclosets (£15) which, deducting the material which would be afterwards available to the Council, would amount to about £12 net; and as the cost of the removal of the refuse would be about 17/6to £1 per week, the Council would be enabled to recoup the whole of their expense during the winter. The Council resolved that the suggestion made by the Clerk to the Military Authorities should be adopted, and that instructions should be given for the work to be put in hand at once. This was accordingly done.

I would draw your attention to the fact that the work of the Public Health Department steadily increases, as year by year Parliament throws greater and more extended responsibilities upon Local Authorities.

I enclose Tables I, II, III, and IV, specially required by the Local Government Board, and I take this opportunity of thanking the Members of the Sanitary Committee and the Inspector of Nuisances for the courtesy and help they have extended to me during the year.

I beg to remain,

Your obedient Servant,

W. CONWAY-COOKE,

Associate of King's College, London. Fell. Royal Institute of Public Health. Medical Officer of Health.

Bognor, April, 1916.

# Vital Statistics of Whole District during 1915 and previous Years.

TABLE I.

	Population		BIRTHS.		Total Registeri Disti	ED IN THE		THS.	NETT	DEATHS IN THE DIST		то	
YEAR.	estimated to Middle of each		Ne	tt.			of Non-	of Resi-	Under 1 Y	ear of Age.	At all	At all ages.	
	Year.	Un- corrected Number.	Number.	Rate	Number.	Rate.	residents registered in the District.	dents 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	
1910.	8100	130		16-0	78	9.6					82	10.1	
1911.	8191	152	¢ <sup>153</sup>	18.6	96	11/7	10	19	15	98.0	105	12.8	
1912.	8387	128	133	15.8	106	12.6	9	13	16	120.0	110	13.0	
1913.	8583	149	151	17.5	102	11.8	7	17	14	92.7	112	13.0	
1914.	8779	163	165	18.7	108	12.3	6	20	13	78.7	122	13.8	
1915.	7673	130	132	15.0	106	13.8	9	7	9	68-1	104	13.5	

Name of District: BOGNOR URBAN DISTRICT.

Area of District in acres (land and inland water) 865

Total population at all ages 8142-At Census of 1911.

### TABLE II.

## Cases of Infectious Disease notified during the year 1915.

Name of District: BOGNOR URBAN DISTRICT.

					ASES REMOVED
NOTIFIABLE DISEASE.	AT	ALL AGES.		TO 1	HOSPITAL.
Small-pox					
Cholera.—Plague					
Diphtheria (including Membr	ranous croup)	26			12
Erysipelas		3		and the second	
Scarlet Fever		14			11
Typhus Fever					
Enteric Fever			14		
Relapsing Fever					
Continued Fever					
Puerperal Fever					
Cerebro-spinal Meningitis		1			
Poliomyelitis					
Ophthalmia Neonatorum					
Pulmonary Tuberculosis					
Other forms of Tuberculosis					
Totals		44		d.	23

Isolation Hospital-Bognor Isolation Hospital, situated in Sheepwash Lane, within the District. Provided by the Urban District Council.

### TABLE III.

# Deaths registered during the Calendar Year 1915 classified by age and cause. Name of District: BOGNOR URBAN DISTRICT.

	125	Nett I	eaths at	the subje	oined age or with	s of "Res	sidents'' v District.	whether o	ceurring	within	Total deaths whether of 'Residents' or
Causes of Death.		All Ages.	Under 1 year.	1 and under 2 years.	CONTRACTOR OF	5 and under 15 years.	15 and under 25 years.	under	under	110-	'nonResidents' in Institutions in the District
1		2	3	4	5	6		8	9	10	11
All Causes { Certified											
Uncertified											
Enteric Fever											
Small-pox											
Measles											
Scarlet fever											
Whooping-cough											
Diphtheria and Croup		2				2					
Influenza		2				1				1	
Erysipelas											
Phthisis, (Pulmonary Tuber	culosis)	5						3	2		
Tuberculous Meningitis		1		·		1					
Other tuberculous diseases		1			1						
Cancer, malignant disease	`	10							5	5	
Rheumatic Fever											
Meningitis		1	1								
Organic Heart Disease		17						2	7	8	
Bronchitis		12	2		1				1	8	
Pneumonia (all forms)	·	1						1			4
Other diseases of Respirator	y organs										
Diarrhœa and Enteritis		1	1								
Appendicitis and Typhlitis											
Cirrhosis of Liver		3						1	1	1	
Alcoholism		1						1			
Nephritis and Bright's Dise	ase	4						2	1	1	
Puerperal Fever											
Other accidents and Disea Pregnancy and Parturitie	on										
Congenital Debility & Malfo tion, including Premature	rma-	3	3								
Violent Deaths, excluding S											
Suicide											
Other Defined Diseases		40	2		2			1	8	27	•
Diseases ill-defined or unk	here and										
Tota	als	104	9		4	4		11	25	51	

### TABLE IV.

BOGNOR URBAN DISTRICT.

## INFANT MORTALITY.

1915. Nett Deaths from stated causes at various Ages under 1 Year of Age.

CAUSES 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 Certified causes. Uncertified	6 				6 	I 		2 		9
Small-pox										
Chicken-pox										
Measles										
Scarlet Fever										
Whooping-cough										
Diphtheria and Croup										
Erysipelas										
(Tuberculous Meningitis										
Abdominal Tuberculosis	1				I					I
Other Tuberculous Diseases										
Meningitis (Not Tuberculous)										
Convulsions								I		I
Laryngitis										
Bronchitis						I		I		2
Pneumonia (all forms)										
∫Diarrhœa										
∫Enteritis	I				I					I
Gastritis										
Syphilis										
Rickets										
Suffocation, overlying										1.1.1
Injury at birth										
Atelectasis										
Congenital Malformations										
Premature Birth	2				2					2
Atrophy, Debility & Marasmus	I				I					I
Other causes	I				I					1
Totals	6				6	1		2		9
Nett Births registered during the calendar year.			di	uring	aths regis the cale ear of	tered ndar		mate in itimate	nfants infant:	9. s —

Annual Report of the Medical Officer of Health for the year 1915 for the URBAN DISTRICT of BOGNOR, on the administration of the Factory and Workshop Act, 1901, in connection with

FACTORIES, WORKSHOPS, WORKPLACES AND HOMEWORK.

# 1.—INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OF INSPECTORS OF NUISANCES.

Premises.		Number of							
1		 Inspections, 2	Written Notices.	Prosecutions. 4					
Factories (Including Factory Laundries).	 	 21	1						
Workshops (Including Workshop Laundries).	 	 86	2						
Workplaces (Other than Outworkers' premises)	 	 							
Total	 	 107	3						

### 2.-DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

		1.000				Number of Defe	ots.	Number
	Partic 1	ulars.			Found,	Remedied.	Referred to H.M. Inspector. 4	of Pros- ecutions
Nuisances under the Public Hee	atth A	cts :				Constant State		1000
Want of cleanliness							1	
Want of ventilation					1	Partially. Pier Engine H	l ouse.	
Overcrowding					10			
Want of drainage of floo	rs							
Other nuisances								
	( inst	afficient .						
Sanitary accommodation	uns	uitable or defe	ctive .		2	2		
	Inot	separate for se	xes .					
Offences under the Factory and	Works	thep Acts :-						
Illegal occupation of und	lergro	und bakehouse	e (s 101).					
Breach of special sanita	ry rec	quirements for	bakehou	ses (ss. 97				
to 100)							**	
Other offences								
(Excluding offences	relatir	ag to outwork)						
Total					3	2	1	-

### 3.—REGISTERED WORKSHOPS.

### 4.-OTHER MATTERS.

Workshops on the Register at the end of the year. Bakehouses .. .. .. 10

6

9

4 .....

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7

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Tailors
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Dressmakers .. .. .. Laundries .. .. .. Shoemakers .. .. ..

Undertakers & Cabinet Makers .. .. Harness Makers ..

Coach Builders ... Watch Makers ...

Cycle Manufacturers ..

Brickmakers .. ..

Register

Total No. of Workshops on

Plumbers .. .. 5 Horse Farriers .. .. 4

Class.

Matters notified to H.M. Inspector of Factories :--

No. 1

Failure to affix Abstract of the Factory and Workshop Acts (s. 131, 1901) ... ... ... .... Action taken in matters referred by (Notified by H.M. Inspector 2 (Defects H.M. Inspector as remediable under the Public Health Acts, but not-under the Fustory & Workshop Acts (s. 5, 1901) Reports (of action taken) sent to H.M. Inspector ... remedied) Other .... .... ... ... Underground Bakehouses (s. 101) in use at the end of the year ...

April, 1916.

workshop

as we here.

such enumerated

of Workshops

classes .

Important

-to

Tuay

bakehouses

### W. CONWAY-COOKE, Medical Officer of Health.

# BOGNOR CLIMATOLOGICAL REPORT on the Year 1915.

Considerations of economy have induced the Observers to curtail their Report on this occasion.

No additions have been made to the number of instruments in use during the year; but a millimetre rain measure was substituted for the inch measure on the 14th of June. The Station was inspected, the instruments examined, and the thermometers tested at one temperature on the First of July by Mr. Sargeant of the Meteorological Office and were subsequently certified as being satisfactory. Copies of the daily records have been sent regularly weekly and monthly to the M.O. on the Forms furnished by that Department, and copies of the monthly sheets on the Official forms purchased have been retained, as usual, for the use of the Bognor Climatological Society. About the middle of November the telegrams containing the hour 18 (6 p.m.) readings of the instruments which were being forwarded to the Meteorological Office every evening had to be stopped owing to want of funds, but it was arranged that the work should be continued on Official Post Cards supplied by the M.O. free of charge for the purpose, and these have taken the place of the telegrams since that time; and although they are not of so great a value for the purpose of advertising the Town as are the telegrams they are a very welcome substitute.

In the following tables the old scales have been retained instead of using the lately introduced millibars for air pressure, Absolute degrees instead Fahrenheit's scale for temperature; and millimetres for inches of rain : but in our daily record sheets the readings of the barometer and rainfall are entered in both scales. The inches of the barometric pressure may easily be converted into millibars by multiplying them by  $33^{\circ}863$ : for example the average air-pressure for the year is shown in Table I to have been 29'931 inches, this amount is equivalent to 1013'6 millibars. The convertion of Fahrenheit degrees of temperature to Absolute degrees is obtained by the use of this formula,  $273 + \frac{5}{9}$  (F—32) = Absolute degrees. Inches of rain may be shown in millimetres by multiplying them by  $25^{\circ}4$ ; and millimetres converted to inches by multiplying them by  $0^{\circ}0394$ . Notice of the introduction of these scales was contained in our Report for 1914.

We are again indebted to Mr. Guermonprez and to Messrs. F. J. and H. Neale for the details of the rain collected at Albert Road, Felpham, and Lidsey—see Table IV. That at Goodwood is taken from the Bognor Observer.

### THE MONTHS.

JANUARY.—A wet month. The rain which formed so marked a feature of December, 1914, continued into the year to the 15th of January, giving a continuous record of twenty-two days rainfall. The total quantity, 4'93 inches or 125'2 millimetres, which fell during this month has only been exceeded by that of January, 1906, when a total of 6'05 ins. was registered. The sum of the quantities collected during December, 1914, and January, 1915, is more than half the average Annual rainfall. The 22nd was marked by the heaviest fall of snow that has occurred in Bognor for many years, it produced about three quarters of an inch of water, and remained on the ground for over four days.

The 4-ft. subsoil temperature declined from 477 to 452 degrees Fah.

FEBRUARY.—This also was a wet month, with some snow and hail : but bright sunshine was fairly plentiful.

The 4-ft. subsoil temperature rose from 45 degs. on the 1st, to 45'7 on the 15th, and fell to 44'8 at the end of the month.

MARCH.—A dry month : it opened in quite the orthodox manner with low air pressure, strong N.W. wind, a good amount of sunshine and a little rain in the evening.

There were only six days entirely without some bright sunshine, a gleam being noted on the 25th but was not measurable on the suncard.

The minimum temperature in the screen fell below 32 degrees on 9 mornings. The 4-ft. subsoil temperature rose from 447 on the 1st to 457 on the 29th and declined again to 445 on the 31st.

APRIL.—This was fairly equable and dry, with no preponderance of any of the meteorological elements. The mean temperature falling, though very slightly, below the average, was due to the failure of the minimum which was 1'4 degree below the average. The 4-ft. subsoil temperature rose from 45'3 to 47'4 degrees.

MAY.—Began fairly: but from the 12th to the 20th a good deal of rain fell: on the 13th the quantity guaged was 171 inch or '05 more than the average of the whole month for the last 17 years. After the 20th no more rain fell and the air was very dry. The 4-ft. subsoil temperature rose from 47.7 to 52.1 degs.

JUNE.—Rather unsettled during the first fortnight. After the 12th the weather became very fine and warm to the 20th; then followed rather unsettled weather to the end of the month; but the total rainfall was comparatively small.

The 4-ft. subsoil temperature increased from 52'2 to 54'9 degrees.

JULY.—The first five days very fine. On the 7th a strong gale blew from the S.W. which did some damage to the bathing-huts and small boats. On the whole the weather was changeable and unsettled. The 4-ft. subsoil temperature rose from 55 degs. on the 1st to 56'1 on the 9th, reaching the critical point 9 days later than last year: it was up to 56'7 on the 31st.

AUGUST.—Was rather stormy during the first half of the month : but the second half was fine and dry mostly, there were some showers on the 29th, and the 30th is credited with the heaviest rainfall of the month, though most, if not the whole, of it fell during the early hours of the 1st of September : the quantity guaged was 18'3 mm. or 0'72 of an inch. The 4-ft. subsoil temperature increased from 56'8 to 58 degrees.

SEPTEMBER.—As is not unusual with this month the weather was generally calm, dry, warm and bright although it opened with a thunderstorm the effects of which were felt during the first three days. The 4-ft. subsoil temperature declined from 58 to 57'4 degrees.

OCTOBER.—Fairly dry as regards the quantity of rain during the first half of the month to the 19th though the air was very damp: after this the weather became unsettled: Bright sunshine was deficient. The 4-ft. subsoil temperature fell from 57°2 on the 1st to 56 degrees on the 7th and further declined to 54°1 by the end of the month.

NOVEMBER.—Weather very variable : a good amount of sunshine and some days of very heavy rain and low temperature. The subsoil temperature declined from 53'9 to 48'6 degrees. DECEMBER.—Was abnormally warm and wet. The spell of rain which set in on the 28th of November continued to the 11th of December. Air pressure was low: the corrected barometric readings being above 30 inches on five mornings only; and twice, the 24th and 25th they were under 29 inches. A thunder-storm with a gale occurred on the 1st and although Bognor escaped with very little damage some of its near neighbours suffered considerably from the force of the wind. The 4-ft subsoil temperature declined from 48'6 to 47'3 degrees on the 26th and rose again to 47'5 before the end of the month.

SNOW AND HAIL were registered on January 1st; hail on 2nd; snow on 22nd. February, snow on 6th and 23rd: hail on 9th, 13th, 18th and 28th. March, snow on 8th, 27th, 28th and 29th. September, hail on 3rd. November, hail on 29th and 30th. December, hail on 6th.

THUNDER-STORMS. January, lightning only on 9th. May, lightning on 6th. June, thunder and lightning very distant on 7th; thunder only on 27th and 29th. July, thunder only on 15th. August, lightning only on 9th, 12th, 14th and 16th; thunder only on 14th, 15th, 17th and 18th; thunder and lightning on 15th. September, thunder and lightning on 1st; lightning only on 2nd, 29th and 30th. November, lightning on 11th, 12th and 15th; thunder on 15th. December, thunder and lightning on 1st.

DRY PERIODS of 7 days or more were: March 12th to 21st, 10 days: there were also two periods of 6 days each at the beginning and end of the month. May 5th to 11th, 7 days: and 21st to 31st, 11 days. June 10th to 22nd, 13 days. August 18th to 28th, 11 days. September 3rd to 12th, 10 days. October 12th to 18th, 7 days. November 19th to 26th, 8 days.

Other statistics will be found in the five tables at the end. It may be remarked in relation to temperature, Table II, that in a general way, the date of the highest minimum is also the day having the highest mean temperature. This is the case in every month with the exception of April this year when the date of the highest mean was the 28th, the date of the highest maximum, the day preceding the highest minimum.

A. G. THOMPSON, C.E., F.R.Met.Soc.H. C. L. MORRIS, M.D., F.R.Met.Soc.

	Air I	Pressu	re at s	9 a.n	n.		13			и	Vind	1.			
9100 - 20	Difference from Average of 17 years 1898-1914	Highest reduced Reading.	Date.	Lowest reduced Reading.	Date.	Number of times observed to be blowing from							be	CALM.	
	Baron to 320 level	Diff Averag				1	х.	N.E.	E.	8.E.	8.	8. W.	w.	8.W.	. 3
	Ins.	In.	Ins.	1000	Ins.	10	1	1.0			1		1		1
January.	29.673	- 0.418	30-533	19th	28.789	3rd	4	3	3	0	1	5	10	5	0
February.	29.676	262	30-435	26th	28-854	13th	1	2	1	2	4	8	3	6	1
March.	30.009	+ -141	30-467	9tB	29-578	18th	1	12	3	0	0	4	3	8	0
April.	30-094	+ .170	30-364	2nd	29-259	7th	2	7	4	1	3	6	3	4	0
May.	30-020	+ •057	30-395	9th	29-664	13th	0	11	5	4	3	6	2	0	0
June.	30-040	+ .037	30-266	4th	29-733	29th	0	6	10	3	1	10	0	0	0
July.	29-932	087	30-260	3rd	29-437	17th	0	0	1	1	2	12	15	0	0
August.	30.015	+ •026	30-312	22nd	29-564	2nd	1	6	0	2	3	11	4	4	0
September.	30.028	- '032	30-443	6th	29.463	26th	2	1	9	2	2	2	7	4	1
October.	30.031	+ -106	30-341	18th	29-351	31st	0	10	5	7	1	3	1	4	0
November.	29-963	+ •016	30-730	21st	28-829	12th	4	10	2	1	0	4	0	9	0
December.	29-690	- •219	30-163	19th	28-941	25th	1	4	4	2	0	10	7	3	0
				-		-	1	-	-		-	-	-		-
Average for the year.	29.931	- 0-040				Totals.	16	72	47	25	20	81	55	47	2

TABLE I.

					_	_					-		_			
Sub Soil.	21011	10	T ognrove. SL-k ornin in ssored	0 46-7	45-1	13-2	46+3	49-8	53-7	1-92	27.6	57-5	55.55	1-19	48-0	1-19
	Sec. 1	1.02	9 no .oT	12	13	14	x	1	0	0	0	0	3	15	9	Total 72
Frosts.	No. of times 300 and values 300 serven regulatored.		and anoton in		4	9	0	0	0	0	0	0	0	8	1	Total 20
On Grass.			Lours	22-9 on 30th	20-1 ,, 25th	20.9 " 20th	23-7 1st	29-7 ., 15th	32-5 ., 1st	39-5 ,, 13th	40-7 ., 30th	30-9 ., 30th	29-6 ,, 1st	20-1 ., 27th	25'9 ,, 13th	
	-04.99	.muminim nasM			32-2	32.6	35-6	42-1	44-2	48-7	49-5	46-2	40.6	31-6	37-6	39.5
Temperature in Sunshine. By Black-bulb thermometer, in vacuo.	Highest.		94 on 15th	106 n 25th	112 " 23rd & 29th	123 " 28th	134 " 8th	136 " 30th	135 n 12th '	133 " 9th & 16th	131 " 1st	118 ., 3rd	101 n 2nd	99 n 26th		
Tempe By Blac		• M	Nea	1-01	6-16	2-26	108+5	120-0	123-1	126-5	126-5	2-211	103-0	82-8	9-02	103-1
Average Temperature in Shade and Subsoil.	Minimum.	Highest.	Tempera- ture. Date.	46-8 on 15th	45-4 ,, 4th	45.8 " 6th	45-8 ., 29th	55-3 " 26th	57-5 " 10th	59.8 ., 4th	61-1 ., 9th	61-9 ., 17th	53-5 ., 23rd	49-8 1st	47-2 ., 31st	
		Lowest 1	Tempera- tuor.	28.8 on 23rd	28-1 ,, 25th	27-4 , 20th	30-8 ., 1st	36-8 ,, 16th	39-6 " 1st	46-3 ., 13th	43-7 ,, 30th	35.7 ., 30th	35-7 ,, 1st	27-7 ,, 27th	29-9 " 13th	
	Maximum.	Lowest.	Tempera- ture, Date,	35*9 on 28th	40-8 ,, 24th	41-0 ., 19th	46-4 , 12th	51-7 " 14th	55-6 " 3rd	60.8 ** 22nd	62-1 ,, 3rd	50-8 ,, 30th	50-0 ., 25th	40-3 " 27th	37-1 " 12th	
		Highest.	Tempera- ture. Date.	53-0 on 13th	48-5 ,, 20th	53-7 " 6th	68.8 " 28th	75-8 " 25th	72-2 " 13th	70-7 1st	73-0 ., 25th	69-0 ., 16-18th	62'6 " 14th	54-7 ,, 11th	52.8 " 10th	
nperature		- 11	Greatest from min. to Date.	0 15-7 on 10th	17-4 ,, 25th	21-3 " 20th	23.7 ,, 28th	26.0 ,, 25th	22-3 ,, 16th	18.6 " 29th	21-0 ., 30th	22-1 ,, 5th (	20.6 ,, 29th	18-2 " 7th	15-6 ,, 13th	
o Ten	-21	Saw	Mean R	0 10	0-6	10-3	12-6	14-2	12-9	11-4	12-1	12-6	11-3	11-8	1-3	
erage	1	+161-8681 клиой 11 fo эболого толf гомолофу(7			9-0+	9-0	1-0-1	+1.2	+0.1	-2-1	-0.2	-0.3	1-1-1	P-2-	+1-9	9-0
AV	чиогу эболгогу			0-15	41-6	42.3	9-91	53.7	57-5-	59-3	61-3	2.19	0-19	40.2	1.25	49-8
	.muminiM nool		OK HOOK	37-2	37-1	01.10	40-3	46-6	51-0	53.6	55.3	51-2	45-3	34-8	2.14	41-3
	· MAN	mis	coM nooM	2-11	1.95	2.19	62-9	8.09	63-9	65-0	673	63-8	9-99	9-95	48.8	66-3
1915.		1915.	Jamaary.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Average for the year.	

TABLE II.

		Hum	idity.			Rainfall.								
1915.	Temper	rage ature at m. of	Fapour pressure,	Relative Humidity. Saturation=100.	Monthly Totals,	or from 17 years 914.	Greatest Fall in	Number of vain days of not less than '005 inch.	Number of days of -04 inch or more.					
	Dry Bulb.	Wet Bulò.				Difference from Average of 17 gravn 1898-1914.	24 hours,							
	0	•	Inch.	%	Ins,	Ins.	Ins. Date.		-					
January	40.8	39-1	0-224	86-2	4.93	+ 2.72	0.84 on 1st	20	14					
February	41-2	39-4	-225	85.5	3.56	+ 1.47	·51 ,, 16th	19	15					
March	42.4	40-1	-228	\$1·9	-66	- 1.38	·17 " 23rd	8	6					
April	48-3	44-9	•263	77.5	1.23	- 0.34	·40 " 6th	13	8					
May	55-5	51-2	-331	75.0	3-60	+ 1.94	1·71 " 13th	12	10					
June	59-5	51.7	-372	73-2	.20	- 1.29	-23 ,, 28th	9	5					
July	61-4	57-4	•420	77-2	2.94	+ 1*58	-95 ,, 22nd	13	8					
August	63-2	59-2	-451	77-9	1.72	- 0.48	·72 " 31st	14	10					
September	59.7	- 56-0	·408	78-3	1.50	- 0.18	·54 ,, 28th	7	7					
October	51.7	49-4	•326	84.4	3.20	Average.	1·10 ,, 24th	15	10					
November	39-8	38-1	•216	85.5	3.38	+ 0.32	·89 ,, 11th	15	7					
December	45.4	43-7	-269	87-0	8-32	+ 5-25	·87 ,, 23rd	28	22					
fear's Average. Totals.	\$0.7	47:8	0-311	80.8	35+84	+ 9-60		173	122					

TABLE III.

TABLE IV.

		-		-	-			-	-	1000			-	1.1.1	- 217	
1915.			nor. Road.	1	Felpham.				Lidsey.				Goodwood.			
	Zotał rain.	Aumier of rain days of '01 or more.	Greatest fall. Date	Total vain.	Number of vain days of .01 or more.	Greatest fall.	Date.	Total Rain.	Number of rain days of 01 or more.	Greatest fall.	Date.	Total rain.	Number of rain days of 01 or more.	Greatest fall.	Date.	
January.	Ins 5-05	20	Ins. 0.88 on 22nd	Ins. 4.78	19	Ins. 0.89 on	22nd	Ins. 4·84	18	Ins. 1.06 o	n 22nd	Ins. 5-42	20	Ins. 1.22	on 22nd	
February.	3-73	19	·55 " 13th	3.19	17	·55 ,,	13th	4.18	18	·60 ,	, 16th	4-98	19	•65	,, 8tł	
March.	•58	7	·21 ,, 23rd	•65	8	·16 "	22nd	-81	6	-20 ,	, 23rd	1-24	11	-33	,, 2nd	
April.	1.32	12	. 42 ,, 6th	1.21	10	••39 "	6th	1.24	7	-46 ,	, 6th	1.62	11	-55	,, 6tł	
May.	3.86	11	1.75 ,, 13th	3.52	11	1.72 ,,	13th	3.63	11	1.66 ,	, 13th	4.09	10	1.87	" 13th	
June.	•55	10	·23 " 28th	•43	8	•24 ,,	28th	-43	7	·16 ,	, 28th	1.15	7	-53	" 29th	
July.	2.86	13	·98 ,, 22nd	2.87	11	•93 ,,	22nd	3.40	11	1.02 ,	, 16th	4.62	16	1-63	" 16tł	
August.	1.75	14	•73 " 31st	1.70	13	•66 ,,	15th	1.12	12	-28 ,	, 31st	1.49	13	-28	,, 31st	
September.	1.57	9	·\$7 ,, 28th	1:76	7	•74 "	28th	2.11	6	1.08 ,	, 28th	2.69	11	1.06	,, 28th	
October.	3.82	13	1.08 " 23rd	3*41	12	1.09 "	24th	3.48	13	-80 ,	, 24th	2.64	17	1.05	,, 31st	
November.	3.31	12	-84 ,, 30th	2.96	9	•74 ,,	llth	3.13	9	-85 ,	, 11th	3.61	11	1-07	,, 11th	
December.	8-38	27	•83 ,, 23rd	8.16	25	·83 ",	23rd	8.82	24	-89 ,	, 9th	9-04	26	1.03	,, 9th	
Totals.	36.78	167		34-64	150			37-22	142			42.62	172			

	Bright Sunshine											
	Totals.	fram 17 years 14.	of unt.	f Days.	Bright	ge of normet.						
1915.		Difference fro versus of 17 y 1898-1914.	Per centage of possible amount.	Number of Sun-recorded 1	Date.	Hours.	For contage of possible amount.					
	Hours.	Hours.	Pos	Sam-		4						
January.	55-7	- 13-7	21-2	21	17th	7-4	% 87.6					
February.	103-9	+ 8.3	37.2	23	21st	8.9	85-6					
March.	121-2	- 18-2	33-0	24	21st	10.8	88•5					
April.	196-7	+ 3.7	47.6	25	29th	13-2	90-4					
May.	234-2	+ 4.8	48.9	27	24th	14.8	93-6					
June.	212-9	- 14.3	43-4	28	15th	15-0	91.5					
July.	234.7	- 8.0	47-4	28	29th	13.3	86-4					
August.	210:6	- 18.3	47.0	31	26th	12-1	87-0					
September.	195-2	+ 5.6	51.7	30	10th	11-8	91-5					
October.	80.6	- 39-8	24-4	28	14th	9.1	84-2					
November.	123-9	+ 40.6	46.3	27	17th 19th	7.8	89-0					
December.	44-4	- 10.9	18.0	21	13th	6.3	79-7					
Totals.	1814-0	- 60.3	40.7	313								

TABLE V.

