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# HEALTH OF PLYMOUTH

DURING THE YEAR 1900.

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BY

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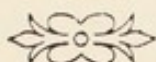
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# Report for the Year 1900.

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MEDICAL OFFICER OF HEALTH'S DEPARTMENT,

MUNICIPAL OFFICES, PLYMOUTH.

*January, 1901.*

GENTLEMEN,

I have the honour of presenting you with my TENTH ANNUAL REPORT on the health of the Borough for the year 1900, with details of the work carried out by the Sanitary Department for the like period.

With the report is included that of the Analyst, the Meteorologist, and that on the health of the floating population within the jurisdiction of the Port Sanitary Authority.

HOUSING OF THE WORKING CLASSES.—During the past year this problem has been occupying the attention of our statesmen and the public alike ; but little progress has been made towards its solution. The crux of the question is really the housing of the very poor and that residuum of the population whose wage is as precarious as their occupations are various ; these are the people who, when displaced from slums, create others, and who, when once displaced, do not return to the better dwellings provided for them by Municipalities and private enterprise, for several reasons—probably the most potent being their inability to pay the enhanced rents. Another is their undesirability as tenants, and their objection to be tied by the restrictions enforced in Municipal dwellings.

The remainder of the site in Looe Street has been cleared, but no decision has been arrived at as to its disposition—whether the Municipality shall erect houses or let the land for that purpose. Financially the dwellings erected at Prince Rock or Looe Street have not been a success. Longer periods for repaying loans are necessary, and may help in some measure to solve the problem. The houses necessary for the very poor should, in my opinion, partake of the character of Municipal lodging-houses—lower rents, concentration of necessary conveniences, and more elastic regulations—or, on the other hand, cottages of one story containing four rooms with common entrance, which could be let to two families if required, with a common bath and wash-house to every 20 houses, closets in groups, arranged in the same way. The cost of erection, exclusive of land, would be approximately about £200 per house—rents 1/- per week per room. At £200 per house this rent would be equal to  $4\frac{1}{2}$  per cent. Unless the rents can be reduced to this sum, I am of opinion that the slum-creating class will not be reached.

From the public meetings of associations having the avowed object of promoting the better housing of the poor, we hear only the much abused landlord condemned for the insanitary condition of property; we hear nothing of the dirty and destructive habits of many of the tenants, who, if housed under the best possible conditions, would soon reduce these conditions to the worst possible.

I am of opinion that sufficient stress is not put upon the vital necessity of cleanliness and order in our elementary teaching, and further, that the Municipality may do much to foster habits of cleanliness by the provision of baths and wash-houses in the different districts. In the workmen's homes erected in the Borough I am not aware that a single bath-room or bath-house has been provided, and the same fact applies to dwellings of the same class erected by private enterprise.



Under the provisions of the Housing of the Working Classes Act, 28 houses have during the year been certified as unfit for habitation, some of which have been demolished and rebuilt as stores, others rebuilt as dwellings, while the remainder have been made habitable by the carrying out of necessary work.

**PUBLIC BATHS AND WASH-HOUSES.**—Again I beg to call attention to the condition of these premises and to their utter inefficiency. Seven years have elapsed since the Sanitary Committee discussed this question, and—abandoned it. The need for baths and wash-houses becomes more pressing each year with a rapidly growing population—the majority of which only occupy a portion of a house—and have no facilities for bathing, with the result that personal cleanliness is neglected to the detriment of health.

A swimming bath is sadly needed for the instruction of the children in swimming, and such instruction should be included in the compulsory curriculum of every elementary school, and I see no reason why the School Board should not be allowed to provide a swimming bath for the use of the children for teaching purposes, and for the inculcation of habits of personal cleanliness, and to indelibly impress upon the minds of the young that cleanliness is next to Godliness.

**MORTUARY AND CORONER'S COURT.**—During the year 48 bodies have been temporarily deposited in the Mortuary, 35 autopsies conducted, and 48 enquiries by the Coroner held in the Court.

**DISINFECTING STATION.**—This Station has now been in use for six years, and has been in constant work during that period. I attribute the yearly decrease in the outbreaks of scarlatina, during the past six years, to the efficient disinfection of bedding, clothing, furniture, &c.

During the year 549 rooms have been fumigated, and 7,343 articles disinfected at the Station.



**NOTIFICATION OF INFECTIOUS DISEASE.**—During the year 523 cases have been notified, of which 66 were scarlatina; 58 diphtheria; 5 membranous croup; 127 enteric fever; 9 puerperal fever; 140 erysipelas; 94 measles; 22 whooping cough. The compulsory notification of the two latter diseases came into force on September 1st.

Upon the recommendation of the Sanitary Committee, the Council sanctioned the voluntary notification of Pulmonary Tuberculosis.

The notifications are treated as private—employers are not informed, as in other cases, of infectious sickness. Each patient is visited, and leaflets containing instructions, useful to himself and his friends, are distributed.

The sanitary condition of the premises is examined and reported upon, and defects made good. During the portion of the year, from September 1st, since the adoption of the notification, 66 cases have been notified. In the event of a fatal termination of a case, disinfection is carried out. I am of opinion that by educating the public in reference to the causation, prevention and cure of tuberculosis, much good may be done, and many lives saved. The continual inculcation into the minds of the children in our elementary schools that the vital necessities of a healthy body are cleanliness, fresh air, and temperance, will, I am of opinion, reduce our sickness and death rates from tuberculosis and other pulmonary affections.

**REFUSE REMOVAL AND DISPOSAL.**—For the past three and a half years the Corporation have undertaken the collection of house refuse. The work is performed regularly and efficiently, much to the benefit of the inhabitants.

The same objectionable methods of disposal of refuse obtain as in former years. The destructor now in course of construction will be at work during the present year, thus putting an end to the nuisance caused by the tips.



GENERAL AND SYSTEMATIC INSPECTION.—Systematic work has been, during the year, considerably interfered with owing to pressure of general work, although a considerable amount has been accomplished, as you will see by the number of inspections made. The great proportion of tenement houses in the Borough make systematic inspection absolutely necessary, especially the jerry built houses that are being erected in such numbers each year, designed for one family and occupied by several. The condition of these houses after a few years' habitation will, I am afraid, be deplorable.

During the year 11,155 visits of inspection have been made by the Sanitary Staff, 2000 house drains have been tested by smoke machine or water, 1647 notices to abate nuisances or carry out sanitary improvements have been served upon owners or occupiers, 1560 of which have been complied with, leaving a balance of 87 to be carried forward. The result of this work has been that 2815 sanitary improvements have been effected.

FOOD AND DRUGS ACT AND FOOD INSPECTION.—The Inspectors appointed for the carrying out of the above work seized and condemned some 13 tons of meat, and 4 tons 3 cwt. of fish.

211 samples of food and drugs have been taken and submitted to the Public Analyst for examination, 12 of which were found to be adulterated ; nine offenders were prosecuted, and in each case a conviction was obtained. Amongst the articles sampled were beer, spirits, butter, pepper, ginger, cheese, milk, lard, margarine, preserves, and vinegar.

COWSHEDS, DAIRIES, MILKSHOPS, AND BAKEHOUSES. — Periodical systematic inspections of the above have been as usual carried out during the year, and no outbreak of disease has been traced to any of the dairies within the borough, although a somewhat serious outbreak was directly traced to a hawker of milk owning a dairy in a rural district on the

borders of the borough. Further and more stringent compulsory legislation is yet required in reference to dairies and farms. I am of opinion that it should be compulsory to report all cases of sickness amongst employés of a dairy-farm or dairy, and that such employé should not be permitted to return to work until a medical man had certified his illness to be non-infectious ; further, that it should be compulsory to remove all cases of infectious sickness occurring on premises used for the purpose of storing, selling, or distributing dairy produce.

More care is also necessary in the storing and transportation of milk, which is such an excellent medium for the growth of pathogenic organisms as the bacilli of enteric fever, diphtheria, tubercle, and others.

Under these regulations 3389 visits of inspection have been made.

I again take this opportunity of tending my thanks to the Members of the Medical profession in the Borough for their assistance and co-operation during the year.

To the Staff of the Department, one and all, my thanks are due for the manner in which their arduous and often disagreeable duties have been performed during the year.

I desire also to express my warmest thanks to the Chairman and Members of the Sanitary Committee for their support and assistance.

And remain, Gentlemen,

Your obedient Servant,

*J. M. Williams*



## General Sanitary Condition of the County Borough of Plymouth at the end of the year 1900.

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### **Borough of Plymouth—Area—Population—Boundaries— Rateable Value—Inhabited Houses.**

The area of the Borough is 2,533 acres, which includes the island of St. Nicholas, in the parish of St. Andrew. Population calculated to the middle of 1900, 102,161. The Borough consists of two parishes, St. Andrew and Charles—which are sub divided into thirteen ecclesiastical districts, and portions of three others, namely, St. Andrew, St. Peter, St. Saviour, St. James, All Saints, Christ Church, St. Matthias, Holy Trinity, Charles, St. Jude, St. John, St. Luke, Emmanuel, Egg Buckland, Pennycross, and Compton Gifford.

The limits of the Urban Sanitary District are co-terminus with those of the County Borough of Plymouth.

The district is bounded on the north by the parishes of Egg Buckland and Stoke Damerel, on the west by the township of Stonehouse, on the south by the waters of the Sound, on the east by the parish of Egg Buckland.

The rateable value of the Borough is £456,357.

The number of houses in the Borough is 13,600 ; 348 have been built during the year.



### Site and Soil.

The town of Plymouth is situate in Lat.  $50^{\circ} 22'$  N., Long.  $4^{\circ} 10'$  W. The site of the town is on the southern slope of the foot hills of Dartmoor. The Town with its environs stands upon the slate and limestone of the middle Devonian series.

The limestone forms a broad band next the sea, broken through at the entrance of Stonehouse Pool, Millbay, Sutton Pool, and by the Plym. It rises to a height of 320 feet; the slate hills to the north reaching that height within the area of the Borough at Hartley. The junction of the limestone with the slate runs roughly parallel on the line of the Millbay Road and George Street, crossing that line to the northward on the west, and to the southward on the east; along this junction are the most productive wells in the district, though there are many good ones also in the slate.

At the north-western corner of St. Andrew's Churchyard there rises a boss of volcanic rock—and interbedded lava—known as dunstone, which occurs in considerable quantity immediately on the outskirts of the Borough at Mannamead. There is also a considerable area of low lying alluvial ground in the vicinity of the Octagon, extending thence on all sides. This formed part of the ancient bed of Surpool, and retained a marshy character in part until recently. Much of it is below the level of high water spring tides, and where the alluvium lies deepest, its depth has not been ascertained.

There is also a belt of low reclaim land around Sutton Pool, but of less practical importance from a geological point of view. The limestone rocks are compact in themselves, but broken by frequent joints and fissures, and contain numerous caverns which provide a system of underground drainage.

The slate rocks vary considerably in character, from the loose broken material locally known as "shillet," to the compact red and purple slates, which is locally distinguished by the

absence of water bearing qualities. As a rule, however, the slate rocks admit freely of percolation of rain and sewage, and the shallower wells sunk in them should be carefully examined if intended for potable purposes. Some of the deeper wells, however, yield both an abundant and an excellent supply.

The alluvial area excepted, the geological condition of Plymouth, and the contours are singularly favourable for the site of a large town, the subsoil, as a rule, is shallow, particularly on the limestone.

### **Water Supply.**

The Waterworks of Plymouth belong to the Corporation. The supply of water is entirely by gravitation, and is obtained from the upper reaches of the watershed of the River Meavy, on Dartmoor. The gathering ground is about 4,885 acres, or  $7\frac{1}{2}$  square miles, in extent, and lies between 700 and 1,700 feet above the sea level. The rocks composing it are of igneous origin, mostly granitic, but a small area is of the altered Devonian.

The water is impounded in a storage reservoir, having a capacity of five hundred million gallons, equal to 130 days' supply for 130,000 persons. The distance from the reservoir to the town is about 12 miles, the water being conducted by iron pipes.

The water is very soft— $1\frac{1}{2}$  degrees of hardness—and is eminently suitable for domestic and trade supplies. The quantity supplied per head, including that for trade purposes, is  $42\frac{1}{2}$  gallons per day.

### **Sewage Disposal and Drainage.**

The sewage of the town (with the exception of that of a small district on the west of Mutley Plain) is discharged into the harbour by four outfalls at different points. The sewage receives no chemical or other treatment before its discharge.



The Borough for drainage purposes is divided into five districts or drainage areas, each having its own outfall.

The largest area includes the western half of the town, taking the Tavistock Road, as the dividing line. The sewage from this district is discharged by an outfall at Millbay, close under the western end of West Hoe Terrace ; it is discharged only on the ebb tide, the sewage accumulating during the flood tide in a large impounding sewer recently constructed. The sewage from the area to the east of Tavistock Road is discharged into Cattewater at Deadman's Bay during the ebb tide, the sewage accumulating during the flood tide in an impounding reservoir. The greater part of the parish of St. Saviour, about 8 acres, forms another small area, draining into the Harbour at Fisher's Nose.

The area forming the north-east part of the Borough to the east of Mutley Plain, drains into the tanks at Laira (erected by the late Compton Local Board), from whence the effluent passes into the estuary at Laira. The greater part of the sewage of Laira flows into the "Mullet Pond," which communicates also with the tidal water of the estuary.

It is intended, as early as possible, to abandon the use of the tanks (which are practically cess pits) and construct a sewer, or sewers, which will carry the whole of the sewage, and discharge it at one of the outfalls.

The remaining area is that portion of the Borough north of the North Road as far as Mutley Station. The sewage from this district is discharged into the Harbour at Rusty Anchor, West Hoe. During the flood tide the sewage is retained in the low level sewer.

One of the deep water outfalls, that at Fisher's Nose, has been completed and is in use. The sewage is now discharged in five fathoms of water on the ebb tide.

The work of reconstructing the subsidiary wall sewers has been continuously carried on during the past year, and it is the intention of the Corporation to proceed with the work until the whole of the wall sewers in the Borough have been replaced by sewers of the best type.

I am able to report that Mr. Mansergh's scheme for the construction of intercepting sewers has received the sanction of the Local Government Board. Contracts have been entered into for carrying out portions of the work. The completion of the scheme will be of immense benefit to the low-lying eastern and western districts of the Borough, in preventing the periodical flooding of those districts, and in relieving the sub-soil in the western district of its sewage.

The work of re-constructing the wall sewers of the town is steadily progressing. The past year has seen a considerable increase in this work, especially in the low-lying district in the neighbourhood of the Sutton Harbour. The excavation for the new sewers has also demonstrated the sewage-logged condition of the subsoil in this district from leakage from defective sewers. The cleansing and draining of the subsoil cannot but have a very appreciable effect on the infantile death-rate in this district.

The work of constructing the great intercepting sewers—planned by Mr. Mansergh—has commenced, and is well in hand ; when completed, the districts now subject to periodical floodings will be immensely benefited.

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## Vital and Mortal Statistics.

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THE AREA OF THE BOROUGH.—2,533 ACRES.

POPULATION.—At the census taken in April, 1891, the population was 88,910, and it is estimated that at the middle of 1900 the population of the Borough was 102,161.

DENSITY.—The mean density of population is 44·6 persons per acre. The average of 44·6 is greatly exceeded in different parts of the Borough, as will be seen by reference to the localized mortality rates.

INHABITED HOUSES.—13,600 estimated number. 348 have been built during the year.

Distribution of Population.—The population is unevenly distributed over an area of 2,533 acres, the mean density being 44·6 persons per acre. The population density of the thirteen districts and portions of three others into which the Borough is divided, varies from two persons in Pennycross, to 207 in Trinity.

Marriages.—The number of marriages recorded in the Borough during 1900 was 979 (equal to a rate of 9·58 per 1000 persons living), as against 1036 for the previous year.

Births.—The number of births registered in the Borough during the year was 2,849; Males 1415; Females 1434. The birth rate of the country is a declining one, that of the past year being the lowest recorded. This also applies to the Borough.



The rate per 1000 is equal to 27·9, that of the 33 great towns being 29·4.

The natural increase of the population, or the excess of births over deaths during the year was 747. The estimated increase in the population was 1,524.

The Births and Birth-rate for the past ten years are as follow :—

		Number of Births.		Birth-rate per 1000.
1891	...	2,508	...	29·6
1892	...	2,483	...	29·0
1893	...	2,590	..	29·8
1894	...	2,528	...	28·8
1895	...	2,551	...	28·7
1896	...	2,643	...	29·3
1897	...	2,764	...	28·3
1898	...	2,931	...	29·6
1899	...	2,982	...	29·6
1900	...	2,849	...	27·9

**Deaths.**—During the year 2,102 deaths occurred in the Borough, inclusive of those dying at the Corporation Asylum at Blackadon, as against 2,198 during the previous year. The uncorrected rate for the year being equal to 20·6 per 1,000 living, as against 21·8 for the year 1899. The corrected rate for age and sex distribution is equal to 19·9 per 1000, which is 0·9 above the general urban rate.

It is with pleasure I have to report a reduction in the death rate of the Borough for the past year, a reduction of 1·3 per thousand, thus reducing the rate nearly to that of the general urban rate of the country, namely, 19·0.

I am strongly of opinion that, owing to the increase of population over and above the ratio observed during the last intercensal period, that the mortality rates of the Borough are

incorrect. It is obvious that in a population under-estimated, which I believe ours to be by some 10,000, that the recorded mortality rate is considerably higher than the true rate, which I estimate at 17·9 per thousand. The coming enumeration of the population will dispel any doubts in this direction, and I propose to issue a report on the vital and mortal statistics of the Borough as soon after the preliminary census report is issued, as is convenient. Much valuable information will be learned from the coming census, inasmuch as it will give the population of each Ward in the Borough, which will enable more trustworthy localized statistics to be computed.

As an example of the obvious incorrectness of working on the present basis, I may mention Pennycross, the death rate of which for the past year, calculated on the last census returns is 108·8 per thousand, which rate is obviously absurd. St. Jude's and St. John's parishes are further examples of error, owing to abnormal increase of population, their death rates being recorded as 37·9 and 31·4 per thousand respectively.

Appended will be found the Mortality Rates for the past ten years.

1891	-	1,900	-	22·4	-	21·9
1892	-	1,616	-	18·8	-	18·3
1893	-	1,860	-	21·4	-	20·2
1894	-	1,596	-	18·2	-	17·8
1895	-	1,800	-	20·2	-	20·0
1896	-	1,769	-	19·6	-	19·4
1897	-	1,866	-	19·1	-	18·6
1898	-	1,931	-	19·5	-	18·9
1899	-	2,198	-	21·8	-	21·2
1900	-	2,102	-	20·6	-	19·9

Public Institutions have been considered for statistical purposes as separate localities. Deaths occurring in the district institutions of persons from other districts are eliminated in calculating the



corrected rate, while the deaths of inhabitants of the Borough occurring in other districts are added. The gross rate is also corrected for sex and age distribution.

The uncorrected or recorded rate for the year is 20·6, the corrected ratio being 19·9 per 1,000.

The average mortality rate in Plymouth, in the ten years 1890-99 is 20·2, as against the general urban rate of 19·2.

The death-rate in England and Wales in 1900 was 18·3 per 1000, which is equal to the rate in the year immediately preceding, but 0·1 below the average rate in the ten years 1890-99.

Of the effect of density of population I can only reiterate the remarks made in former reports, and still urge the Corporation to be ceaseless in their efforts to reduce overcrowding, by the provision of rapid and cheap transit from the outskirts to the business centres of the Borough, to retain as many open sites as possible in the centre of the town, when possible to widen streets, and to strictly enforce the necessary air space in rear of all new dwellings.

Overcrowding affects largely the mortality from diseases of the respiratory organs and Zymotic enteritis, especially of children.

The comparative mortality and density tables for 20 of the large civilian centres is appended :—

## Comparative Mortality Table.

Shewing the Estimated Population, Density, Birth-rate, Death-rate, Zymotic-rate, and Infantile Death-rate of 20 large towns of England and Wales for the year 1900.

Cities and Boroughs.	Estimated Population in the middle of 1900.	Persons to an Acre. (1900.)	Birth-rate.	Death rate.	Zymotic rate.	Deaths under 1 Year to 1000 Births.
33 Large Towns...	11,610,296	33·8	29·4	19·5	2·50	172
London .....	4,589,129	61·5	28·5	18·8	2·22	160
Liverpool.....	634,780	48·0	35·9	25·7	3·16	186
Manchester .....	548,768	42·5	32·3	24·1	3·06	190
Birmingham .....	519,610	40·9	32·7	21·5	2·70	200
Leeds .....	431,287	20·0	30·4	20·0	2·93	182
Sheffield .....	365,922	18·6	34·1	22·6	4·33	201
Bristol .....	324,973	27·8	27·7	16·6	1·88	134
Nottingham .....	242,676	22·1	27·7	19·1	2·34	196
Hull .....	238,736	26·5	32·8	19·7	3·11	183
Newcastle .....	234,369	43·6	30·4	19·5	1·37	171
Leicester .....	219,169	25·5	28·2	17·4	3·53	174
Portsmouth .....	194,955	41·8	25·7	17·3	2·37	156
Cardiff .....	194,247	32·0	26·8	13·7	2·06	140
Bolton .....	164,240	10·8	29·0	19·4	2·42	171
Sunderland .....	147,398	44·7	35·7	21·4	2·51	169
Blackburn .....	137,107	19·7	25·1	20·5	3·52	220
Preston.....	118,902	29·1	28·9	24·0	4·37	236
Derby .....	107,991	31·3	26·9	17·4	2·31	174
<b>PLYMOUTH .....</b>	<b>102,161</b>	<b>44·6</b>	<b>27·9</b>	<b>20·6</b>	<b>2·26</b>	<b>174</b>
Wolverhampton ...	89,598	25·4	33·5	22·5	3·67	205



### Mortality at Different Seasons.

During the first quarter of 1900, 620 deaths were registered, as compared with 517 for the corresponding period of 1899.

During the second quarter 573 deaths were registered, as against 485 for the corresponding period of 1899.

During the third quarter 519 deaths were registered, as against 591 for the corresponding period of 1899.

During the fourth quarter 390 deaths were registered, as against 605 for the corresponding period of 1899.

The number of deaths registered during each quarter of the year are as follows :—

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Year.
Total deaths	620	573	519	390	2102
Male ... ..	296	299	252	192	1039
Female ..	324	274	267	198	1063
Death-rate	24'3	22'4	20'3	15'3	20'6

Mean age at death, 1892—36 years and 8 months.

„	„	1893—32	„	9	„
„	„	1894—33	„	0	„
„	„	1895—35	„	2	„
„	„	1896—33	„	5	„
„	„	1897—33	„	3	„
„	„	1898—35	„	7	„
„	„	1899—35	„	6	„
„	„	1900—35	„	4	„



TABLE I.

Shewing the Estimated Population, Marriages, Births, and Deaths for the year 1900, and 10 years preceding.

* Year.	Estimated Population.	Marriages.	Registered Births.	Number of Deaths.		
				All Ages.	Under 1 year.	Principal Zymotic Diseases.
1900	102,161	979	2849	2102	498	231
1899	100,637	1036	2982	2198	566	185
1898	99,136	988	2931	1931	501	205
1897†	97,658	1016	2764	1866	521	215
1896	90,276	909	2643	1769	460	206
1895	89,096	906	2551	1800	456	169
1894	87,931	864	2528	1596	426	138
1893	86,781	872	2590	1860	443	236
1892	85,646	920	2483	1616	342	150
1891	84,526	899	2508	1900	452	202
1890	83,421	857	2445	1759	392	214
Average of 10 years 1890-99.		926·7	2642	1829	455·9	192·

\* For statistical purposes the Registrar-General estimates the population to the middle of the year, on the basis of the rate of increase ruling between the two preceding census periods.

† Borough extended.

TABLE II.

Shewing the Density, Birth-rate, Death-rate, Zymotic-rate, and Infantile Death-rate for the year 1900, and 10 years preceding.

Year.	Persons to an acre.	Birth-rate.	Death-rate.	Zymotic-rate.	Deaths under 1 year to 1,000 Births.
1900	44·6	27·88	20·57	2·26	174
1899	43·9	29·63	21·84	1·84	189
1898	43·3	29·6	19·5	2·07	171
1897	42·6	28·3	19·1	2·20	188
1896	60·5	29·3	19·6	2·29	174
1895	59·7	28·7	20·2	1·90	179
1894	58·9	28·8	18·2	1·58	168
1893	58·2	29·8	21·4	2·71	171
1892	57·4	29·0	18·8	1·75	137
1891	56·7	29·6	22·4	2·39	181
1890	55·9	29·3	21·1	2·56	160
Average of 10 years. 1890-99.		29·20	20·21	2·12	171·8

TABLE III.

Shewing the number of Deaths from the Principal Zymotic Diseases for the year 1900, and 10 years preceding.

Year.	Small pox.	Measles.	Scarlet Fever.	Diph- theria.	Whooping Cough.	Fever.	Diarrhœa.	Totals.
1900	...	96	...	12	11	22	90	231
1899	...	10	3	20	53	10	89	185
1898	...	69	4	10	31	8	83	205
1897	...	52	5	13	53	9	83	215
1896	...	90	3	15	18	5	75	206
1895	...	76	3	10	29	6	45	169
1894	5	4	8	4	75	12	30	138
1893	...	83	21	10	46	12	64	236
1892	1	18	44	9	4	20	54	150
1891	...	28	17	5	68	15	69	202
1890	1	56	26	14	28	27	62	214
Average of 10 years, 1890-99.	0·7	48·6	13·4	11·0	40·5	12·4	65·4	192·0



TABLE IV.

Shewing the relative Mortality Rates from the Principal Zymotic Diseases for the year 1900, and 10 years preceding.

Year.	Smallpox	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Fever.	Diarrhœa.	Total Zymotic Rate.
1900	...	0.94	0.00	0.12	0.11	0.21	0.88	2.26
1899	...	0.10	0.03	0.20	0.53	0.10	0.88	1.84
1898	...	0.69	0.04	0.10	0.31	0.08	0.83	2.07
1897	...	0.53	0.05	0.13	0.54	0.09	0.85	2.20
1896	...	1.00	0.03	0.17	0.20	0.06	0.83	2.29
1895	...	0.85	0.04	0.11	0.33	0.07	0.50	1.90
1894	0.06	0.05	0.09	0.05	0.85	0.14	0.34	1.58
1893	...	0.95	0.24	0.11	0.53	0.14	0.74	2.71
1892	0.01	0.21	0.51	0.10	0.05	0.23	0.63	1.75
1891	...	0.33	0.20	0.06	0.80	0.18	0.81	2.39
1890	0.01	0.67	0.31	0.17	0.33	0.32	0.74	2.56
Average of 10 years 1890-99.	0.008	0.53	0.15	0.12	0.44	0.14	0.71	2.12

## Localized Mortality Rates.

*For the Year, 1900.*

DISTRICT.	Persons to an Acre.	Mortality Rate per 1,000.	Zymotic Rate per 1,000	Zymotic Rate 33 large Towns.
St. Andrew ...	104·0	14·2	1·81	
St. Peter ...	159·2	19·5	2·54	
St. Saviour ...	188·4	17·9	2·04	
St. James ...	66·6	15·7	1·19	
All Saints ...	178·4	17·5	2·36	
Christ Church ...	81·1	18·6	1·60	
St. Matthias ...	59·8	20·3	1·33	
Holy Trinity ...	207·2	18·1	2·76	
Charles ...	65·7	19·2	2·49	2·26
St. Jude ...	20·9	37·9	3·31	
St. John ...	23·6	31·4	5·45	
St. Luke ...	104·4	17·0	2·09	
Emmanuel ...	43·4	19·5	1·44	
Compton Gifford ...	6·8	20·4	1·55	
Laira ...	4·2	} 29·7	6·50	
Egg Buckland ...	10·8			
Pennycross ...	1·8	108·8	14·3	



### Localized Mortality Rates.

The heaviest death tolls were levied during the year in the following districts :— St. Jude, St. John, Laira and Pennycross, from causes which have been referred to in a previous paragraph, viz. :—the abnormal increase of population in these districts.

The most noticeable facts in connection with districts having practically a fixed population of considerable density, is the gradual reduction of the death rates—I refer to Trinity, Charles, All Saints, St. Saviour's and St. Andrew. This reduction can only be due to the improved sanitary conditions under which the population live. St. Andrew again shews the lowest death rate, viz. :—14·2 per thousand, a further reduction on the figures of last year.

### Infantile Mortality.

The mortality of infants under one year of age was in the proportion of 174·8 deaths to 1,000 births registered, being 15·0 per 1,000 below the rate for 1899. The total number of deaths of infants under one year was 498.

The following table gives the number of births, and of infant deaths, with the infant mortality rate, for the past ten years :—

	No. of Births.	No. of Infant Deaths.	Infant Mortality Rate per 1,000 Births.
1891	2,508	452	181
1892	2,483	342	137
1893	2,590	443	171
1894	2,528	426	168
1895	2,551	456	179
1896	2,643	460	174
1897	2,764	521	188
1898	2,931	501	171
1899	2,982	566	189
1900	2,849	498	174

**Infant Mortality in Plymouth in the Years  
1895-1900, from different diseases.**

	1895.	1896.	1897.	1898.	1899.	1900.
Measles ... ..	17	26	13	15	0	19
Whooping Cough ...	14	8	31	15	20	8
Diarrhœa ... ..	38	58	70	62	74	81
Tabes Mesenterica ..	21	10	6	15	13	9
Premature Births ...	50	55	51	58	49	39
Convulsions ... ..	28	26	53	52	61	58
Bronchitis ... ..	65	61	51	46	52	45
Pneumonia ... ..	16	28	26	26	32	28
Diseases of Stomach ...	2	17	11	8	4	10
Enteritis ... ..	34	31	50	42	85	35
Debility, Atrophy, Inanition	30	19	21	19	26	24
Other causes ... ..	141	121	138	143	150	142
Totals -	456	460	521	501	566	498

**Illegitimacy, 1900.**

During the past year 71 births of illegitimate children have been recorded, being 2·49 per cent. of the whole. The number of deaths of illegitimate children under one year was 32, equal to a rate of 450·7 per 1000 births, the rate for legitimate children being equal to 167·7 per 1,000 births.

**Certification of Death.**—During the year, 2102 deaths were registered in the Borough, 1,981 (or 94·25 per cent.) of which the causes were duly certified by registered medical practitioners, and 114 (or 5·42 per cent.) by coroner after inquiry, leaving the causes of 7 deaths uncertified, a decrease of 4 as compared with the previous year.



During the past year the percentage of uncertified deaths registered in England and Wales was equal to a percentage of 1·9 as against 0·33 in the Borough.

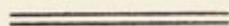
The Borough Coroner has during the year made inquiry into the cause of 114 deaths, which were certified by him, as follows :—

Violent Deaths—Accident or Negligence :—

Burns and Scalds ...	...	...	4
Poison ...	...	...	4
Drowning ...	...	...	4
Suffocation ...	...	...	6
Other Injuries ...	...	...	12
			— 30

Violence other than Accidental :—

Homicide ...	...	...	1
Suicide ...	...	...	7
			— 8
Natural Causes ...	...	...	76
			—
			114
			—



MORTALITY TABLES.—Deaths in the County Borough of Plymouth, for 12 months ending 31st December, 1900.

CAUSES OF DEATHS.	All Ages.		Under 1 Year.		1 and under 5		5 and under 15		15 and under 25		25 and under 35		35 and under 45		45 and under 55		55 and under 65		65 and under 75		75 and upwards.		TOTAL.
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
ALL CAUSES	2102	231	151	106	42	36	35	55	49	69	76	67	99	70	91	113	108	135	119	182	2102		
I.—SPECIFIC FEBRILE OR ZYMOTIC DISEASES	335	74	62	60	38	7	8	2	7	2	10	6	9	3	5	9	3	14	5	5	335		
II.—PARASITIC DISEASES	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2		
III.—DIETETIC DISEASES	4	1	...	...	...	...	...	...	1	...	1	...	...	1	...	...	...	...	...	...	4		
IV.—CONSTITUTIONAL DISEASES	361	16	12	14	14	13	10	16	23	30	21	20	30	19	18	34	11	16	6	12	361		
V.—DEVELOPMENTAL DISEASES	216	27	29	...	...	...	...	1	...	...	...	...	...	...	...	3	12	12	57	75	216		
VI.—LOCAL DISEASES	1108	127	108	73	53	17	17	13	20	29	45	40	54	44	68	66	81	93	51	89	1108		
VII.—VIOLENCE	38	2	4	4	1	4	1	4	1	3	3	1	5	3	...	1	1	...	...	...	38		
VIII.—ILL-DEFINED AND NOT SPECIFIED CAUSES	38	19	16	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	38		



MORTALITY TABLES.—Deaths in County Borough of Plymouth for 12 months ending 31st December, 1900.

CAUSES OF DEATH.	All Ages.		Under 1 Year.		1 and under 5		5 and under 15		15 and under 25		25 and under 35		35 and under 45		45 and under 55		55 and under 65		65 and under 75		75 and upwards		TOTAL.
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
I.																							
1. Miasmatic Diseases	205	18	12	54	37	7	8	2	6	2	5	4	5	6	2	5	8	3	13	3	5	205	
2. Diarrhoeal	104	46	46	5	1	...	...	...	...	...	...	...	...	1	1	...	1	...	...	2	...	104	
3. Malarial	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
4. Zoogenous	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
5. Venereal	19	10	3	...	...	...	...	...	...	2	2	2	1	1	...	...	...	...	...	...	...	19	
6. Septic	7	...	1	1	...	...	...	...	1	2	2	...	...	1	...	...	...	1	...	...	...	7	
II.																							
Parasitic Diseases	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	
III.																							
Dietetic Diseases	4	1	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...	...	...	...	...	4	
IV.																							
Constitutional Diseases	361	16	12	14	14	13	10	16	26	23	30	21	20	30	19	18	34	11	16	6	12	361	
V.																							
Developmental Diseases	216	27	29	...	...	...	...	1	...	...	...	...	...	...	...	...	3	12	12	57	75	216	

MORTALITY TABLES.—Deaths in the County Borough of Plymouth, for 12 months ending 31st December, 1900.

CAUSES OF DEATH.	All Ages.	Under 1 Year.		15 and under 25		25 and under 35		35 and under 45		45 and under 55		55 and under 65		65 and under 75		75 and upwards	TOTAL.				
		M	F	M	F	M	F	M	F	M	F	M	F	M	F						
		M	F	M	F	M	F	M	F	M	F	M	F	M	F						
VI.																					
1. Diseases of Nervous System ...	249	40	23	13	7	6	7	2	3	3	8	7	10	7	13	14	22	25	13	20	249
2. Organs of Special Sense ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3. Circulatory System ...	184	2	2	1	...	5	4	2	6	6	8	10	19	14	19	10	16	21	11	23	184
4. Respiratory System ...	415	38	44	47	40	2	4	5	6	5	15	9	17	10	27	26	23	35	21	38	415
5. Digestive System ...	173	44	37	10	6	1	1	2	5	2	8	6	4	7	4	10	10	6	2	7	173
6. Lymphatic System and Ductless Glands ...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
7. Urinary System ...	57	...	1	1	...	1	1	2	3	4	6	3	3	2	4	5	10	6	4	...	57
8. Reproductive System (a) Organs of Generation (b) Parturition ...	3	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	3
9. Organs of Locomotion...	14	1	...	...	...	...	...	5	4	...	3	...	...	...	...	...	...	...	...	...	14
10. Integumentary System...	6	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...	6
...	5	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5
VII.																					
1. Accident or Negligence ...	30	2	4	4	1	4	1	4	1	1	2	...	2	2	...	1	1	...	...	...	30
2. Homicide ...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
3. Suicide ...	7	...	...	...	...	...	...	2	...	...	1	3	1	...	...	...	...	...	...	...	7
4. Execution ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
VIII.																					
Ill-Defined and not Specified Causes...	38	19	16	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	38















MORTALITY TABLES.—Deaths in the County Borough of Plymouth, for 12 months ending 31st December, 1900.

CAUSES OF DEATH.	All Ages.		Under 1 Year.		1 and under 5		5 and under 15		15 and under 25		25 and under 35		35 and under 45		45 and under 55		55 and under 65		65 and under 75		75 and upwards		TOTAL.
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
<b>Diseases of Circulatory System.</b>																							
Endocarditis, Valvular Disease	24	...	...	...	1	...	3	3	1	...	...	...	2	2	2	...	2	2	2	2	2	3	24
Pericarditis	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Hypertrophy of Heart	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Angina Pectoris	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	...	...	...	2	2
Syncope	16	...	1	...	...	...	...	...	1	...	...	...	2	1	1	1	...	...	2	1	...	16	16
Aneurism	2	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...	...	2	2
Senile Gangrene	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	6
Embolism, Thrombosis	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Other and undefined Diseases of Heart or Circulatory System...	132	2	1	...	...	...	1	1	5	5	6	6	3	6	13	11	14	7	13	17	9	17	132
<b>Diseases of Respiratory System.</b>																							
Laryngitis	10	...	1	...	2	2	1	...	...	1	...	...	...	1	...	...	1	1	...	...	1	10	10
Croup	5	...	...	...	1	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	5
Other Diseases of Larynx and Trachea	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Emphysema, Asthma	9	...	...	...	...	...	...	...	...	...	...	...	1	...	2	1	...	3	1	...	...	9	9
Bronchitis	205	20	25	18	...	...	...	...	1	2	3	5	2	3	5	5	14	17	12	20	17	24	205
Pneumonia	156	11	17	16	...	...	2	4	3	3	5	8	8	4	4	4	11	4	9	13	4	9	156
Pleurisy	13	...	...	...	...	...	1	...	...	...	1	...	2	1	...	...	1	1	1	2	...	3	13
Other and undefined Diseases of Respiratory System	17	7	1	5	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	...	...	17





MORTALITY TABLES.—Deaths in the County Borough of Plymouth for 12 months ending 31st December, 1900.

CAUSES OF DEATH.	All Ages.		Under 1 Year.		1 and under 5		5 and under 15		15 and under 25		25 and under 35		35 and under 45		45 and under 55		55 and under 65		65 and under 75		75 and upwards		TOTAL.
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
<b>Diseases of Lymphatic System and Ductless Glands.</b>																							
Diseases of Lymphatic System	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Diseases of Spleen	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bronchocele	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Addison's Disease	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
<b>Diseases of Urinary System.</b>																							
Acute Nephritis	31	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31
Bright's Disease, Albuminuria	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9
Uræmia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Suppression of Urine	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Calculus	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Hæmaturia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of Bladder and of Prostate	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8
Other and undefined Diseases of Urinary System	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8
<b>Diseases of Organs of Generation.</b>																							
Ovarian Disease	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Diseases of Uterus and Vagina	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Disorders of Menstruation	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pelvic Abscess...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Perineal Abscess	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diseases of Testes, Penis, Scrotum, &c.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...





MORTALITY TABLES.—Deaths in the County Borough of Plymouth for 12 months ending 31st December, 1900.

CAUSES OF DEATH.	All Ages.		Under 1 Year.		1 and under 5		5 and under 15		15 and under 25		25 and under 35		35 and under 45		45 and under 55		55 and under 65		65 and under 75		75 and upwards		TOTAL.
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
<b>Ill-defined and not Specified Causes.</b>																							
Debility, Atrophy, Inanition	24	15	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24
Other Ill-defined and not Specified Causes	14	4	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14
<b>(INQUESTS)</b> <b>Accident or Negligence.</b>																							
Fractures, Contusions	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gunshot Wounds	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cut, Stab	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Burn, Scald	4	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
Poison	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
Drowning	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
Suffocation	6	2	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6
Other and undefined Forms	12	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12
<b>HOMICIDE.</b>																							
Murder, Manslaughter	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1

MORTALITY TABLES.—Deaths in the County Borough of Plymouth, for 12 months ending 31st December, 1900.

CAUSES OF DEATH.	All Ages.	Under 1 Year.		5 and under 15		15 and under 25		25 and under 35		35 and under 45		45 and under 55		55 and under 65		65 and under 75		75 and upwards		TOTAL.	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
<b>INQUESTS.—Continued.</b>																					
<b>Suicides.</b>																					
Gunshot Wounds	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	
Cut, Stab	4	..	..	..	..	..	..	2	..	..	..	1	..	..	..	..	..	..	..	4	
Poison	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Drowning	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	
Hanging	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Other and undefined Methods	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
<b>Natural Causes.</b>																					
Specific Febrile or Zymotic Diseases	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	
Constitutional Diseases	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
Diseases of Nervous System	14	5	3	1	1	..	..	1	..	..	..	1	..	..	..	..	..	..	..	14	
"  Circulatory System	32	..	1	..	..	..	..	2	..	5	2	6	2	7	..	2	3	1	1	32	
"  Respiratory System	17	5	..	2	2	..	..	..	..	1	..	2	2	..	1	..	..	..	2	17	
"  Digestive System	3	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	3	
"  Urinary System	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	
Other Causes	6	1	2	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	6	



## Prevalence of Disease, 1900.

---

During the year, 2102 deaths were registered in the Borough ;  
of these, 298 were caused by zymotic diseases :—

Influenza	...	...	64
Measles	...	...	96
Scarlet Fever	...	...	0
Diphtheria	...	...	9
Whooping Cough	...	...	11
Fever (Enteric)	..	..	22
Diarrhœa	...	...	90
Membranous Croup	...	...	3
Puerperal Fever	...	...	2
Erysipelas	...	...	1
			-----
			298
			-----

Measles and Whooping Cough have been responsible for the greatest number of deaths, Measles having caused 96 deaths, and Whooping Cough 11.

During the past year the Council decided to make both these diseases compulsorily notifiable, the notification to commence from September 1st so that I trust future years will see a decreased mortality from these very fatal diseases of childhood.

**Syphilis.**—Another year has passed without any attempt to bring about legislative enactment in reference to this loathsome and far reaching disease, a disease that is costing the tax payer an enormous sum yearly, and is sapping and ruining thousands of lives.

**Small Pox.**—No case of this disease has occurred in the Borough since 1895. Cases have, however, been received and treated from vessels arriving in the Port and from the Royal Navy.

**Diphtheria.**—A considerable increase in the number of cases notified has taken place during the year, principally due to an outbreak at a private school—13 cases occurring. Of a total number of 58 cases reported during the year, 32 were removed to hospital, 4 cases of which terminated fatally; the remaining 26 were treated at their homes, 5 of the cases terminating fatally.

**Enteric Fever.**—I have to record a very considerable increase in the incidence of Enteric Fever during the year, due entirely to a somewhat severe outbreak of 80 cases, traced directly to infected milk supplied from an adjoining rural district. The details of this outbreak have been reported to the Committee, and the means taken to avert its extension. The total number of cases reported during the twelve months is 127, those cases not traced to infected milk were sporadic in origin and distributed throughout the Borough; 6 cases were imported.

**Influenza.**—This disease may be regarded as endemic in this country. It is now ten years since Influenza appeared, and rapidly became epidemic throughout Great Britain. The death toll in the Borough for ten years from this disease has been 475. Deaths were registered each month, with the exception of August from this cause, the greatest mortality in any one month being in January, when 22 deaths occurred. I am of opinion that sufficient care is not exercised in the isolation of



patients suffering from Influenza or in the disinfection of clothing, bedding, and dwellings upon recovery. The disease is often treated too lightly by those affected—often with fatal result, arising from some complication brought about by undue exposure and carelessness.

**Scarlet Fever.**—66 cases only have been reported during the year, the majority of these being of a very mild type, 26 of which were treated in the Isolation Hospital. No fatalities have been recorded.

**Diarrhœa (Zymotic Enteritis).**—Meteorological conditions during July and August were favourable to the development of this disease, which was, during that period very prevalent and fatal, 90 deaths being registered from this cause in the past year.

Owing to pressure of other matters, the Committee appointed for the purpose of formulating a scheme for the establishment of a station for the distribution of sterilized and humanized milk to the poorer class infants, have not been able to complete their work.

**Borough Hospital.**—At the end of the year, 1899, there remained under treatment 21 cases of infectious sickness; during the year 148 have been admitted, 39 of which still remain under treatment.

The majority of cases have been those of enteric fever. 15 cases have been admitted from outside the Borough.

During November and December, a somewhat severe outbreak of enteric occurred in the Borough—taxing to the utmost the capacity of the Hospital, in fact, over taxing, as we had to refuse admission to many cases, and utilize both pavilions for enteric cases. Each year grave inconvenience is being caused by the absence of sufficient accommodation; this year the want of such accommodation has been more acutely felt than

ever, and the Hospital Committee have resolved to approach the Council for sanction to complete the original plan of the Hospital.

During the year the Laundry, which is well equipped with modern machinery, has been completed, and is now in full working order.

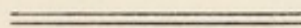
I have to report five cases of enteric amongst the Staff, contracted whilst in the execution of their duty—and it is with extreme regret I have to report the fatal termination of two of the cases—1st, a promising young Nurse ; 2nd, that of a Ward Sister who had been with us for several years.

I must take this opportunity of marking my appreciation of the work of the Staff during the year, and especially during a time of severe stress and anxiety—of their devotion to duty and untiring energy—to which is mainly due the recoveries of many of the severe cases of enteric ; and I feel that their work has been appreciated by the Committee and by the friends of the patients.

The case mortality per cent. of those receiving hospital treatment for enteric and diphtheria, was from the former 10·769 per centum ; from the latter 9·375 per centum ; against a mortality per cent. of those treated at their homes of 26·9 and 25·00 respectively.

The difference is most marked, and should prove an object lesson to those who are opposed to hospital treatment.

The details of all cases are set out in the appended tables.





PLYMOUTH SANITARY AUTHORITY'S HOSPITALS.

TABLE OF CASES TREATED DURING 1900.

MOUNT GOULD HOSPITAL.

	Scarlatina.		Diphtheria.		Membranous Group.		Typhoid Fever.		Erysipelas.		Measles.		Puerperal Fever.		Chicken Pox.		"Observation."		TOTAL.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Remaining from last year . . .	7	3	1	...	...	...	4	3	...	1	...	1	...	...	...	...	...	...	21
Admitted . . .	9	17	15	17	1	...	39	26	3	2	5	7	..	3	..	1	3	...	148
Discharged . . .	16	19	14	15	1	...	18	9	3	3	6	7	...	1	...	1	3	...	117
Died . . .	...	...	2	2	...	...	2	5	...	..	...	...	..	2	...	...	...	...	13
Remaining in Hospital . . .	.	1	...	...	...	...	23	15	...	...	...	...	.	..	...	...	...	...	39
Mortality % . . .	...	...	12	12	...	...	9	72	...	...	...	...	66	6	...	...	...	...	...

HOSPITAL SHIP MAUD.

	Small Pox.		Scarlatina.		Diphtheria.		Membranous Group.		Typhoid Fever.		Erysipelas.		Measles.		Chicken Pox.		"Observation."		TOTAL.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Remaining from last year	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Admitted	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0
Discharged	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
Died	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
Remaining in Hospital	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0
Mortality %																			...



PLYMOUTH SANITARY AUTHORITY'S HOSPITALS.

TABLE SHEWING THE NUMBER OF CASES ADMITTED IN EACH MONTH DURING 1900.

MOUNT GOULD HOSPITAL.

Month.	Scarlatina		Diphtheria		Membranous Group		Typhoid Fever		Erysipelas		Measles		Puerperal Fever		Chicken Pox		Observation		Aggregate No. of days spent in Hospital.	Average No. of days for each Patient.
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.		
January	4	...	3	...	...	...	2	...	...	...	1	...	...	...	1	...	...	...	618	19.3
February	3	...	7	1	...	...	...	...	...	...	...	...	...	...	...	...	3	...	493	15.9
March	1	...	8	...	...	...	1	...	...	...	2	...	...	...	...	...	...	...	480	17.7
April	5	...	4	...	...	...	...	...	...	...	5	...	...	...	...	...	...	...	513	19.0
May	5	...	...	...	...	...	1	...	...	...	3	...	...	...	...	...	...	...	462	15.4
June	1	...	4	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	278	13.9
July	1	...	3	2	...	...	2	...	...	2	...	...	...	...	...	...	...	...	324	20.2
August	3	...	...	...	1	...	1	...	...	1	...	...	...	...	...	...	...	...	328	21.8
September	...	...	2	...	...	...	5	2	1	...	...	...	1	1	...	...	...	...	349	15.8
October	1	...	1	1	...	...	7	1	...	...	...	...	2	1	...	...	...	...	335	15.9
November	1	...	...	...	...	...	40	2	1	...	...	...	...	...	...	...	...	...	813	15.9
December	1	...	...	...	...	...	6	2	...	...	...	...	...	...	...	...	...	...	1289	25.3
Year	26	...	32	4	1	...	65	7	5	...	12	...	3	2	1	...	3	...	6282	42.5

THE PLYMOUTH SANITARY AUTHORITY'S HOSPITALS

## THE INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889.

*Table shewing the number of cases of Infectious Disease notified in each month during the year 1900.*

NOTIFIABLE DISEASES.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	TOTALS.
Small Pox ...	...	...	...	...	...	...	...	...	...	...	...	...	0
Scarlatina or Scarlet Fever ...	6	4	5	7	14	6	1	2	5	5	6	5	66
Diphtheria ...	7	16	10	3	2	4	6	...	2	3	3	2	58
Membranous Croup ...	1	..	...	...	1	...	...	1	1	...	1	...	5
Typhoid or Enteric Fever ...	6	2	3	...	2	4	4	3	5	9	76	13	127
Continued Fever ...	..	...	..	...	..	...	...	1	..	1	...	...	2
Puerperal Fever ...	...	2	...	1	...	1	1	...	2	2	...	...	9
Cholera ...	...	..	...	...	...	...	...	...	..	...	...	...	0
Erysipelas ..	8	11	14	13	16	5	11	6	7	18	20	11	140
Measles ...	...	...	...	...	...	...	...	...	2	3	23	66	94
Whooping Cough ...	...	...	..	...	...	...	...	..	...	...	8	14	22
Totals in each month ...	28	35	32	24	35	20	23	13	24	41	137	111	523



THE INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889.

Table shewing the number of Notifications received in the ten years 1891-1900.

NOTIFIABLE DISEASES.	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	TOTALS.
Small-pox	3	38	1	27	1	...	...	...	...	...	70
Scarlatina or Scarlet Fever..	239	1264	469	182	73	118	78	362	255	66	3106
Diphtheria	56	52	60	54	33	37	57	52	47	58	506
Membranous Croup	12	6	10	3	6	12	8	2	6	5	70
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...
Typhoid or Enteric Fever	51	93	56	38	28	28	49	40	50	127	560
Continued Fever	4	7	...	...	...	...	...	9	1	2	23
Relapsing Fever	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	3	6	6	4	11	7	4	7	15	9	72
Cholera (English)	...	...	1	...	...	...	...	...	...	...	1
Erysipelas	101	138	174	137	108	141	211	191	200	140	1541
Measles	...	...	...	...	...	...	...	...	...	94	94
Whooping Cough	...	...	...	...	...	...	...	...	...	22	22
Totals	469	1604	777	445	260	343	407	663	574	523	6065

Monthly Table of Deaths from All Causes and Zymotic Diseases, with the rates per 1,000 per annum.

MONTH.	No. of Deaths from All Causes.	Annual Rate per 1,000 living.	No. of Deaths from Zymotic Diseases.	Annual Rate per 1,000 living.	Deaths of	
					Infants under 1 year of age.	Persons aged 60 and upwards.
January ...	204	23.96	9	1.06	45	81
February ...	213	25.02	7	0.82	44	72
March ...	203	23.84	22	2.58	36	58
April ...	224	26.31	38	4.46	43	74
May ...	199	23.37	31	3.64	33	58
June ...	150	17.62	8	0.94	30	38
July ...	150	17.62	10	1.17	32	48
August ...	206	24.20	57	6.70	107	44
September ...	163	19.14	23	2.70	61	42
October ..	128	15.03	10	1.17	31	39
November ...	129	15.15	10	1.17	25	36
December ...	133	15.62	6	0.70	11	58
YEAR ..	2102	20.57	231	2.26	498	648



**Slaughter-houses.**—I am unable to report the commencement of the erection of the Public Abbatoirs, the slaughtering of cattle being still carried on in the private slaughter-houses.

## Annual Report of Public Analyst.

BOROUGH LABORATORY,

MUNICIPAL BUILDINGS,

PLYMOUTH,

*January 24th, 1901.*

GENTLEMEN,

Two hundred and eleven samples of Food were examined during 1900, with results as follow :—

Articles analysed.	No.	Genuine.	Adulterated.	Doubtful.
Milk ... ..	82	70	10	2
Lard ... ..	14	14	...	...
Butter ... ..	54	49	5	...
Margarine ... ..	17	17	...	...
Cheese ... ..	5	5	...	...
Pepper ... ..	5	5	...	...
Ginger ... ..	5	5	...	...
Preserves ... ..	8	7	1	...
Spirits ... ..	8	8	...	...
Vinegar ... ..	5	5	...	...
Beer ... ..	8	8	...	...
Totals ... ..	211	193	16	2



Milk, as usual, furnished the largest proportion of the cases of adulteration discovered ; 10 out of the 82 samples examined had been more or less tampered with, 2 were of extremely doubtful character, 5 samples contained large amounts of added water, 3 were both watered and deprived of some of the fat, 2 others were skimmed of a considerable proportion of their fat.

In one of the worst cases, the milk was skimmed of at least, 11 per cent. of its fat, and contained 12 per cent. of added water. Another contained, at least 24 per cent. of added water. One may picture the rich nutritious kind of food this would become when given, further diluted, to some wretched, sickly child, whose only possible diet is milk ; and the anxious mother wondering why her infant does not get on ! The offenders were prosecuted, in nine instances, convicted, and paid in well merited fines upwards of £27, exclusive of costs.

Amongst the 54 samples that were brought as butter, no less than five were found that contained no butter fat at all, but consisted entirely of an artificial substitute. Proceedings have been taken in some of these cases, the hearing of which is pending.

The case of adulterated jam was a gross fraud ; at least a quarter of the preserve consisted of a cheap rhubarb substitute for the more expensive fruit.

Eight samples of beer were examined for arsenic, with special reference to the recent epidemic of poisoning in another part of the country, produced by the use of impure chemicals in the preparation of beer. No arsenic was found, and the "beers" were, in the absence of any kind of standard, returned as genuine.

Legislation is to be hoped for in this direction, for, at present, the term beer is of so extremely a catholic character, that almost any fluid may be sold as "beer" if it does not contain less than a certain small proportion of alcohol, even though



it be an utter stranger to malt, and have but the slenderest acquaintance, if any with hops—that beer is necessarily brewed from malt and hops is but a hoary tradition.

Six samples of “ice cream” taken from itinerant vendors in the street were examined bacteriologically and chemically; enormous numbers of bacteria were found, in one case of an offensive character. Chemically the “ice creams” consisted of milk thickened with flour, sweetened and coloured. In view of the facts that milk is so favourable a medium for the rapid growth of infective micro-organisms, that the premises in which these ice creams are manufactured are generally situated in the less sanitary parts of the town, and that they may become the means of wholesale distribution of disease difficult to trace, it was suggested that the places of manufacture should be considered, in the interests of Public Health, Milk Stores, etc., so as to bring them under the control of County Council through the agency of its bye-laws affecting such places.

All the other samples examined were found to be genuine.

Periodic analyses of the Plymouth water have been made through the year. They have shewn a progressive improvement in its quality.

Traces of iron, which in the previous year were frequent and large, adding very much to the disagreeable discoloration of the water, have completely disappeared. Some amount of coloration is still present, but it is entirely due to dissolved peaty material, and in the specimen last examined it was of the faintest description.

I am,

Your obedient Servant,

CHARLES E. BEAN, F.I.C., F.R.C.S.E.



ANNUAL REPORT OF THE PORT MEDICAL OFFICER  
FOR 1900.

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Plymouth Port Sanitary Authority.

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GENTLEMEN,

I have the honour of presenting to you my Tenth Annual Report upon the health of the floating population within the jurisdiction of your Authority, and of the work performed by your officials during the year 1900.

During the year I have had occasion to medically inspect 102 vessels.

I must again call the attention of your Authority to the fact that we possess no disinfecting apparatus for dealing with infected clothing or bedding removed from vessels.

For the ordinary Zymotic diseases, I utilize the Disinfector belonging to the Corporation ; bedding, clothing, etc., plague or cholera infected, is destroyed.

During the year, 459 cases of sickness and accident have come to my notice, or have been reported to me as having occurred during the voyage, 52 of which were of an infectious character ; of these, 7 cases have been removed from vessels arriving in this Port, and are as follows :—One of Small-pox, one of Continued Fever, one of Typhoid, and four cases of Diphtheria.

The particulars of the cases removed for treatment are as follows :—

On the 5th January, the outward bound P. and O. s.s. "Arabia" arrived at this Port with a steward suffering from

Small-pox. The case was removed to the Hospital Ship "Maud" for treatment. The clothes and bedding, etc., were thoroughly disinfected, and all necessary precautions taken. The patient was discharged on the 9th February, convalescent.

On the 7th June, the Danish schooner "Neiross" arrived at this port from Runcorn to discharge salt. On boarding the vessel, one of the crew was found to be unwell, with a high temperature. I had the case removed to the hospital ship "Pique" for observation, which proved to be one of continued fever. The patient was discharged on the 20th June convalescent.

On the 22nd October, the s.s. "North Anglia," then lying at the Great Western Docks, was visited, and one of the firemen reported ill. On an examination, symptoms of enteric were present, and he was removed to the Borough Hospital for observation. The patient developed a severe attack of the disease, and was discharged on the 18th December convalescent.

The increase in the number of plague infected districts and its appearance in Glasgow has entailed increased inspection of vessels upon your officials during the year. No cases have come under observation for that period.

In conclusion, I take this opportunity of expressing my thanks to the officials of H.M. Customs, the Agents of the various Steamship Companies, and the Great Western Railway officials, for their unvarying courtesy and co-operation. May I also be allowed to express my thanks to your Committee for their assistance and support during the past year.

I have the honour to remain,

Your obedient Servant,

*J. M. Williams*



Summary for the Year 1900.

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Number of Vessels inspected, British	...	1,142	
"    "    "    Foreign	...	129	
		—	1,271
"    "    insanitary	...		21
Registered Tonnage	... ..		729,584
Number of Seamen	... ..		92,674
Admitted to Hospital Ship "Pique"	...		1

J. E. PEARCE,

*Port Sanitary Inspector.*

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**Cases of Sickness reported to the Port Sanitary Officials, and seen by the Port Medical Officer during the Year 1900.**

Date, 1900.	Ship's Name.	From Whence.	Nature of Sickness or Accident.
January 1	Garth Castle	Cape Town	1 death from Pneumonia
" 3	Caledonia	Bombay	2 cases of Small Pox, proceeded in vessel; 3 cases of Malarial fever (convalescent)
" 17	Para	West Indies	2 cases of Measles (convalescent)
" 18	Peninsular	Bombay	4 " Malarial fever (convalescent)
February 2	Egypt	Calcutta	2 " Small Pox (convalescent); 4 of Malarial fever landed at Aden
" 15	Sunda	"	1 death from Phthisis, coal trimmer
" 17	Oriental	Bombay	4 cases of Malarial fever; 1 death from Pneumonia and 1 case of Measles, landed at Aden
" 17	Cuzco	Sydney	Master suffering from Right Hemiplegia, proceeded to London in vessel
" 17	Duke of Fife	Queensland	1 death from Heart Disease
" 17	Sokoto	Calcutta	1 " Malarial fever
" 27	Gowrain	Port Madoc	1 case of Diphtheria, seaman, removed to Borough Hospital
" 27	Hathor	New Orleans	1 " Quinsy, seaman
" 2	Lady Martin	Dublin	1 " Diphtheria, steward, removed to Borough Hospital
" 3	Palawan	Calcutta	7 cases of sickness, proceeded in vessel
" 5	Copeland	Belfast	Accident to seaman, removed to South Devon and East Cornwall Hospital
" 7	Woolwich Infant	Swansea	Master of Ketch, death from Heart Disease
" 11	Rome	Sydney	1 case of Small Pox, proceeded to London in vessel
" 12	Batanga	West Coast of Africa	2 deaths, 1 from Heat Apoplexy, 1 from Malarial fever
" 15	Arabia	Bombay	2 cases of Malarial fever; 1 of Malta fever, proceeded to London in vessel



**Cases of Sickness reported, &c.—Continued.**

Date, 1900.	Ship's Name.	From Whence.	Nature of Sickness or Accident.
March 28	Caledonia	Bombay	2 cases of Small Pox landed at Marseilles; 1 death from Haemorrhage after Abortion
April 3	Hispania	Libau	1 case of Gastro-enteritis, removed to South Devon and East Cornwall Hospital
" 6	Fjord	Moulmein	1 case of Dysentery, removed to South Devon and East Cornwall Hospital
" 7	Pembroke Castle (Transport)	Cape Town	About 70 convalescents from Enteric fever and Wounds, landed at this Port for the Military Hospital
" 10	Graff Waldersee	New York	1 case of Diphtheria, removed to Borough Hospital
" 11	Ruahine	Lyttleton	1 death from Heat Apoplexy (coal trimmer)
" 12	Ionic	Lyttleton	1 death from Phthisis
" 13	Ophir	Sydney	2 cases of Measles (convalescent) proceeded in vessel to London
" 13	Auguste Victoria	New York	1 death from Phthisis
" 13	Peninsular	Bombay	1 case of Chicken Pox, proceeded in vessel to London
" 14	Scottish Wizard	Iquique	1 case of Scurvy (seaman)
" 16	Oron	West Coast of Africa	2 cases of Malarial fever (convalescent) proceeded in vessel to Liverpool
" 17	Doune Castle (Transport)	Cape Town	Military Invalids, 53 convalescents from Pneumonia and Enteric fever, and 47 from wounds, landed at this Port for the Military Hospital
" 20	Britannia	Sydney	1 death from Chronic Bright's Disease; 4 cases of Malaria Fever, proceeded in vessel to London; and 1 case of Malta fever, landed at this Port
" 21	Valetta	Calcutta	3 cases of Malarial fever, proceeded in vessel to London; 1 case of Malta fever and 1 case of Tropical Abscess of Lungs, landed at this Port

Cases of Sickness reported, &c.—Continued.

Date, 1900.	Ship's Name.	From Whence.	Nature of Sickness or Accident.
April 21	Matiana	Calcutta	3 deaths, 2 (firemen) from Acute Diarrhoea and 1 (infant) from Malarial fever
" 24	Pennsylvania	New York	2 cases of Phthisis, proceeded in vessel to Hamburg
" 24	Jebba	Old Calabar	1 death from Exhaustion, resulting from Malarial fever and Phthisis
" 26	Egypt	Bombay	4 cases of Malarial fever (convalescent) proceeded in vessel to London
" 28	Edward Bohlen	West Coast of Africa	1 death from Malarial Fever
" 28	Government Steam Yacht 'Ivy'	...	1 death from Malarial fever, 1 case of Malarial fever, and 1 of Nephritis, proceeded in vessel
May 8	Avondale Castle	Durban	1 case of Typhoid fever (convalescent stage) proceeded in vessel to London; 1 death from Acute Phthisis, body landed at Plymouth
" 10	China	Bombay	2 cases of Malarial fever (crew) and 2 of Measles (children of passengers) convalescent, proceeded in vessel to London
" 10	Fürst Bismarck	New York	1 death of Heart failure
" 11	Thames	Malta	7 cases of Malta fever (convalescent) proceeded in vessel to London. 14 Naval Invalids landed at this Port
" 11	Bornu	Old Calabar	1 death from Syncope
" 17	Braemar Castle (Transport)	Cape Town	1 case of Enteric fever (convalescent), proceeded in vessel to London; 1 death from Hodgkin's disease
" 20	Massilia	China	1 death from Liver Abscess; 1 Naval Invalid proceeded in vessel to London



Cases of Sickness reported, &c.—Continued.

Date, 1900.	Ship's Name.	From Whence.	Nature of Sickness or Accident.
May 24	Arabia	Bombay	2 deaths, 1 from Heat Apoplexy, and 1 from Cardiac Failure; 1 case, European, of Fever and Enlarged Glands, which did not prove to be Plague; 1 case of Enteric fever, landed at Marseilles, May 19th; 1 Naval Invalid, proceeded in vessel to London
" 25	Omrah	Sydney	11 Naval Invalids landed at this Port
" 27	Palawan	Calcutta	4 cases of Malarial fever, convalescent, proceeded in vessel to London
June 1	Australia	Australia	1 case of Facial Erysipelas, landed at Marseilles; 3 Military Invalids landed at this Port
" 6	Orient (Transport)	Cape Town	1 death from Malarial fever
" 7	Neiross	Runcorn	1 case of fever, removed to "Pique" for observation; clothes disinfected.
" 7	Caledonia	Bombay	1 case of Small Pox landed at Aden; all precautions taken and clothes burnt; 1 death from Abscess of Liver; 3 cases of Malarial fever (convalescent), landed at this Port
" 8	Sokoto	Old Calabar	9 cases of Tropical fever (convalescent), proceeded in vessel to London
" 11	Sumatra	Calcutta	2 cases of Malarial fever (convalescent); and 2 Military Invalids, proceeded in vessel to London.
" 11	Victoria	Fiji Islands	12 cases of Scurvy
" 15	Arcadia	Australia	2 cases of Malarial fever (convalescent), proceeded in vessel to London
" 18	Dilwara (Transport)	Cape Town	209 Officers and Men, convalescents from Enteric Fever and wounds landed at this Port; 1 suicide during voyage; 1 death from Heart Failure.

**Cases of Sickness reported, &c.—Continued.**

Date, 1900.	Ship's Name.	From Whence.	Nature of Sickness or Accident.
June 20	Orinoco	... Limon (West Indies)	... 1 death from Cerebral Hæmorrhage; 1 case of Peripheral Neuritis, landed at this Port
" 20	Ortona	... Sydney	... 7 Naval Invalids landed at this Port
" 21	Delware	... New York	... 1 case of Erysipelas of leg, proceeded in vessel
" 22	Fantee	... Old Calabar	... 1 death from Dysentery
" 22	Sobrano	... Bombay	... 2 deaths, 1 (child) from Pneumonia, and 1 (adult) from Heart Disease
" 23	Montfort (Transport)	... Capetown	... 3 cases of Enteric fever landed at this Port, and removed to Military Hospital
" 24	Patricia	... New York	... 1 death from Phthisis, body landed at this Port
July 5	Furst Bismarck	... New York	... 1 death from Syncope
" 7	Bombay	... Calcutta	... 1 case of Typhoid fever, proceeded in vessel to London
" 7	Orizaba	... Sydney	... 2 cases of Measles (convalescent) proceeded in vessel to London
" 8	Oriental	... Bombay	... 2 deaths (natives) 1 from Meningitis; 1 the result of an accident
" 13	Dunera (Transport)	... Natal	... 76 Military Invalids landed at this Port for the Military Hospital, being Enteric and Dysentery cases, for the greater part in the convalescent stage
" 14	Himalaya	... Sydney	... 1 death from Heart Disease, 1 case of Dysentery
" 17	Golconda	... Calcutta	... 2 deaths, 1 from Apoplexy; 1 from Cerebral Hæmorrhage
" 19	Jebba	... West Coast of Africa	... 4 deaths from Remittent fever, 3 cases of Malaria fever proceeded in vessel to Liverpool
" 21	Egypt	... Bombay	... 1 death from Enteritis; 25 Naval Invalids landed at this Port for Royal Naval Hospital suffering from Malarial and Malta fevers



**Cases of Sickness reported, &c.—Continued.**

Date, 1900.	Ship's Name.	From Whence.	Nature of Sickness or Accident.
July 21	Oroya	Sydney	1 death from Phthisis
" 22	Cavour (Transport)	Cape Town	200 Military Invalids landed at this Port for the Military Hospital, mostly Enteric fever cases. convalescent
" 26	Borneo	Calcutta	5 deaths 4 from Cholera. and one on which an autopsy was held, failed to reveal the cause of death
" 29	Oceana	Australia	1 death from Sprue, 5 Naval Invalids (convalescent) landed at this Port
" 30	Ceylon	Calcutta	4 cases of Malta fever and 2 of Malaria fever (convalescent), and 1 Naval Invalid landed at this Port
August 1	Atrato	Carthagera	1 death from Malaria fever. 1 passenger accidentally drowned, 19 cases (all crew) of Malaria fever, of whom 6 convalescent, all proceeded in vessel to Southampton
" 8	Orcana (Transport)	Cape Town	2 deaths from Malarial fever; 197 Military Invalids landed at this Port for the Military Hospital, the greater part of whom were convalescents from Enteric and Malarial fevers
" 12	Peninsular	Australia	1 death from Abscess of Liver; 3 cases of Chicken Pox (convalescent) proceeded in vessel to London; 3 Naval Invalids landed at this Port
" 14	Trent	West Indies	8 cases of Malarial Fever (convalescent), proceeded in vessel to Southampton
" 14	Moravian	Sydney	1 case of Chicken Pox landed at Durban, and several cases of Military convalescents from Enteric fever from Cape Town, proceeded in vessel to London
" 16	Columbia	New York	1 case of Phthisis, and 1 case of Malarial fever, proceeded in vessel to Hamburg

Cases of Sickness reported, &c.—Continued.

Date, 1900.	Ship's Name.	From Whence.	Nature of Sickness or Accident.
August 17	Caledonia	Bombay	1 case of Venereal Bubo (Native Coal Trimmer); 1 Naval Invalid (convalescent). landed at this Port.
" 27	Palawan	Ca'cutta	22 Naval Invalids landed at this Port being convalescents from Mediterranean fever, for the greater part in the convalescent stage; 4 cases proceeded in vessel to London
" 29	Orinoco	Carthagena	1 death from Pneumonia
" 30	Sokoto	West Coast of Africa	2 cases of Malarial fever (convalescent), one landed at this Port, the other proceeded in vessel to Liverpool
" 30	Lismore Castle (Transport)	Cape Town	156 Military Invalids landed at this Port for the Military Hospital, being Enteric and Dysentery cases for the greater part in the convalescent stage
September 9	China	Australia	1 death from Delirium Tremens (body buried at sea), 24 Naval Invalids landed at this Port
" 17	Mirror	Lying in Stonehouse Pool	1 case of severe Rheumatism
" 17	Mariehamn	Gulf of Florida	Chief-mate suffering from Abscess of Groin
" 21	Pearlmoor	Mobile (United States)	2 cases of Malaria fever (convalescent)
" 22	India	Sydney	22 Naval and Military Invalids from Hong Kong landed at this Port, 1 death from Phthisis (body landed here), 2 cases of Measles (convalescent) proceeded in vessel to London
" 28	Egypt	Bombay	3 deaths, 1 from Typhoid fever, 1 from Meningitis, and 1 from Enteric fever
October 6	Australia	Sydney	2 deaths 1 from Bright's disease, and 1 from Heart disease.
" 8	Erling	Fredrikstadt	1 death from Pulmonary Tuberculosis (post-mortem by Port Medical Officer)



**Cases of Sickness reported, &c.—Continued.**

Date, 1900.	Ship's Name.	From Whence.	Nature of Sickness or Accident.
October 10	Don	Carthage	... A suspicious case of Enteric fever (steward) proceeded in vessel to Southampton, and Health Officer there notified.
" 11	Arabia	Bombay	... 1 death from Cardiac failure (chief-engineer). body landed at Jamaica
" 12	Papanui	New Zealand	... 3 cases of sickness during voyage (convalescent), 1 from Inflammation of Lungs, 1 from Bronchitis, and 1 from Quinsy, 2 Naval Invalids (convalescent) landed at this Port
" 13	Sobo	Old Calabar	... 1 death from Pneumonia
" 15	Trojan (Transport)	Cape Town	... 2 cases of Blackwater fever existed during voyage, convalescent by 5th inst. and proceeded in vessel to Liverpool
" 18	Dunera (Transport)	Durban	... 122 Officers and Men (Military Invalids) for the greater part convalescents from Enteric and Malaria fevers and wounds; Invalids removed to Military Hospital; 1 case of Scarlet fever (orderly) landed at this Port
" 19	Marabout	Port Arthur	... 100 Officers and Men (Military Invalids) for the greater part convalescents from Enteric fever and wounds, removed to Military Hospital
" 22	North Anglia	Philadelphia	... Ship's Carpenter fell from yard-arm to deck and killed; body buried at sea
" 22	Deutschland	New York	... 1 case of Typhoid fever removed to Borough Hospital
" 24	Trent	West Indies	... 1 case of Inflammation of Bladder, proceeded in vessel to Cherbourg 1 case of Enteric fever (isolated), and taken to Southampton in vessel

**Cases of Sickness reported, &c.—Continued.**

Date. 1900.	Ship's Name.	From Whence.	Nature of Sickness or Accident.
October 27	Orizabo	Bombay	4 cases of Malaria fever (convalescent), proceeded in vessel to London
"	Bhamo	Sydney	1 case of Measles landed at Fremantle (convalescent), 1 death from Cardiac failure
"	Parramatta	Rangoon	Several members of the crew suffered from Malaria fever during voyage, which resulted in 1 death.
November 4	Ceylon	Calcutta	4 cases of Beri Beri, 1 fatal; remainder proceeded in vessel to London
"	Rome	Australia	1 case of Malta fever (convalescent) landed at this Port
"	Golconda	Calcutta	2 deaths, 1 from Heat Apoplexy, and 1 from Peritonitis.
"	Caledonia	Bombay	1 case of Enlarged Liver, and 1 case of Glandular Enlargement of Groin, both landed at Aden.
"	Zodiac	Buenos Ayres	1 case of Enteritis, and 1 case of Venereal disease
"	Orcana (Transport)	Cape Town	33 Officers and Men, landed at this Port. convalescent from Enteric fever and wounds and Dysentery, removed to Military Hospital
"	China	Bombay	5 cases of Malaria fever (convalescent) among crew; proceeded in vessel to London
"	Cornocopia	Rouen	1 case of Erysipelas of Face
"	Jelunga (Transport)	China	4 deaths on homeward voyage; 1 from Remittent fever, 1 from Asthma, 1 from Gunshot wound in action, and 1 from Sprue
"	Nineveh (Transport)	Australia	1 case of Febris Enterica during homeward voyage, landed convalescent at this Port
December 4	Whakatane	Wellington	1 case of Enteric fever (convalescent), by 30th ult.



**Cases of Sickness reported, &c.—Continued.**

Date, 1900.	Ship's Name.	From Whence.	Nature of Sickness or Accident.
December 6	Egypt	Bombay	3 cases of Buboes among crew, who proceeded in vessel to London
" 7	Oruba	Sydney	1 death from Syncope
" 8	Yorkshire (Transport)	Cape Town	55 Officers and Men landed at this Port, convalescent from Enteric fever and wounds and removed to Military Hospital
" 12	Duke of Sutherland	Brisbane	2 cases of Malarial fever during voyage, (convalescent)
" 15	Oceana	Sydney	2 cases of Abscess in Groin, both resulted from Septic wounds
" 20	Arabia	Bombay	1 death from Anaemia; 1 case of Small Pox landed at Suez; 1 case Enteric fever, landed at this Port

METEOROLOGICAL OBSERVATORY,

THE HOE,

PLYMOUTH,

*March, 1901.*

*To the Chairman and Members of the  
Sanitary Committee.*

GENTLEMEN,

I have now the honour to submit my Annual Report upon the administration of the Observatory during 1900, being the Seventh year since its establishment, together with a summary of the chief meteorological observations made during the year.

The equipment consists of the following instruments which are in daily use:—

1. Dine's Pressure Tube Anemometer.
2. Bailey's Anemograph.
3. Beckley's Self-Recording Rain Guage.
4. Richard's large size Barograph.
5. Marine Standard Barometer (by Adie).
6. Copper Rain Guage, 8 inches diameter.
7. Campbell-Stokes Sunshine Recorder.
8. Maximum Shade Thermometer.
9. Minimum Shade Thermometer.
10. Dry Bulb                                "
11. Wet Bulb                               "
12. Terrestrial Radiation               "
13. Solar Radiation Thermometer, black bulb in vacuo.
14. Stevenson Screen.



## FREEDOM FIELDS.

15. Copper Rain Guage, 8 inches diameter.

## BLACKADON ASYLUM.

16. Copper Rain Guage, 5 inches diameter.

## PLYMOUTH SOUND.

17. Sea Temperature Thermometer.

In addition to the foregoing, several Thermometers are held in reserve for use in case of breakage, and thereby ensure continuity of the observations.

The instruments have been read twice daily at the hours of 9 a.m. and 9 p.m., and in this work I have received assistance from Mr. E. H. Netten, and Mr. G. Secombe, Computation Clerk, to both of whom I tender my sincere thanks, as well as to Messrs. Chalice, Stokes, and Caretaker of Hospital Ships, for attending rain gauge in Freedom Fields, the anemometer in Smeaton Tower, and the sea temperature of Plymouth Sound, respectively.

Daily and weekly reports have been sent to the local papers, and at night the observations have been telephoned to the Editors of the "Western Morning News," and "Western Daily Mercury," and published in the following day's issue.

Climatological Reports to the number of 22 have been circulated each day to the principal hotels, boarding houses, and shipping offices, and I have personally noticed that the information is much sought after and fully appreciated, and the result cannot do other than popularise to a very large extent the important position the town occupies as a Health and Holiday resort.

Monthly Climatological Reports have been sent to the Chairman of the Sanitary Committee of the Cornwall County Council, and published in the valuable reports issued by that authority.

Agricultural statistics of the weather have been furnished to the meteorological office weekly, and full reports at the end of each month.

In September, the Observatory was inspected by Mr. R. H. Curtis, from the Meteorological Office, and the instruments were examined and compared with his standards. It was found that the Dine's Anemometer at the Smeaton Tower required cleaning, and it was taken down and put in thorough order by him, since which it is working very satisfactorily.

Several enquiries for information respecting the climate of Plymouth have been received through the year, and the information has at all times been readily accorded.

Since September, the Meteorological Office has sent copies of the daily weather reports and forecasts, and these have been exhibited in the screen adjoining the Observatory, as well as a table of weekly sunshine at various health resorts.

I am indebted to Dr. Bowes for particulars of the rain-fall at Blackadon Asylum, and also to Dr. F. M. Williams for the observations of sea temperature from the hospital ships in the Sound, as well as for his kind assistance and advice on all occasions. To both these gentlemen I beg to tender my sincere thanks.

Before concluding, I desire to thank you for the kind assistance and co-operation which you have been good enough to extend to me throughout the year.

I have the honour to be, Gentlemen,

Your obedient servant,

H. VICTOR PRIGG, F.R.M.S.,

*Borough Meteorologist.*



RESULT OF OBSERVATIONS MADE DURING  
THE YEAR, 1900.

The Observatory is situated on "The Hoe" to the north of the Gardener's Lodge, and is in latitude  $50^{\circ} 21' 44''$  N. ; longitude  $4^{\circ} 8' 20''$  W. ; its altitude is 117 feet above mean sea level.

The barometer is a marine pattern by Adie, and is fixed 116 feet above sea level.

The thermometers are by Negretti and Zambra.

All readings of the barometer are corrected for index error.

Duration of bright sunshine is ascertained by a Campbell-Stokes' sunshine recorder.

The rain gauges are the Meteorological Office pattern, made of copper, and fixed 10 inches above the ground. Those at "The Hoe" and Freedom Fields are 8 inches in diameter, and fixed at 117 feet and 208 feet above mean sea level, respectively. The gauge at Blackadon Asylum (situate about thirteen miles east of Plymouth on the south-east border of Dartmoor) is five inches in diameter, and fixed at a height of 607 feet above sea level.

All the instruments were supplied through the Meteorological Office and verified at Kew Observatory.

The observations are made twice daily, at the hours of 9 a.m. and 9 p.m. local time (Greenwich time 9 hrs. 16 mins.)

The direction of the wind is taken to true and not magnetic bearings.

The averages which the results in the tables are compared with are as follows :—

Temperature	25 years 1870 to 1895
Atmospheric pressure	10 years 1880 to 1889
Sunshine	15 years 1880 to 1895
Rainfall	30 years 1865 to 1895

Table No. 1.—TEMPERATURE IN STEVENSON SCREEN.

1900.	* Mean Temperature	† Difference from Average.	Means of		* Mean Daily Range.	Absolute Temperature.			
			Maximum.	Minimum.		Maximum.	Date.	Minimum.	Date.
January	44.5	+3.0	48.7	40.3	8.4	53.0	8th	27.6	6th
February	40.4	-2.2	45.6	35.2	10.3	54.1	25th	25.9	8th
March	40.7	-3.4	46.6	34.9	11.9	56.8	13th	26.2	18th
April	48.7	+0.1	55.5	41.9	13.3	65.6	22nd	32.6	6th
May	51.3	-2.2	57.9	44.7	13.2	67.3	29th	38.6	20th
June	55.9	-3.1	64.1	51.2	12.9	68.7	6th	43.1	23rd
July	62.2	+0.8	70.0	54.5	15.5	82.1	19th	45.6	3rd
August	60.6	-0.7	67.2	53.3	13.9	77.6	17th	48.2	12th
September	57.8	+0.1	65.4	50.1	15.2	70.8	8th	41.6	7th
October	53.3	+2.2	58.4	48.2	10.1	63.5	7th	36.7	22nd
November	47.1	+4.4	52.9	41.3	11.5	59.7	1st	30.9	22nd
December	48.2	+5.6	52.8	43.5	9.2	56.9	28th	35.4	22nd
Means	50.9	+0.1	57.1	44.9	12.1	82.1	July 19th	25.9	Feb. 8th

\* The Mean Temperature given above are the Means of the daily readings of the Maximum and Minimum Thermometers.

† The Average here referred to is the average of 25 years, 1871 to 1895.



## REMARKS (TABLE No. 1).

*Temperature of the Air.*

The mean temperature of the air for the year was above the average—0·1 degree.

During January, April, October, November, and December the temperature was considerably above the average, the greatest excess being 5·6 degrees in December.

During the summer months the temperature was at and below the average.

The warmest day was 19th July, the shade temperature being 82·1 degrees and the coldest day 8th February, the minimum for the day was 25·9 degrees.

Table No. 2. ATMOSPHERIC PRESSURE.

1900.	Mean Pressure (at 32° F. and Sea Level.)	Difference from Average.	Highest.	Date.	Lowest.	Date.	Observed Monthly Range.
...	inches. 29.967	inches. -0.352	inches. 30.523	25th	inches. 29.194	3rd	1.329
...	29.573	-0.317	30.021	14th	29.690	19th	0.331
...	30.009	+0.042	30.716	14th	29.110	19th	1.606
...	30.020	+0.117	30.528	19th	29.152	5th	1.376
...	29.977	-0.003	30.434	30th	29.420	3rd	1.014
...	29.958	-0.057	30.244	1st	29.634	25th	0.610
...	30.036	+0.069	30.335	8th	29.675	2nd	0.660
...	29.982	-0.006	30.389	13th	29.450	3rd	0.939
...	30.147	+0.233	30.510	12th	29.608	27th	0.902
...	30.015	+0.066	30.641	22nd	29.439	25th	1.202
...	29.744	-0.074	30.376	18th	28.990	28th	1.386
...	29.962	-0.018	30.542	16th	29.247	30th	1.295
Means	29.949	-0.035	30.716	March 14th	28.990	Nov. 28th	1.726



## REMARKS (TABLE No. 2.)

The extremes observed were 30·716 inches on the 14th March, and 28·990 inches on the 28th November, giving a total range of 1·726 inches.

The greatest monthly range occurred in March, and the least in February.

The mean pressure was slightly below the average.

Table No. 3. DURATION OF BRIGHT SUNSHINE.

1900.	Actual Sunshine (hours).	Percentage of Possible.	Difference from Average (hours).	Greatest Daily Amount (hours).	Percentage of Possible.	Sunny Days.	Sunless Days.
January	47.78	18	-3.29	6.28	75	20	11
February	72.39	26	-13.19	8.09	77	21	7
March	111.28	30	-27.82	9.15	75	27	4
April	175.17	41	-2.67	12.56	92	27	3
May	238.23	48	+26.12	14.47	94	27	4
June	180.57	36	+27.30	14.54	88	27	3
July	268.72	54	+76.79	14.90	91	31	...
August	241.63	54	+54.80	13.52	93	31	...
September	190.71	52	+38.68	12.09	89	28	2
October	123.58	38	+17.06	9.24	81	27	4
November	76.00	29	+16.14	7.26	82	27	3
December	26.10	16	-25.68	4.00	51	14	17
Total and Means	1752.16	36.6	+134.4	14.90	91	307	58



## REMARKS (TABLE No. 3).

Bright sunshine during the year was considerably above the average of 15 years—1881-1895. The greatest excess was during July and August—40 and 29 per cent. respectively.

During five months the sunshine was deficient, May being more than 20 per cent below the normal.

The greatest daily amount during the year was registered on the 5th of July with 14.90 hours.

The mean daily sunshine was 4.80 hours.

The sun shone on 307 days.

TABLE 4. RAINFALL.

1900.	Total Rainfall.			Wet days, or falls of 0.01 or more.			Greatest fall in one day.					
	The Hoe.		Blackadon Asylum.	The Hoe.	Freedom Fields.	Blackadon Asylum.	The Hoe.		Freedom Fields.		Blackadon Asylum.	
	Rainfall.	Difference from Average.	inches.	inches.	inches.	inches.	Amount.	Date.	Amount.	Date.	Amount.	Date.
...	inches.	inches.	inches.	27	27	27	inches.	6th	inches.	6th	inches.	6th
January	5.80	+1.89	9.47	27	27	27	1.36	6th	1.31	6th	2.08	6th
February	5.85	+2.98	9.85	17	17	20	0.96	14th	0.97	14th	1.75	15th
March	2.43	-0.03	3.07	16	17	12	0.88	18th	1.01	18th	0.68	21st
April	2.02	-0.6	2.27	12	14	17	0.66	3rd	0.66	6th	0.74	6th
May	1.73	-0.30	1.79	9	10	11	0.51	21st	0.50	21st	0.90	21st
June	3.83	+1.86	5.78	17	17	18	0.77	14th	0.76	14th	1.11	14th
July	0.95	-2.02	1.26	11	11	10	0.30	31st	0.31	31st	0.38	31st
August	2.71	-0.22	4.16	15	15	16	0.61	6th	0.63	6th	0.86	6th
September	1.43	-2.08	2.79	14	14	14	0.31	26th	0.48	26th	0.92	26th
October	2.23	-1.73	3.97	18	20	21	0.58	4th	0.68	4th	0.93	4th
November	4.35	+0.58	6.36	22	23	25	0.60	24th	0.78	24th	0.69	24th
December	6.59	+2.70	10.51	26	25	28	0.98	4th	0.93	4th	1.22	4th
Totals	39.92	+3.36	62.47	204	210	219	1.36	Jan. 6th	1.31	Jan. 6th	2.08	Jan. 6th



## REMARKS (TABLE No. 4.)

*Remarks on the Rainfall.*

During seven months the quantity registered was below the average, the driest month being July, with a fall of 0·95 inch.

The mean wet day rainfall for the year was 0·19 inch.

There were 204 wet days or days with a rainfall of at least 0·01 inch at the Hoe, 210 wet days at Freedom Fields, and 219 wet days at Blackadon Asylum.

The greatest daily fall was 1·36 inch, on 6th January.

Table No. 5. AMOUNT OF CLOUD, RELATIVE HUMIDITY, AND GENERAL PHENOMENA.

1900.	Mean amount of Cloud.		Mean relative humidity. Saturation - 100.		Number of days observed.						
	9 a.m.	9 p.m.	9 a.m.	9 p.m.	Fog.	Snow	Hail.	Clear Sky.	O'cast.	Thunderstorms.	Distant Lightning
	January	7.1	6.6	91	91	...	...	...	8	12	...
February	6.0	6.0	89	89	...	2	...	7	2	...	...
March	7.0	6.0	83	81	...	2	1	6	5	...	...
April	6.0	5.0	83	87	...	...	...	10	3	...	...
May	7.0	4.0	86	92	...	...	...	16	2	...	...
June	7.0	7.0	86	90	...	...	...	3	8	...	...
July	6.0	5.1	76	86	...	...	...	15	3	2	...
August	7.4	4.7	78	85	...	...	...	15	3	...	...
September	5.6	1.9	81	86	...	...	...	7	3	...	...
October	7.0	5.5	83	87	1	...	...	8	2	...	...
November	7.1	6.7	87	87	1	...	...	9	4	...	...
December	8.3	8.0	90	87	...	...	...	3	22	...	...
Means and Totals ...	6.8	5.5	84	87	2	4	1	107	69	2	...



## REMARKS . (TABLE No. 5).

*Amount of Cloud, Relative Humidity, and General Phenomena.*

The sky was clearest during May, July and August, and overcast in January and December.

The air was driest during July, the mean Relative Humidity being 81. The driest air recorded was on 11th June, when it contained 50 per cent of moisture. On eleven days during the year the moisture in the air was under 60 per cent.

Fogs were most prevalent during October and November.

Table No. 6.—DIRECTION OF WIND.

1900.	N. per cent	N.E. per cent	E. per cent	S.E. per cent	S. per cent	S.W. per cent	W. per cent	N.W. per cent	Calm per cent
January	14	6	8	6	10	16	26	13	1
February	12	28	9	11	11	14	50	10	0
March	29	29	14	8	2	5	5	8	0
April	27	5	19	3	6	12	22	6	0
May	21	14	13	10	22	11	6	1	2
June	17	8	3	1	25	17	20	8	1
July	24	1	8	8	8	8	25	16	2
August	19	8	8	4	17	19	6	16	3
September	12	10	20	8	13	13	16	6	2
October	29	8	1	3	13	24	17	13	2
November	20	13	7	3	7	18	15	17	...
December	11	6	6	5	6	38	15	13	...
Means	19	11	9	6	11	16	18	9	1



## REMARKS TABLE No. 6.)

The wind during the year was very variable, Northerly winds being slightly predominant.

45 per cent. of the winds were Easterly and Northerly, and 55 per cent. were Westerly and Southerly.

Gales occurred in February, October and December.

TABLE NO. 7.

1900.	Maximum in Sun Black Bulb in Vacuo.			Minimum on Grass.			Earth Temperature 1 foot deep.			Sea Temperature Plymouth Sound.		
	Mean.	Maximum	Minimum	Mean.	Maximum	Minimum	Mean	Maximum	Minimum	Mean.	Maximum	Minimum
January	...	90.7	48.0	...	46.2	27.8	...	46.5	39.4	...	50.0	47.0
February	...	110.5	49.0	...	48.3	18.5	...	48.7	34.6	...	49.0	44.5
March	...	114.0	53.2	...	38.1	24.3	...	45.2	39.4	...	47.5	45.0
April	...	121.3	68.2	...	49.3	28.1	...	55.5	40.1	...	52.0	46.0
May	...	114.2	79.8	...	46.9	31.7	...	60.0	51.5	...	53.5	50.0
June	...	118.4	78.0	...	54.7	31.1	...	64.4	56.8	...	58.4	50.8
July	...	128.3	100.3	...	62.1	39.1	...	71.2	59.4	...	61.6	56.2
August	...	120.9	83.2	...	55.7	43.7	...	69.5	59.9	...	62.5	58.5
September	...	114.1	79.3	...	55.5	35.3	...	63.0	57.2	...	62.0	57.0
October	...	100.7	68.5	...	59.7	28.1	...	58.8	47.8	...	61.0	54.0
November	...	84.3	56.3	...	47.9	25.2	...	54.7	40.2	...	56.0	50.0
December	...	69.8	46.0	...	49.0	30.6	...	49.7	42.7	...	59.0	48.0
Means	...	99.9	46.0	...	62.1	18.5	...	71.2	34.6	...	62.5	44.5



## REMARKS (TABLE No. 7).

*Maximum in Sun ; minimum on Grass ; Temperature of Earth and Sea Temperature.*

The sun's heat rays were greatest during July and least during January, the absolute maximum was 144 degrees.

The Temperature on the ground was coldest during the month of March and warmest in July ; the coldest temperature was registered on the 8th February, when it was 18.5 degrees.

The earth's temperature one foot below the surface reached its maximum on the 17th July, when it was 71.2 degrees, and was coldest on the 2nd March, when it was 34.6 degrees. The warmest month was July and the coldest February.

The sea was warmest during August and coldest in February. The maximum was 62.5 degrees on 10th September, and minimum 44.5 degrees on February 18th.

## APPENDIX.

*Mean Temperature, Sunshine, and Rainfall, at various Towns and Health Resorts in the British Isles.*

Town.	Mean Temperature. 25 years.	Mean Daily Range. 25 years.	Average Annual Sunshine. 15 years, Hours	Average Annual Rainfall. 30 years. Inches.
PLYMOUTH	50.8	11.8	1617.5	36.56
Aberdeen	46.2	11.4	1420.9	30.84
Glasgow	46.8	11.2	1095.8	39.61
Durham	46.7	14.2	1297.2	28.21
York	47.8	14.2	1279.8	25.95
Blackpool	48.1	11.9	1339.7	33.89
Douglas	48.0	11.1	1592.1	41.25
Manchester	47.6	13.3	—	37.81
Liverpool	48.8	10.4	—	28.93
Llandudno	49.7	10.8	1349.6	31.14
Pembroke	49.7	7.4	1654.5	35.16
Oxford	48.9	13.9	1482.2	25.72
Cambridge	48.7	16.7	1521.9	23.29
London	49.9	14.8	1240.1	24.84
Southampton	50.2	13.8	1647.8	31.27
Hastings	49.6	10.5	1761.1	29.54
Falmouth	50.8	8.6	1734.4	47.69
Armagh	47.4	12.2	1262.9	31.17
Dublin	49.5	11.0	1514.3	27.55
Valencia	51.0	10.3	1487.7	55.80
Jersey	51.9	10.1	1930.5	34.18





PLATE 201 - 907 10/10/19



(B) TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1900, in the Borough of Plymouth. Urban Sanitary District; classified according to DISEASES, AGES and LOCALITIES.

NAMES OF LOCALITIES adopted for the purpose of these Statistics; Public Institutions being shown as separate localities.  (a)	POPULATION AT ALL AGES.		Registered Births. (d)	New Cases of Sickness in each Locality, coming to the knowledge of the Medical Officer of Health.													Number of such cases removed from their Homes in the several Localities for treatment in Isolation Hospital.													
	Last Census. (b)	Estimated to middle of 1900. (c)		1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12	13	
				Measles.						Typhoid.					Cholera.	Erysipelas.	Meningitis.	Whooping Cough.	Scarletina.	Diphtheria.	Morbilli Group.	Typhus.					Cholera.	Erysipelas.	Meningitis.	Whooping Cough.
				Fever.					Typhoid.	Typhoid.	Typhoid.	Typhoid.	Typhoid.	Typhoid.	Typhoid.	Typhoid.	Typhoid.	Typhoid.	Typhoid.	Typhoid.	Typhoid.	Typhoid.	Typhoid.	Typhoid.	Typhoid.	Typhoid.	Typhoid.	Typhoid.	Typhoid.	
<b>Ecclesiastical Parishes—</b>																														
St. Andrew ...	9363	...	...	...	3	1	1	...	2	...	...	...	7	7	...	...	2	1	1	...	1	...	...	...	...	...	1	...		
St. Peter ...	11785	...	...	...	2	3	1	...	5	...	...	...	15	1	1	...	1	2	...	...	1	...	...	...	...	...	1	...		
St. Saviour ...	2450	...	...	...	2	1	...	...	2	...	...	1	7	...	1	...	...	...	...	...	2	...	...	...	...	...	...	...		
St. James ...	2864	...	...	...	...	10	...	...	2	...	...	...	2	5	...	...	...	7	...	...	1	...	...	...	...	...	...	2		
All Saints ...	6778	...	...	...	4	2	...	...	3	...	...	2	3	1	...	...	1	1	...	...	...	...	...	2	...	...	...	...		
Christ Church ...	6244	...	...	...	5	1	...	...	8	...	...	...	6	4	...	...	...	1	...	...	1	...	...	...	...	...	...	...		
St. Matthias ...	4488	...	...	...	5	3	...	...	9	...	...	1	3	4	...	...	1	1	...	...	5	...	...	...	...	...	1	...		
Holy Trinity ...	4351	...	...	...	1	3	...	...	1	...	...	1	9	1	...	...	...	3	...	...	...	...	...	...	...	...	...	...		
Charles ...	10849	...	...	...	10	2	...	...	10	1	...	1	12	9	...	...	2	...	...	...	2	...	...	1	...	...	2	...		
St. Jude ...	7557	...	...	...	11	22	...	...	13	1	...	1	15	3	8	...	...	6	...	...	5	...	...	...	...	...	...	...		
St. John ...	6964	...	...	...	3	2	1	...	5	...	...	...	31	3	11	...	2	1	...	...	3	...	...	...	...	...	1	...		
St. Luke ...	3342	...	...	...	...	1	...	...	5	...	...	2	5	...	...	...	...	...	...	...	4	...	...	...	...	...	...	...		
Emmanuel ...	1387	...	...	...	6	...	...	...	3	...	...	...	...	1	1	...	4	1	...	...	1	...	...	...	...	...	...	...		
Compton Gifford ...	3232	...	...	...	9	3	...	...	19	...	...	1	11	43	...	...	6	...	...	...	7	...	...	...	...	1	1	...		
Laira ...	1076	...	...	...	...	1	2	...	6	...	...	...	...	...	...	...	...	1	...	...	3	...	...	...	...	...	...	...		
Pennycross ...	349	...	...	...	2	...	...	...	33	...	...	...	...	12	...	...	1	...	...	...	21	...	...	...	...	...	...	...		
<b>Public Institutions—</b>																														
S. D. & E. C. Hospital ...	...	...	...	...	2	1	...	...	...	...	...	...	...	...	...	...	2	1	...	...	...	...	...	...	...	...	...	...		
Workhouse ...	...	...	...	...	1	2	...	...	...	...	...	...	14	...	...	...	1	2	...	...	...	...	...	...	...	1	3	...		
<b>Totals</b> ...	<b>*86079</b>	<b>102161</b>	<b>2849</b>	...	<b>66</b>	<b>58</b>	<b>5</b>	...	<b>127</b>	<b>2</b>	...	<b>9</b>	...	<b>140</b>	<b>94</b>	<b>22</b>	...	<b>23</b>	<b>28</b>	<b>1</b>	...	<b>57</b>	...	...	<b>3</b>	...	<b>3</b>	<b>11</b>	...	

\* The Census of 1891 shewed the Population of the Borough to be 88,910, which includes Public Institutions and floating population.

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Chapter XLIII	640
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Chapter XLVIII	715
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Chapter L	745
Chapter LI	760
Chapter LII	775
Chapter LIII	790
Chapter LIV	805
Chapter LV	820
Chapter LVI	835
Chapter LVII	850
Chapter LVIII	865
Chapter LIX	880
Chapter LX	895
Chapter LXI	910
Chapter LXII	925
Chapter LXIII	940
Chapter LXIV	955
Chapter LXV	970
Chapter LXVI	985
Chapter LXVII	1000