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County Borough of Southampton.

# Annual Report

ON THE

Health of the County Borough of Southampton

AND THE

Port of Southampton For the Year 1929,

BY

R. E. LAUDER, M.D., F.R.C.S. Ed., D.P.H.,

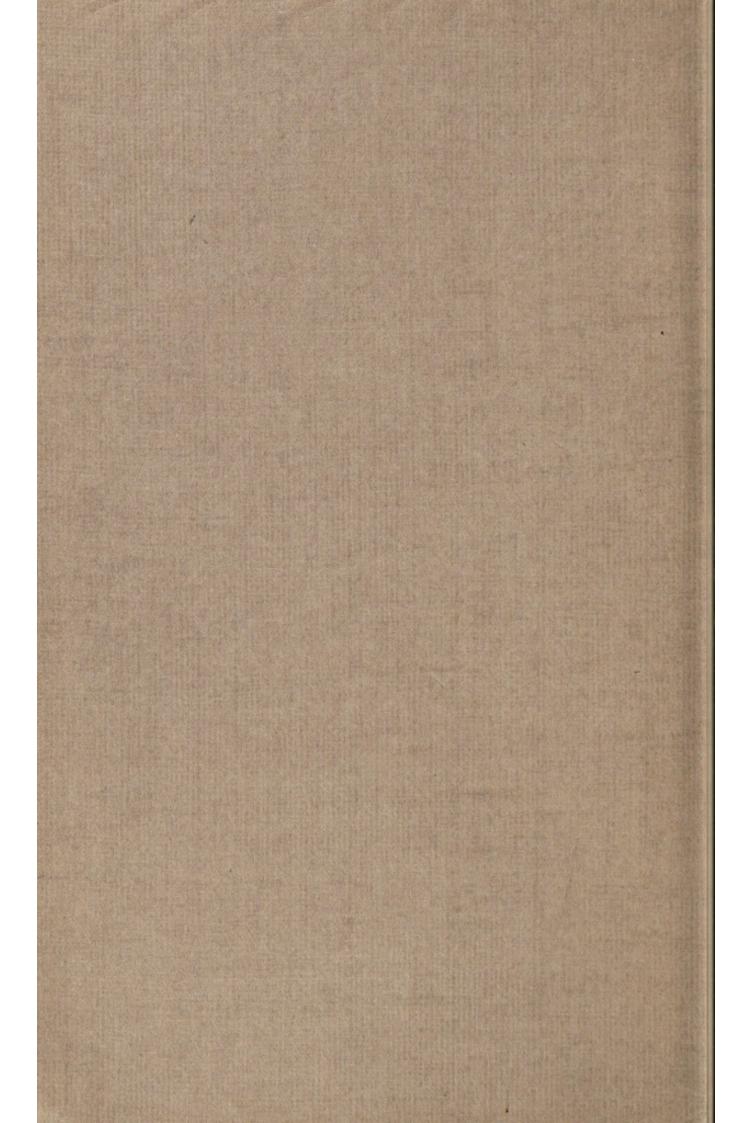
Medical Officer of Health of the County Borough and Port of Southampton,

Medical Superintendent of the Borough and Port Fever Hospitals.

Soutbampton:

SOUTHERN NEWSPAPERS, LIMITED, 45 ABOVE BAR.

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# Annual Report

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#### COUNTY BOROUGH AND PORT OF SOUTHAMPTON.

## Annual Report of The Medical Officer of Health.

TO THE MAYOR, ALDERMEN AND COUNCILLORS.

MR. MAYOR, LADIES AND GENTLEMEN,

I have the honour to submit for your information, in accordance with Article 14 (3) of the Sanitary Officers Order, 1926, my Annual Report on the sanitary circumstances, the sanitary administration, and the vital statistics of the County Borough of Southampton for the year 1929. A summary of the work done and action taken under the Factory and Workshops Acts, the Midwives Acts, and the Housing Acts, is also included in the Report.

Summaries are included in the Report of the general public health work carried out in the Borough, and the action taken in respect of infectious disease and the measures adopted for the prevention and control of Tuberculosis.

Owing to the epidemic of Influenza during the first three months of the year—the epidemic being the most severe since 1918–1919—and the extreme cold during February, the death rate 13.48 is the highest recorded for ten years. The infantile mortality rate was also influenced by the same conditions, the rate being 63.6 per 1,000 births, the highest since 1922.

The annual Report on the health of the Port of Southampton for the year 1929 is appended at the end of the Borough Report.

I am, Mr. Mayor, Ladies and Gentlemen,

Your obedient Servant,

R. E. LAUDER,

Medical Officer of Health.

### REPORT.

# STATISTICAL SUMMARY FOR THE COUNTY BOROUGH OF SOUTHAMPTON.

A . /1 . 1 . 1 . 1 . 1 . 1 . 1								
Area (land and inland water). Acreas			9,192					
Area (including tidal water and foresh	ore)		11,109					
Population (Census 1921)			160,994					
Population, Registrar-General's estima	ate (1929)		172,300					
Number of structurally separate sets		s in-						
tended or used for habitation (cer			30,347					
Total private families therein (Census	1921)		37,214					
Rateable value (March, 1930)			,263,910					
Gross value (March, 1930)		£1	,511,124					
Sum represented by a penny rate			£4,975					
Births—			21170					
Legitimate Males 1,501 Fem	ales 1,459	Tot	al 2,960					
Illegitimate Males 83 Fem								
Birth-rate								
Deaths								
Death-rate								
Number of women dying in, or in con								
of, childbirth	-							
Deaths of infants under one year of ag								
Legitimate, 62.5; Illegitimate, 86.1; total, 63.6.								
Deaths from Measles (all ages)			I					
Deaths from Whooping Cough (all age								
Deaths from Diarrhœa (under 2 years	or age)	•••	22					

#### POPULATION.

The enumerated population of the County Borough of Southampton taken on the 19th June, 1921, was:—Males, 78,131; Females, 82,863; Total, 160,994.

The Census of 1921 was not taken until the month of June, and it was found that many persons were away on holiday. An adjustment to what would probably be the normal population of the Borough was made by the Registrar-General of 162,200.

The population of the Borough is estimated by the Registrar-General as at 1st July, 1929, to be 172,300.

The estimate is based on the adjusted 1921 figures, after allowance for the varying rate of natural increase as evidenced by the births and deaths, and of migration, as indicated from other sources of information, such as changes in the numbers on the Parliamentary Register, and the migration returns obtained from the Board of Trade.

The increase over the estimated population for the previous year is 2,400, and an increase of 10,100 over the revised Census population, 1921. The population, however, still appears to be underestimated.

The number of structurally separate dwellings that have been completed for occupation since the Census is 7,097.

## GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA.

The following particulars are inserted by the request of the Ministry of Health.

Hospitals provided or subsidized by the Local Authority.

#### A. (I) FEVER HOSPITAL.

The Fever Hospital, known as the Southampton Isolation Hospital, which was opened in 1900, is situated at Millbrook within the County Borough.

The Hospital is constructed of brick, and stands on high ground, sloping to the south. The buildings consist of entrance lodge, out-bathing station, mortuary, administration block, five pavilions, one of which was erected in 1905, laundry, ambulance block, disinfector, and other buildings. In addition to this accommodation there are two huts, containing 16 beds each, which were erected for the reception of military cases in 1916, and one additional brick pavilion of 12 beds, for the reception of Tuberculosis cases, was erected in 1919.

The total number of beds provided is 156, of which 48 are set aside for the treatment of Tuberculosis cases with the approval of the Ministry of Health.

Provision has been made for any future extensions necessary, the buildings having been arranged with that end in view. The original site contained 10½ acres, and in 1915 the Corporation acquired the adjoining land and buildings with an area of about 44 acres.

(2) SMALL POX HOSPITAL.

The Small Pox Hospital is situated at Millbrook Marsh, on a triangular piece of land about 21 acres in extent. It is bounded on two sides by the Southampton Water, and on the third side by the railway line. Accommodation for 30 cases is provided in three military huts, and one observation hut. Staff quarters, fumigation hut, laundry, and other offices are provided.

B. (I) TUBERCULOSIS,

Forty-eight beds are available for the treatment of cases of Tuberculosis in two pavilions set aside for this purpose at the Isolation Hospital.

#### (2) MATERNITY.

Six beds are provided by the Local Authority at No. 2, East Park Terrace, for the treatment of Maternity cases. The extension of the accommodation is being carried out, which will provide seven additional beds.

#### Ambulance Facilities.

(a) For Infectious Cases.

Three motor ambulances, with the necessary staff for the removal of infectious cases, are provided by the Corporation.

(b) For Non-Infectious and Accident Cases.

For non-infectious and accident cases, an ambulance is provided by the Fire Brigade and by the Red Cross Society.

Clinics and Treatment Centres.

The following Clinics and Treatment Centres are provided by the Local Authority:—

Maternity Centre and Infant Clinic... No. 2, East Park Terrace.
Ditto ... Sydney House, Bitterne.

Seven Mothers' and Infant Welcomes, situated at Winton Street, Bond Street, Albert Road, Shirley, Hampton Park, Woolston, and Bitterne.

Tuberculosis Dispensary ... No. 1, East Park Terrace.
(See pages 41-55).

Ditto ... Sydney House, Bitterne.

School Clinic (see separate Report) No. 1, East Park Terrace.
Ditto ... Sydney House, Bitterne.

Treatment Centre for Venereal No. 1, East Park Terrace.

Diseases (see pages 26, 37-40).

Ditto (Females) ... No. 2, East Park Terrace.

Ditto ... No. 2, East Park Terrace.

Royal South Hants and
Southampton Hospital.

#### Professional Nursing in the Home.

#### (a) GENERAL.

Nursing is provided by the Queen Victoria Jubilee Nurses' Institute for cases brought to their notice by the Health Visitors. A grant is made by the Council to the Institute in aid of this work.

#### (b) Infectious Diseases.

Cases where proper isolation or adequate nursing arrangements cannot be provided are removed to the Isolation Hospital for treatment. Cases of Measles coming to the knowledge of the Department are visited by the Health Visitors, and, if necessary, removed to the Isolation Hospital.

#### Midwives.

No practising midwives are employed by or subsidized by the Local Authority. The number of midwives practising in the area is 38—trained, 36; untrained, 2.

#### Maternity and Nursing Homes.

The following is a record of the action taken during the year:—

(1)	Number of applications for registration		5
(2)	Number of Homes registered		4
(3)	Number of orders made refusing or canc	elling	
	registration		I
(4)	Number of appeals against such orders		nil
(5)	Number of cases in which such orders	have	
	been		
	(a) Confirmed on appeal		nil
	(b) Disallowed		nil
(6)	Number of applications for exemption	from	
	registration		nil
(7)	Number of cases in which exemption has	been	
	granted :—		
	(a) Granted		nil
	(b) Withdrawn		nil
	(c) Refused		nil

Chemical Work.

The chemical work is carried out by the Public Analyst in the Borough Laboratory.

A detailed report of the work of this Department during the year is included in this Report (pages 92—98).

Legislation in Force.

LOCAL ACTS DEALING WITH SANITARY MATTERS:

The Southampton Improvement Act, 1844. The Southampton Corporation Act, 1910.

GENERAL ADOPTIVE ACTS.

Public Health (Amendment) Act, 1890, except Part IV. Public Health (Amendment) Act, 1907. Public Health Act, 1925.

ByE-LAWS.

Common Lodging Houses; Houses let in lodgings; Slaughter-houses; New Streets and Buildings; Drainage of existing houses; Tents, vans, sheds or other similar structures; For the prevention of nuisances arising from snow, filth, dust, ashes and rubbish, and for prevention of keeping of animals on any premises so as to be injurious to health; Spitting in public places.

#### METEOROLOGY.

The weather in Southampton during 1929 was marked by the unusual dryness of the first nine months of the year, and the exceptional rainfall during the last three months. The deficiency in rainfall from January to the end of September was 8.5 inches, and the excess in the rainfall from October to December 10.9 inches. March and September were the driest months with 0.17 inch and 0.42 inch respectively. November was exceptionally wet, 9.06 inches of rain falling.

The year was very sunny, the sunshine in Southampton totalling 1,876 hours, or 208 more than the average.

Owing to the unusually cold February, the mean temperature for the year, 50.1°, is less than the average 50.8°.

An abstract from the monthly weather reports, published by the Meteorological Office, in which the records relating to Southampton are included, is given on page 91.

#### BIRTHS.

The total number of births occurring among residents of the Borough was 3,111, compared with 3,047 in the previous year. The actual number of births registered in the Borough was 3,127, of which 73 were non-residents, and 57 births occurred in other districts among residents of Southampton. The birth-rate was 18.12, and is an increase of 0.12 compared with the previous year.

The birth-rate in 1928 was 18.00, and the average for ten years 19.8.

The excess of births over deaths was 796, compared with 1,022 in 1928 and 775 in 1927.

The following were the birth-rates in the Municipal Wards during the year:—

St. Nicholas		35.7	Woolston	 15.7
Bitterne & Sholi	ng	24.3	Newtown	 15.5
Shirley		21.9	Portswood	 15.5
Bitterne & Pear	Tree	21.6	St. Mary's	 14.7
Northam		19.5	Bevois	 14.1
Trinity		19.0	Freemantle	 13.2
Millbrook		18.5	Banister	 13.1
Town		17.8	All Saints	 12.7
St. Denys		17.0		

Of the total of 3,111 births, 1,584 were males and 1,527 females, being in the proportion of 1,037 males to every 1,000 females; the average for the previous five years being 1,051.

The number of illegitimate births recorded was 151, the proportion to every 1,000 births registered being 49, compared with an average of 38 in the preceding five years.

The birth-rate in England and Wales was 16.3, and for the 107 great towns, 16.6.

#### DEATHS.

The death-rate of the County Borough for the year was 13.48 per 1,000 of the population, being an increase of 1.52 over that of the previous year. The average death-rate for the previous 10 years was 11.76.

The total deaths registered (52 weeks) in the Borough amounted to 2,332, of which 160 were non-residents. One hundred and forty-three deaths of residents of the Borough occurred in other districts in England and Wales. The total deaths of residents of the Borough was therefore 2,315, of which 1,225 were males and 1,090 females.

The increase of 290 in the number of deaths recorded, compared with the previous years, was due to the epidemic of Influenza during the first three months of the year, the most severe since 1918–19, and the exceptionally cold weather experienced throughout January and February.

The mortality of persons over sixty years of age from Influenza, Bronchitis and Broncho-pneumonia was much in excess of the average.

There was also an increase in the deaths of children under five years of age, due to deaths from respiratory diseases and Whooping Cough, the deaths totalled 280, compared with 205 in 1928.

The death-rate in each of the Municipal Wards per 1,000 of the population was:—

Bitterne & Pear Tr	ree 9.3	St. Denys	 13.1
Bitterne & Sholing	10.8	All Saints	 13.2
Newtown	. 11.5	St. Mary's	 13.3
Millbrook	. 12.2	Woolston	 14.4
Portswood	. I2.2	Trinity	 15.5
Northam	. 12.3	Freemantle	 15.6
St. Nicholas	. 12.4	Shirley	 15.6
Bevois	. 12.7	Town	 20.3
Banister	. 13.0		

The death-rate in each of the old civil parishes of the Borough was: Town 14.69, Portswood 12.49, Shirley 14.05, Itchen 11.00, South Stoneham 12.02.

Of the 2,332 deaths registered in the Borough, 859, equal to 36.8 per cent., occurred in Public Institutions and Nursing Homes, compared with 40.3 per cent. in 1928 and 37.4 in 1927.

The Institutions in which the deaths occurred were: Isolation Hospital 40, Shirley Warren Infirmary 483, Workhouse 35, Royal South Hants and Southampton Hospital 208, Southampton Children's Hospital 31, Municipal Maternity Home 2; Nursing Homes 60.

TABLE A.

Showing Population, Birth Rates, Infantile Mortality and Death Rates in each of the Municipal Wards for the Year 1929, together with the Average Rates for the past 10 Years 1919—1928.

28.	Death Rate from All Causes	6.91	12.1	12.4	13.5	12.0	11.2	13.1	0.11	9.11	10.7	II.I	0.0I	IO.3		1.6	IO.3	10.2	11.3	11.76
rs, 1919-19	Death Rate from Phthisis.	2,00	81.1	14.1	1.23	16.0	0.95	10.1	0.70	0.89	1.12	0.92	99.0	16.0		1.03	00.00	0.74	0.99	1.07
s, Ten Yea	Death Rate from Zymotic Diseases.	0.98	0.68	99.0	0.58	0.43	0.33	0.41	0.20	0.30	0.56	0.41	0.28	0.27		0.50	0.35	0.36	0.42	0.48
Average Rates, Ten Years, 1919-1928.	Infantile Mortality per 1,000 Births Register'd	95.1	82.5	0.89	9.29	57.9	54.5	65.5	41.3	50.2	47.8	55.6	52.1	44.0	,	20.1	57.2	45.4	49.5	61.2
Av	Birth Rate.	21.3	19.3	23.2	23.0	16.8	15.7	17.1	12.2	6.91	22.0	20.7	18.2	18.4		(22.3	* 23.1	18.8	128.1	8.61
	Death Rate from All Causes.	20.3	13.3	12.3	15.5	11.5	13.2	12.7	13.0	15.6	12.2	15.6	12.2	13.1		9.3	10.8	14.4	12.4	13.48
	Death Rate from Phthisis.	2.38	19.1	0.77	1.54	1.48	19.0	0.71	0.46	0.72	1.16	6.67	0.73	1.54		1./1	0.93	1.54	1.03	1.16
1929.	Death Rate from Zymotic Diseases.	0.93	0.39	0.25	0.99	0.11	19.0	0.12	0.0	0.24	0.58	0.89	0.27	0.41		0.30	0.37	0.24	1.33	0.48
	Infantile Mortality per 1,000 Births Regist'red	95.2	83.3	61.7	74.3	29.4	72.0	16.9	53.I	I.60I	67.3	84.7	52.9	66.3	1	37.2	33.6	75.2	41.3	63.6
	Birth Rate.	17.8	14.7	19.5	0.6I	15.5	12.7	14.1	13.1	13.2	18.5	21.9	15.5	17.0	,	21.0	24.3	15.7	35.7	18.12
Esti-	mated Popula- tion, 1929.	11,827	13,091	11,683	9,132	8,829	9,847	8,423	8,664	8,352	12,075	13,544	11,009	9,776		9,992	10,769	8,476	118,9	172,300
	Ward.	Town	St. Mary's	Northam	Trinity	Newtown	All Saints	Bevois	Banister	Freemantle	Millbrook	Shirley	Portswood	St. Denys	Bitterne and	Bitterne and	Sholing	Woolston	St. Nicholas	Borough 172,300
	180	i	63	3	4.	ò	9	7.	00	6	IO.	II.	12.	13.	14.	7.4		.91	17.	

Averages for eight years only (1921-1928).
 Includes deaths from Smallpox, Enteric Fever, Scarlet Fever, Diphtheria, Measles, Whooping Cough, and Diarrhoea and Enteritis under two years of age.

#### INFANTILE MORTALITY.

The deaths of infants under one year of age recorded during the year amounted to 198, which is an increase of 46 deaths compared with the previous year.

The deaths are equal to a rate of 63.6 per 1,000 births registered during the same period, and is the highest rate recorded in Southampton since 1922. The average rate for the ten years, 1920–1929, was 61.2.

The increase in deaths over the previous years was chiefly due to Whooping Cough, Tubercular Meningitis, Diarrhœa and malformations.

In the 107 great towns of England and Wales the infantile mortality rate for 1929 was 79.

The infantile mortality rate in Southampton during the past thirty-two years is shown in the following table:—

-			-		
	Perio	d.	Infantile	Mortality Rate	
Average 5	years,	1897—1901	 	159	
,,	,,	1902—1906	 	120	
,,	,,	1907—1911	 	108	
,,	,,	1912—1916	 	86	
,,	,,	1917—1921	 	76	
,,	,,	1922—1926	 	59	
		1927	 	63	
		1928	 	50	
		1929	 	64	

In the year 1929 the number of deaths of male infants amounted to 109, and the deaths of females 89. The rate per 1,000 births for each sex for the past five years is shown in the following table:—

	Males.	Females.	Both Sexes.
1925	 57.5	 55.7	 56.6
1926	 65.8	 45.5	 56.4
1927	 70.0	 54.5	 62.9
1928	 58.0	 41.3	 49.9
1929	 68.8	 58.3	 63.6

The deaths of illegitimate infants amounted to 13, which, calculated upon the number of illegitimate births registered during the same period, is equal to an infantile mortality of 86.1, the rate for legitimate infants being 62.5.

Similar rates for the past five years are given for comparison:

		Legitimate Infant Mortality Rate.			llegitimate ant Mortality Rate.
1925	 		56		 75
1926	 		55		 102
1927	 		63		 70
1928	 		48		 93
1929	 		63		 86

The infantile mortality rate in 1929 in the Municipal Wards is given below, the average for the preceding ten years being shown for comparison:—

Ward.			1929.	Averag	e 10 years, 1919-1928.
Bevois			 16.9		65.5
Newtown			 29.4		57.9
Bitterne an	d Pear	Tree	 37.2		56.1*
St. Nichola	S		 41.3		49.5*
Portswood			 52.9		52.1
Banister			 53.1		41.3
Bitterne an	d Shol	ing	 53.6		57.2*
Northam			 61.7		68.0
St. Denys			 66.3		44.0
Millbrook			 67.3		47.8
All Saints			 72.0		54.5
Trinity			 74.3		67.6
Woolston			 75.2		45.4*
St. Mary's			 83.3		82.5
Shirley			 84.7		55.6
Town			 95.2		95.1
Freemantle			 109.1		50.2
Borough			 63.6		61.2

<sup>\*</sup>Average for eight years only (1921-28).

The Notification of Births Act came into operation in the Borough on the 9th March, 1908. This Act requires any person in attendance upon the mother within six hours after the time of birth, to notify the Medical Officer of Health of such birth in writing within thirty-six hours of the birth having occurred.

The number of notifications received during the year under the Act was 3,163, including 75 relating to still births.

The number of births registered during the same period was 3,232.

The number of notifications of births received, including still births, and percentages under the Notification of Births Act during the last five years are shown in the following table:—

Notified by—					
·	1925.	1926.	1927.	1928.	1929.
Doctors	448	447	455	507	603
Midwives	2,647	2,676	2,334	2,386	2,510
Other persons present in the house at time of			.001		70
birth	57	46	28	18	50
	3,152	3,169	2,817	2,911	3,163
Percentage of live births	06.6		07.6		
notified	96.6	95.9	91.6	93.3	97.8

The following table shows the percentage of women in childbirth attended by midwives, and the percentage of still births to total births attended during the last 10 years:—

Year.	Number of Live Births Registered.	Number of Live Births attended by Midwives.	Number of Still Births attended by Midwives.	Percentage of Live Births attended by Mid- wives to Births registered during same period.	Percentage of Still Births among Births attended by Midwives.
1920	3172	2362	70	74.5	2.9
1921	3621	2741	90	75.7	3.2
1922	3318	2500	64	75.3	2.6
1923	3205	2504	83	78.1	3.3
1924	3204	2602	90	81.2	3.3
1925	3250	2485	- 66	76.5	2.6
1926	3141	2452	69	78.1	2.7
1927	2958	2332	68	78.8	2.8
1928	3077	2220	45 68	72.7	2.0
1929	3232	2300	68	71.2	2.4

#### MATERNITY AND CHILD WELFARE.

The work of the Department has been carried out on the same lines as before.

Owing to the rapid growth of the population in the suburbs, the attendances at the outlying Centres continue to increase. The distances from the Clinic make it more difficult for mothers to bring sick infants and toddlers so far, with the result that more ailing children are dealt with at Welcomes than the original scheme provided for, though infective conditions and serious illness are excluded.

Bitterne Welcome had to seek more commodious premises early in the year, and the Shirley Welcome had so outgrown its accommodation that new premises were secured at the Wesleyan Institute, St. James' Road, and occupied in December.

The new Clinic premises at 23, East Park Terrace, also became available in December. When certain administrative details have been adjusted, this Clinic will be very convenient.

The extension of the Maternity Home, which has more than doubled the number of beds available, has necessitated the transference from Nos. 1 and 2, East Park Terrace, to 23, East Park Terrace, of the Maternity and Infant Centre and Clinic, Lady Medical Officer's room, Superintendent Health Visitor's room, Health Visitor's room, Laboratory, and sleeping accommodation for the Maternity Nurses.

The supervision of Maternity and Nursing Homes, the provision of medical aid through insurance on the advice of midwives, of consultants in Pyrexia cases, with arrangements for Hospital treatment where necessary, and of home helps, dressings and food during confinement, have all tended to improve the maternity service of the Borough. For the same purpose the Municipal Maternity Home is to double its accommodation, to take in patients who, for social or medical reasons, cannot well be delivered in their own homes, but do not apparently need Hospital treatment. The Maternal Mortality Investigation, instituted by the Ministry of Health at the end of October, 1928, has been carried on, and, up to December 31st, 1929, 23 cases had been investigated through the Department with the co-operation of the practitioners in attendance.

The present nursing staff is inadequate to cope with the work entailed by new regulations, and during 1929 even this staff has seldom been at full strength, thus hampering necessary expansion.

The work of the Department may be classified as follows:-

(I) Provision for Maternity Services in the district.

(a) Insurance Scheme for medical aid.

(b) Inspection of Midwives.(c) Provision of Home Helps.

(d) Inspection of Maternity and Nursing Homes.

(e) Report on notifications of Puerperal Fever and Pyrexia.

(f) Still Births.

(g) Ophthalmia Neonatorum.

- (2) Ante-natal Clinic at 2, East Park Terrace.
- (3) Maternity Home at 2, East Park Terrace.

(4) Mothers' and Babies' Welcomes.

(5) Infant Clinic at 2, East Park Terrace.

(6) General advice to Mothers at 2, East Park Terrace.(7) Clinic for Venereal Diseases at 2, East Park Terrace.

(8) Sydney House Clinic for Mothers and Infants.

(9) Health Visiting in the Homes.

(10) Grant of free milk and sales at cost price or less.

#### I (a). MIDWIVES ACT, 1918. INSURANCE SCHEME.

Section 14 of the Midwives Act, 1918, prescribes that in case of any emergency as defined in the Rules of the Central Midwives' Board, a midwife shall call in to her assistance a registered medical practitioner, and the Local Supervising Authority shall pay to such medical practitioner a fee in accordance with a scale fixed by the Ministry of Health.

The same section gives power to the Local Supervising Authority to recover the fee from the patient or from the husband or other person liable to maintain the patient, either summarily or otherwise as a civil debt, unless it be shown to their satisfaction that the patient or her husband or such other person is unable, by reason of poverty, to pay such fee.

Much difficulty is experienced in recovering the fee from the patient and, with the approval of the Ministry of Health, an Insurance Scheme was inaugurated in the Borough, under Section 2 (3) of the Midwives and Maternity Homes Act, 1926.

Briefly, the scheme which was put into operation on the 1st August, 1927, is as follows:—An expectant mother, on booking her confinement with a midwife, may send the sum of five shillings to the Medical Officer of Health, and this payment, without any further liability, will ensure the patient the services of a doctor for any condition for which the midwife, in accordance with the rules of the Central Midwives' Board, is required to send for medical help.

The number of cases from whom the insurance fee was received under the scheme during the year was 1,455.

The notifications received from midwives of sending for medical help totalled 949. The number of claims for fees received from medical practitioners during the year for insured patients was 653, and 163 for uninsured patients. In the latter cases 75 patients were unable to pay owing to poverty; in the remaining 88 cases accounts were sent by the Local Authority for the recovery of the whole or part of the fee.

(b.) Inspection of Midwives.

The midwives' work continues to be highly satisfactory and of good standard. Ante-natal work continues to improve, and the midwives continue to send their patients to the Clinic and to doctors for ante-natal advice. Their equipment is well kept, and records in order. Personal hygiene is well observed, washing uniform is worn, and, in most cases, washing gloves are now worn by the midwives.

The midwives work well and sympathetically with the Health Visitors and at the Welcomes, and have given much assistance by at once reporting any abnormality noticed in their work. They have much appreciated the talks and lectures arranged for them by the Medical Officer of Health and their energetic Hon. Secretary, Mrs. Harvey. It is hoped to extend these lectures in the new year.

The only dark spot in this work was an outbreak of Pemphigus in the first quarter of the year, eight cases of a violent type occurring one after the other. Three deaths of babies unfortunately resulted. Active measures were adopted to prevent the spread, with the result that it was checked speedily.

The following notifications from midwives were received by the Local Supervising Authority during the year:—

Notification of Intention to practice (t midwives 36, untrained 2)	
Notifications received of sending for m	nedical
aid (for mothers 738, for the child 2	11) 949
Notification of Still Births	45
" ,, Artificial Feeding	25
,, ,, Death of Infant	II
,, ,, Death of Mother	I
,, ,, of contact with infectiou	s disease 8
" Laying out dead body	5
Routine Inspection of Midwives	90
Special Visits of Enquiry	1,809

The special visits of enquiry are made in respect of notified cases under the Midwives Act, and claims of medical practitioners of fees for medical attendance.

Of the 25 cases of artificial feeding notified, the reasons given were: By doctors' orders not to nurse, 5; mother suffering with Tuberculosis, 3; inability to nurse—no milk, 13; baby to be boarded out, 4.

The conditions for which medical aid was sought by midwives were:—

Moti	HER.				
Ante-Partum Hæmorrhage	·			52	
Post-Partum Hæmorrhage				18	
Premature, Delayed and	Prolonged	Labo	our	166	
Mal-presentation				42	
Retained Placenta				13	
Ruptured Perineum				146	
Threatened Abortion or M				27	
General Condition Unsatis	sfactory—				
Ante-natal			121)	188	
Post-natal			675	100	
Rise of Temperature				36	
Albuminuria				25	
Thrombosed and Varicose	Veins			25	
					738
INFA	ANT.				
Premature Birth				26	
Dangerous Feebleness				15	
Malformation of Infant				14	
Tongue Tie				26	
Discharge from Eyes				65	
Skin Trouble				23	
General Condition Unsatis	stactory			33	
Still Births		• • •		9	
					211
	Total				949

### (c.) Home Helps.

The demand for home helps continues, and has proved of the greatest assistance to mothers in poor circumstances. Help was granted in 54 cases for two weeks, or longer periods if necessary, both before and after confinement. The payment varies from 7/6 to 15/- per week, and in cases where the home help sleeps in the house £1 is paid. Clean, healthy women are selected for this work who have no young children at home. Bovril and sanitary appliances have also been granted in necessitous cases. Careful observation is kept by the Health Visitors, who report much benefit to the health and mind of the mother, and also enhanced breast feeding.

#### (d). Nursing Homes Registration Act, 1927.

This Act, which came into operation on the 1st January, 1927, made it an offence for any person to carry on a Nursing or Maternity Home unless registered under the Act.

There are now 29 registered Nursing Homes on the register, the majority of which take in midwifery and maternity cases. Forty-nine visits of inspection were made to these Homes by the Inspectors of Midwives. The Homes were found satisfactory, and the equipment and method of nursing most efficient. Care is particularly required in the separation of sick cases from maternity cases, and, as a result, there was but one case of Puerperal Pyrexia notified from these Nursing Homes during the year. The standard of cleanliness is high, and the prescribed records are kept.

One application for registration of a Nursing Home was refused after inspection and adverse report.

#### (e). PUERPERAL FEVER.

Eight cases of Puerperal Fever were notified during the year, seven of which occurred in the practice of midwives, and one in which a doctor was in attendance. In the midwives' cases the fever followed:—

Three cases of prolonged labour with forceps delivery.

One retained placenta and post-partum hæmorrhage.

One case in which the patient swallowed smelling salts, resulting in high temperature and shock.

The other two cases were mild, with no history of trouble during labour.

Six cases were treated in Shirley Warren Infirmary, and six deaths were recorded during the year, one of which occurred in a public institution.

All the cases notified were immediately investigated, and disinfection carried out of the midwife and her appliances. The midwife ceased attendance on the case, and the Queen's Nurses appointed to nurse the patient until removal to Hospital, or recovery. Careful observation was taken at the time of all contacts. No cross infection occurred.

#### PUERPERAL PYREXIA.

Thirty-two cases of Puerperal Pyrexia were notified during the year. Three cases occurred among patients attended by medical practitioners, six in Maternity Homes, ten in Shirley Warren Infirmary, and one in the Isolation Hospital. Cases occurring in outside institutions were investigated, and trained nurses, usually Queen's Nurses, were provided, and the midwife who attended disinfected where necessary. Home helps and sanitary appliances were also provided.

Investigation was made where possible with a view to discovering the cause of the infection, and the following particulars were obtained:—

Abortion					 3
Retained Pl	acenta				 8
Severe Eclar	mpsia an	d For	ceps de	livery	 I
Following R	uptured	Perine	eum		 3
Respiratory	trouble				 2
Mastitis					 2

In the case notified from the Isolation Hospital, Pyrexia followed abortion caused by Diphtheria.

#### (f.) STILL BIRTHS.

Seventy-five cases of still births were notified under the Midwives Act, and investigation was made into fifty-four of these cases as to the probable cause as follows:—

Premature, caused by ante-partum hæn	norrha	ige	II
Perinal trouble and laceration of infant			7
Shock through fall or otherwise			5
Mal-presentation, forceps delivery			15
Eight of the latter were malformed.			
Previous history of still birth			3
Previous history of specific disease			6
Born before arrival of skilled aid			3
No definite history except bad health of	moth	er	4
Total			
Total			54

Where it has been possible, cases subject to previous still births have been advised to place themselves under medical treatment, either by their own doctor or by attending the Clinic for women, at 23, East Park Terrace. The midwives in the Borough have assisted in this matter.

#### (g.) OPHTHALMIA NEONATORUM.

Thirty-seven cases were notified during the year, of which six were notified by doctors, five from Shirley Warren Infirmary, and 26 from the Free Eye Hospital. The majority of cases treated were slight, and were notified and attended to at once, some being only a few hours old. Midwives in the town have been very prompt in notifying cases of trouble with the eye, which has much assisted, and attained good results.

OPHTHALMIA NEONATORUM. Particulars of cases notified.

(This Table is inserted by request of the Ministry of Health).

						21						
Remarks.		Treated at home and in Hospital. Attended Welfare Centre 18/6/30. Apparently	Cured.  Treated at home and in Hospital. Last visited 7/2/29. Reported discharged from	-		visited 19/6/30. Reported cured. 21/2/29 first visit. Doctor's orders being carried out. Now left this address. Unable to trace. Grandmother refuses	address. Going to America.  Reported very slight case. Attended Welcome. Now left this address. Cannot	0 - 0	cured.  Treated at home by Doctor 19/6/30. Re-	Treated at home and in Hospital. Last	Infant born in Shirley Warren Infirmary; since then living in St. Mary's Institute.	Has attended Clinic ever since till March, 1930. Apparently well.  Born in Shirley Warren Infirmary. Cannot trace. No information obtainable.
Present	Condition.	Well	Well	Well	Well	When last seen apparently well	Well when left district. Last	seen March, 1930 Well	Well	Well	Well	Lost trace after leaving S.W.I.
Vision	Unimpaired.	Yes	Yes	Yes	Yes	Reported	Yes	Yes	Yes	Yes	Yes	:
ted	In Hospital.	Yes	Yes	No. Private	Yes	Yes	Yes	Yes	No. Private	Yes	S.W.I.	S.W.I.
CASES. Treated	At Home.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	
	Notified.	January 7th	" 17th	February 7th	,, 15th	,, r9th	March 27th	April 13th	,, 14th	" 22nd	" 3oth	May∡4th
	No.	н	61	60	4	10	9	7	00	6	OI	II

OPHTHALMIA NEONATORUM. Particulars of cases notified.—continued.

			CASES.				
			Tre	Treated	Vision	Present	Remarks.
No.	Notified.		At Home.	In Hospital.	Unimpaired.	Condition.	
12	May 22nd	:	No	S.W.I.	Yes	Well	Born in Shirley Warren Infirmary, 19/6/30.
13	,, 22nd	:	Yes	No. Private	Yes	Well	Sight apparently unimpaired.  Treated at home by Doctor, Last visited
14	" 26th	:	Yes	Yes	Yes	Cured O Neon.	25/6/29 doing well. Last visited 19/6/30.
15	June 1st	:	Yes	No. Private	Yes	(Nepotred by Doctor) Well	attend Eye Hospital again.  Treated at Nursing Home by Doctor.
91	" 9th	:	Yes	Doctor Yes	Yes	Well	Last visited 20/6/30. Reported cured. Treated at home and in Hospital, 27/6/29.
17	" roth	:	Yes	Yes	Yes	Well	Reported cured. Treated at home and in Hospital. Last
18	,, 23rd	:	:	Yes	Yes	Well	visited 19/7/29. Cured. Very slight. Reported to have scratched
61	,, 25th	:	Yes	Yes	Yes	Well	its eye. Doctor's case.  Treated at home and in Hospital. Attended Welfare Centre. Last visited 10/7/20.
20	July 1st	:	Yes	Yes	Yes	Well	Cured.  Treated at home and in Hospital 20/7/29.
	,, 4th	;	Yes	Yes	Not stated. Apparently not.	Reported by Doctor	Discharged as cured.  Treated at home by Doctor, then taken to Eye Hospital. Now left the town. Cannot
	" 5th	:	Yes	Yes	Yes	Eyes better Well	
	" 9th	:	Yes	Yes	Yes	Well	visited 19/6/30. Quite clear. Treated at home and in Hospital. When
	", 13th	:	Yes	Yes	Yes	Well	*
25	" 19th " 25th	::	 Yes	 Yes		Well	Infant died 6 days' old with Pneumonia.  Treated at home and in Hospital. Last

OPHTHALMIA NEONATORUM. Particulars of cases notified.—continued.

		CASES.				
		Tre	freated	Vision	Present	Remarks
No.	Notified.	At Home.	In Hospital.	Unimpaired.	Condition.	AVCHIORENCE
27	July 30th	Yes	No. Private	Yes	Well	Reported moved to London. Last visit to
170	August 22nd	Yes	Yes	Yes	Well	Treated at home and in Hospital. Last
29	" 22nd	:	Yes	:	Died at	Visited 20/0/30. Completely cured. Infant died 29/8/29.
30	October 1st	Yes	Yes	:	7 days old.	Treated at home and in Hospital. Died when 6 months' old. Mother died one
						week later. No further information obtain- able.
31	" 2nd	Yes	Yes	Yes	Well	Treated at home and in Hospital. Last visited 10/6/30. Apparently not affected.
60	" 3rd	Yes	Yes	Yes	Reported by Eye Hospital	Reported by Eye Hospital better.  Treated at home and in Hospital. Last visited 19/6/30. Better.
33	" 3rd	Yes	Yes	Very slight squint	Last visit to Eye Hospital	Treated at home and in Hospital. Last visited 19/6/30. Very slight squint.
34	November 4th	Yes	Yes	Yes	Both eyes clear Well	Treated at home and in Hospital. Dis-
35	" rith	:	S.W.I.	Yes	Well	treated in Shirley W
. 36	" 12th	Yes	Yes	Yes	Well	Treated at home and in Hospital. Last visited 2/12/20. Reported discharged
37	,, 14th	Yes	Yes	Apparently	Well	two Nurses; al 22/11/29.

#### 2. ANTE-NATAL CLINIC.

This is fully attended, though there were slightly fewer new cases, partly owing to the increase of ante-natal work by private practitioners through the insurance scheme, and partly owing to uncertainty as to the extension of the Maternity Home. More cases with medical complications requiring treatment attended. Dental treatment is urgently needed for these expectant mothers.

#### 3. MATERNITY HOME.

The demand for beds at the Maternity Home has been as great as before. Alterations to increase accommodation were begun at the close of the year, and the conditions became so difficult that it was decided to send the book-patients elsewhere for a time during the first few months of 1930.

During the year 1929 159 patients were admitted for confinement, and three for ante-natal treatment only. There was no maternal death, but there were four still births and two neonatal deaths. Six cases of Puerperal Pyrexia were notified, and all did well.

The average stay of patients in the Maternity Home was 14.9 days.

#### 4. Mothers' and Babies' Welcomes.

These are seven in number, that at Portswood having two sessions a week, and needing more. Bitterne and Shirley are better off than previously, and the Eastern Welcome building (an old school) has had a small amount of repair work done to make it possible for use in wet weather, but it is still very dreary.

There is a decrease in the attendances and the consultations during 1929, due in some measure to a large amount of sickness amongst children, owing to the severe weather during the first few months of the year. The bad accommodation of Shirley and Bitterne Welcomes, which has now been rectified, militated in some degree against the success of the work. Voluntary work has also opened new centres in the districts.

The Welcomes are now well established, and there is no difficulty in securing new attendances, especially among young mothers, who satisfactorily carry out the instructions given.

Owing to shortage of staff, it has not been possible to give regular health talks, and it is found that informal talks by Doctors and Health Visitors, personally given to a small group of mothers, are of special value. The success of these talks is due to the band of voluntary helpers, who render invaluable service to the work.

#### Table of attendances at the Welcomes during the year 1929:

Welcome.		Mothers.	Babies.	Toddlers.	Weighed.	Consul- tations.
Hampton Parl		3,644	2,594	2,660	2,695	2,459
Woolston		2,931	2,287	1,255	1,865	1,848
Shirley		1,995	1,650	1,314	1,276	1,407
Bond Street		1,270	1,103	857	607	759
Eastern		2,529	1,861	1,995	1,239	2,098
Winton Street		2,849	2,329	1,267	1,733	2,124
Bitterne		1,188	870	673	1,073	1,035
Total Comparative	s	16,406	12,694	10,021	10,488	11,730
figures for	1925	15,597	10,339	9,725	7,229	6,849

#### 5. Ante-Natal, Maternity and Infant Clinic, East Park Terrace.

This Clinic is intended for the treatment of minor ailments, convalescence, disorders of nutrition, etc. Coughs and colds are very numerous, and a few cases of Whooping Cough are treated separately. Patients are recommended by doctors, midwives, Health Visitors, social workers, etc., and enquiries are made. A few of the patients were able to obtain sunray treatment at the Central Hall, Light Clinic. Provision for dental and ear treatment is badly needed.

#### MATERNITY CENTRE AND INFANT CLINIC, EAST PARK TERRACE.

### Number of medical consultations:-

New cases:	Ante-natal			412	
	Mothers			27	
	Children			337	
Old cases:	Ante-natal			1,249	
	Mothers			81	
	Children			3,000	
	Tota				5,106
Number of babi	es weighed				722
Number of chil	dren who	receiv	red m	edical	
intermediate	e treatment				3,280
Dispensing for C	linic and Bra	anch '	Welco	mes	1,597

#### 6. General Advice to Mothers.

This work occupies a great deal of time of the Superintendent of Health Visitors and the Sister in charge. A considerable number of mothers attend for general hygienic advice who do not belong to Welcomes. In addition a number of medical and social emergencies are dealt with, e.g., by reference to private doctors, hospitals, philanthropic agencies, etc.

The Superintendent of Health Visitors is also in attendance several mornings a week to see mothers who are in difficulties of one kind or another.

Number of general consultations by Medical Officer, Superintendent of Health Visitors, and the Sister in Charge at No. 2, East Park Terrace ... ... ... 1,466

Number of consultations for ante-natal and maternal advice ... ... 1,069

## 7. CLINIC FOR VENEREAL DISEASES IN WOMEN AND CHILDREN.

This Clinic is held at the Maternity and Child Welfare Centre, in East Park Terrace. The work does not increase, though a number of patients are sent by doctors and nurses for diagnosis. Only two recent cases of infections with Syphilis came, and of these one disappeared almost immediately. The others had mostly late complications, or were treated cases expecting another child. The patients suffering from Gonorrhæa attended as well as their occupations (service, shop, factory, etc.) permitted, but the varying hours are very difficult to meet in a small institution, especially when patients live out of the Borough. Only three patients sought admission to the Maternity Home, and there was no eye trouble.

It is plain that this Clinic is not suitable for the usual type of dangerously infecting woman.

#### 8. Sydney House Clinic.

The numbers attending this Clinic were satisfactory. One session of two hours is held weekly.

The Mothers' and Babies' Welcome (which meets in Woolston every Tuesday afternoon) is well attended.

Advice is given on the feeding, hygiene and general care and management of the infant, also short informal talks on Maternity and Child Welfare. Valued assistance is given to the health staff at the Welcomes by ladies who very kindly help with the mothers' teas, etc.

The following gives the particulars of the Maternity and Child Welfare work carried out at Sydney House Clinic:—

Number of medical consu	itatio	ns:—	
New cases : Ante-nata	al		 18
Mothers			 13
Children			 136

Old cases:	Ante-nata	al	 	24	
	Mothers		 	19	
	Children		 	243	
					453

Number of	childre	n who	receive	d me	edical t	reat-	
ment							338
Number of	intervi	ews for	general	advi	ice		42
Babies wei	ghed						14

#### 9. HEALTH VISITING IN THE HOMES.

The claims of institutional work tend to curtail the amount of time that Health Visitors can devote to visiting. This is unfortunate, as the visiting is the backbone of Maternity and Child Welfare work, and at present following-up of cases is deficient.

The following is a record of visits made by the Health Visitors during the year:—

Visits to expectant mothers	1,385
First visits to infants under one year of age	3,184
Re-visits to infants under one year of age	5,142
,, ,, children over one year of age and under school age	5,310
Visits to cases under Ophthalmia Neonatorum Regulations	62
" ,, cases of Pneumonia, Measles, Chicken Pox and Mumps	223
Visits in connection with free milk	
Visits to nurse children under Children Act	87
Other visits	1,739

## 10. GRANTS OF FREE MILK, AND SALE AT COST PRICE OF DRIED MILK.

Owing to the continued poverty and unemployment, the grants of free milk and milk foods have been on a somewhat more extensive scale, though each month every application is scrutinised by the "Milk Committee." The number who are prepared to pay half-price remains small. There is a fair sale of the nutrient preparations, for which a small charge is made, but the need of free cod liver oil is very great. Our clients have faith in it, and it is undoubtedly a boon to many of these infants, and to a few expectant and nursing mothers, who otherwise could not get it. The system whereby the milk vendors collect receipts from the beneficiaries, whether for free or cheap milk, has definitely saved the time of the Health Visiting staff, but is administratively rather complicated.

The total free fresh milk granted during the year was 71,314 pints, compared with 74,385 pints in 1928; free dried milk 3,555lbs., compared with 4,150lbs. in 1927.

During the year the following grants of free fresh milk were made:—

			Average number on book	r	Total amount supplied in pints.
Expectant mothers			24		6,822
Nursing mothers			120		34,909
Infants under 6 months			18		5,543
Infants between 6 month years of age	ns 	and 5	8r		24,040

Grants of milk at less than cost price.

The following amounts were supplied:-

			Averag numbe on book	r	Total amount supplied in pints.
Expectant mothers			I		259
Nursing mothers			8		1,892
Infants under 6 months			I		175
Infants between 6 mor years of age	nths ar	nd 5	5		1,363

The following grants of free dried milk, etc., were also made:

			Average number on books	Total amount supplied in lbs.
Expectant mothers			I	 18
Nursing mothers			I	 22
Infants under 6 months			10	 I,020
Infants between 6 mon	ths a	and 5		
years			35	 3,174
Ditto from Sydney Hous			-	 350
Free grants of Malt and	Cod	Liver		
Oil			-	 4,147
Ditto from Sydney Hous	se		_	 470

The amount of dried milk issued at less than cost price was 87lbs.

The following figures give further particulars as to the distribution of free milk during 1929:—

Number	receivin	ng fresh n	nilk, I	ecembe	r 31st,	1928	179	
,,	,,	dried r	nilk	,,	,,	,,	21	
								200
22	11	fresh n		"	,,	1929	259	
"	"	dried r	nilk	"	,,	,,	69	0
								328
Grants to	o new f	amilies of	fresh	or drie	d milk		252	
		amilies of		*	ed mill	ς	53	
Renewed	l grants	from for	mer y	ears			154	
							-	459
Grants d	iscontin	nued duri	ng the	e year			331	
First gra	nts of f	resh milk	in 19	29 to :-	-			
Expectar	nt moth	ners						87
Nursing								22 I
Babies u								16
Children	under	5 years			• • • •	•••		71
First gra	nts of o	lried milk	to:-	_				
Expecta	nt moth	ners						I
Nursing								2
Babies u								46
Children	under	5 years		•••				22

Fresh and dried milk were interchanged according to medical advice, and cheap or free milk granted according to varying incomes.

### INFANTILE MORTALITY, 1929.

Deaths from stated causes at various ages under I year.

Cause of l	DEAT	н,		Under I week.	r-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 4 weeks.	4 weeks & under 3 months.	3 months & under 6 months.	6 months & under 9 months.	9 months & under	Total Deaths under 1 year.
Small Pox													
											2	I	3
Measles												1	I
									4	2	2	5	13
						***				***			***
Tuberculous Menin	gitis				I		I	2		2	2	2	8
Abdominal Tuberco	ulosis								2	I			3
Other Tuberculosis									I			1	3 3
Meningitis									I	2			3
		***							2		I		3
		***	***						***				
							I	I	6	2	I	4	14
Pneumonia (all for				I			1	2	5	4	. 9	5	25
	eritis		***		2			2	4	6	2	5	19
		***											
Syphilis		***			1			I		***	***		I
Pemphigus		***			I	2	I	4		***	***		4
Suffocation, overly	ng		***						1	I			2
				5	I			6					6
				2	I			3					3
				8	3	I		12	I	1	1	I	16
				43	5	2	I	51	2	***			53
Debility and Maras	mus			2	2	3		7	I		I		9
Other Causes .			•••	1				I	4	***	2	3	10
Totals .				62	17	8	5	92	34	21	23	28	198

## THE INCIDENCE OF NOTIFIABLE INFECTIOUS DISEASES.

The following is a total of the notifications received during the year, also the rate per 1,000 of the population:—

				Notified.		te per 100 Population	ngland and Wales.
Small Pox				0		0.00	 0.28
Diphtheria				368		2.14	 1.59
Erysipelas				62		0.36	 0.45
Scarlet Fever				367		2.13	 3.05
Enteric Fever	and Pa	ra-Typ	hoid				
Fever				7		0.04	 0.07
Puerperal Feve	г			8		0.05	 0.06
Puerperal Pyre	xia			32		0.19	 0.14
Cerebro-Spinal	Fever			2		0.01	 -
Encephalitis Le	ethargica	a		2		0.01	 -
Ophthalmia Ne	onatoru	m		37	*	11.45	 _
Pulmonary Tul	perculosi	is		365		2.12	 -
Other Forms of	Tuberc	ulosis		40		0.23	 -
Pneumonia				229		1.33	 _
Malaria				I		0.01	 _
Poliomyelitis				I		0.01	 
Dysentery				I		0.01	 -
*Rate per 1,00	o births	š.		1,522			

#### MORTALITY FROM ZYMOTIC DISEASES.

The death-rate from diseases usually classified as the chief epidemic diseases, namely: Small Pox, Scarlet Fever, Diphtheria, Enteric Fever, Measles, Whooping Cough, and Diarrhæa, and Enteritis among children under two years of age, amounted to 0.32 per 1,000 of the population.

The death-rate per 1,000 of the population from the diseases specified above for the past five years is shown in the following table:—

	1925	1926	1927	1928	1929
Small Pox	.000	.000	.000	.000	.000
Scarlet Fever	.024	.000	.059	.012	.017
Diphtheria	.054	.118	.059	.II2	.139
Enteric Fever	.018	.024	.012	.035	.017
Measles	.107	.018	.312	.018	.006
Whooping Cough	.095	.047	.071	.059	.168
Diarrhœa and Enteritis	-				
under 2 years of age	.054	.108	.159	.083	.128
Total Zymotic					
Death-rate	.352	.315	.678	.319	.475

The following table shows the number of cases of notifiable disease recorded in the Borough during the past five years:—

Dise	ASE.		1925.	1926.	1927.	1928.	1929
Small Pox		 	_	_		2	_
Scarlet Fever		 	352	206	441	324	367
Diphtheria		 	3 09	345	254	329	368
Enteric Fever		 	18	11	18	18	7
Puerperal Fever		 	18	15	12	10	8
Puerperal Pyrexia		 	_	15	37	42	32
Erysipelas		 	63	70	118	68	62
Cerebro-Spinal Fe	ver	 	2	3	2	1	2
Poliomyelitis		 		5	2	3	1
Ophthalmia Neon			32	46	49	32	37
Pulmonary Tuber		 	255	291	339	340	365
Other Forms of T	ubercule		57	55	49	67	40
Encephalitis Leth		 	8	6	- 5	9	2
Pneumonia		 	99	186	244	267	229
Malaria		 	1		3	1	1
Dysentery		 	_	2	-	1	1
	als	 	1,214	1,256	1,573	1,514	1,522

Ophthalmia Neonatorum was made compulsorily notifiable on 1st April, 1914; Encephalitis Lethargica on the 1st January, 1919; Pneumonia, Malaria and Dysentery on 1st March, 1919, and Puerperal Pyrexia on the 1st October, 1926.

There were 978 visits and re-visits made to houses in which infectious diseases occurred, and inquiries were made relative to the probable source of infection, and the isolation of the patient. Information was also given concerning the precautions necessary to be taken to prevent the spread of disease, and in the case of Measles advice as to treatment and nursing of patients where a medical man was not in attendance.

Of the cases notified in the Borough under the various Acts and Regulations, 825 were removed to the Isolation Hospital for treatment.

Sanitary defects were found in 62 houses in which cases occurred.

#### SMALL POX.

No case of Small Pox was notified in the Borough during the year.

#### SCARLET FEVER.

The number of cases of Scarlet Fever notified during the year amounted to 367.

This number notified is an increase of 43 compared with 1928.

Three cases proved fatal compared with two deaths in the previous year.

The disease was most prevalent in the St. Mary's, Trinity, and St. Nicholas Wards.

The number of cases notified and deaths resulting from the disease for the past five years were:—

		Cases.	Deaths.	Percentage.
1925	 	 352	4	1.14
1926	 	 206	0	0.00
1927	 	 44I	10	2.27
1928	 	 324	2	0.62
1929	 	 367	3	0.82

Two hundred and sixty-five of the cases notified were removed to the Isolation Hospital, which is equal to a percentage of 72.2, compared with 63.3 in 1928 and 67.6 in 1927.

In addition to the cases admitted to the Isolation Hospital from the Borough, 34 from neighbouring districts, nine from the Port, II military cases, and one case from Atlantic Park Hostel were admitted for treatment.

The following table gives particulars of cases of Scarlet Fever notified in the Borough, showing the number treated in the Isolation Hospital, the period of detention and the number of "return" cases during the past six years:—

Year.	Cases notified.	Admitted to Hospital.	Average period in Hospital (days).	No. of "return" cases.	Cases treated at home.
1924	 341	260	35.8	3	8I
1925	 352	253	33.3	3	99
1926	 206	153	38.9	I	52
1927	 441	298	36.6	2	143
1928	 324	205	38.0	2	119
1929	 367	265	37.0	3	102

### DIPHTHERIA.

The number of cases of Diphtheria notified during the year amounted to 368, being an increase of 39 compared with the previous year.

The disease was most prevalent in the following Wards of the Borough:—Millbrook, Shirley, Bitterne and Sholing, and St. Nicholas.

Twenty-three deaths occurred from the disease during the year. The percentage of deaths to cases was 6.25, compared with 5.77 in 1928 and 3.94 in 1927.

The number of cases notified and deaths recorded during the past five years are shown in the following table:—

		Cases.	Deaths.	Percentage.
1925	 	 309	9	2.91
1926	 	 345	20	5.80
1927	 	 254	10	3.94
1928	 	 329	19	5.77
1929	 	 368	23	6.25

Three hundred and twenty-three of the cases notified were admitted to the Isolation Hospital for treatment, which is equal to a percentage of 87.8, compared with 89.1 in 1928 and 86.6 in 1927.

In addition to the number specified above, 9 cases were admitted to the Isolation Hospital from the Port, 29 from neighbouring districts, 5 military cases, and 7 from Atlantic Park Hostel.

### ENTERIC FEVER.

The number of cases of Enteric Fever notified during the year amounted to seven, including two cases of Para-Typhoid. Seven of the cases notified and two observation cases were admitted to the Isolation Hospital, and 9 cases were admitted from the Port.

The number of cases notified, and the deaths that occurred amongst cases notified in the Borough for the past five years are given in the following table:—

		Cases.	Deaths.	Percentage of Deaths amongst cases notified in the Borough.
1925	 	 18	3	16.6
1926	 	 II	2	18.2
1927	 	 18	2	II.I
1928	 	 18	5	27.7
1929	 	 7	2	28.5

### INFLUENZA AND PNEUMONIA.

A severe epidemic of Influenza occurred during the first three months of the year, being aggravated by the exceptionally cold weather in January and February. The deaths from Bronchitis among old people were much increased, 214 deaths being recorded from this disease, 163 of which were of persons over 65 years of age.

The number of deaths from Influenza was 93, the average for the previous five years being 15. The deaths from Influenza were, with pneumonic complications, 37; Influenza with other pulmonary complications, 32; Influenza without pulmonary complications, 24; total, 93.

The mortality from respiratory diseases totalled 404. The number of deaths from all forms of Pneumonia was 170, an increase of 6 compared with the previous year.

The notifications of Acute Primary Pneumonia and Influenzal Pneumonia numbered 229 compared with 267 in the previous year. A large majority of the cases were notified from the Shirley Warren Infirmary.

### ENCEPHALITIS LETHARGICA.

Two cases of Encephalitis Lethargica were notified, one of which has proved fatal.

The total number of deaths, however, which were recorded was nine, six of which occurred in institutions where they had been removed for observation, or were cases that had been notified in previous years. One case which died in Park Prewett Hospital was notified to the Local Authority as far back as 1920.

### VENEREAL DISEASES.

The following is a summary of the work carried out during the year 1929 at each of the Clinics provided by the Local Authority for the treatment of Venereal Diseases:—

Number of persons under treat- ment or observation on	East Park Males.	Terrace. Females.		& S. Hos. Females.
1st January, 1929	1,476	82	43	32
Number of persons dealt with for the first time during 1929 at the Out-Patient	0			
Clinics	384	109	167	57
Total attendances of all persons at the Out-Patient Clinics	0.118	T 250	T 265	600
during 1929	9,110	1,359	1,305	620
Aggregate number of In-Patient days of treatment given to				
persons	_	60*	57	16
*Females, 48;	infants,	12.		

The above figures show that 717 persons were dealt with for the first time during the year 1929. This number is 9 more than in the previous year. The total includes 242 persons who attended for conditions other than Venereal.

The total attendances at the Out-Patient Clinics amounted to 12;462, compared with 13,678 in the previous year, and 14,389 in 1927.

The number of persons discharged from the Out-Patient Clinics after completion of treatment and observation was 98. Three hundred and forty-three persons ceased to attend the Out-Patient Clinics before the completion of the first course of treatment.

### PATHOLOGICAL WORK.

The specimens submitted for Wassermann reaction were 280 from Nos. 1 and 2, East Park Terrace, and 224 from the Royal South Hants and Southampton Hospital.

The number of specimens examined at the Municipal Laboratory for the detection of Spirochetes was 20, and for the detection of Gonococci, 1,770. At the Royal South Hants and Southampton Hospital the totals were 2 for Spirochetes and 16 for Gonococci.

### Return relating to all Persons who were Treated at the Treatment Centre at Nos. 1 and 2, East Park Terrace, Southampton, during the year ended the 31st December, 1929.

during the y				5 01		ecem				
	Syp	hilis.		oft incre.	Gono	orrhœa.	other	than ereal.	To	TAL.
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1. Number of cases which—  (a) at the beginning of the year under report were under treatment or observation for  (b) had been marked off in a previous year as having ceased to attend or as transferred to other Centres, and which returned to the Treatment Centre during the year under report suffering from the same infection	684	40			770	33		5	1454	78
Total—Items 1 (a) & 1 (b)	688	41			788	36	***	5	1476	82
2 (a) Number of cases dealt with at the Treatment Centre during the year for the first time with infections of  2 (a) Number of cases dealt with at the one year's standing cases than one year's standing one year's standing	79	3	5		242	22		62	326	87
Total-Items 1 (a), 1 (b) & 2 (a)	810	60	5		1045	64	***	67	1860	191
2 (b) Number of cases included in Item 2 (a) known to have received previous treatment at other Centres for the same infection	4	6			7	6			11	12
3. Number of cases which ceased to attend—  (a) before completing the first course of treatment for  (b) after 1 or more courses,	49	2		***	273				322	13
but before completion of treatment for (c) after completion of	18	7			***	***			18	7
treatment, but before final tests as to cure of 4. Number of cases trans- ferred to other Treatment	6	3			16	17			22	20
Centres after treatment for 5. Number of cases dis- charged after completion of treatment and observa-	9	4	***		32	5	***		41	9
6. Number of cases which, at the end of the year under report, were under treat-	25	***	5	***	43	15			73	15
ment or observation for	703	44			681	16		5	1384	65
Total—Items 3, 4, 5 and 6	810	60	5		1045	64	***	5	1860	129
7. Out-patient attendances:— (a) For individual attention by the Medical Officer (b) For intermediate treat- ment, e.g., irrigation,	2028	536	15		6997	605	78	102	9118	1243
dressings, etc				***	***	116	***	***		116
Total attendances	2028	536	15		6997	721	78	102	9118	1359
8. Aggregate number of "In- patient days" of treat- ment given to persons who were suffering from	}		***	Mater	nity (	adults 48 inf'ts 12	***	***	{	adults 48 inf'ts 12

Return relating to all Persons who were Treated at the Treatment Centre at Nos. 1 and 2, East Park Terrace, Southampton, during the year ended the 31st December, 1929—continued.

	I	or detection of	of	For
	Spirochetes	Gonococci	Other Organisms	Wassermann Reaction
9. Examinations of Pathological material:—				
(a) Specimens which were examined at, and by the Medical Officer of, the Treatment Centre	***	1770	944	***
(b) Specimens from per- sons attending at the Treatment Centre which were sent for examina- tion to an approved lab-				
oratory			***	224

Statement showing the services rendered at the Treatment Centre during the year, classified according to the areas in which the patients resided.

Name of County or County Borough (or Country in the case of persons residing elsewhere than in England and Wales).	South- ampton	Hampshire	Liverpool	Lancashire	London	Jersey	Kent	Bristol	TOTAL
A. Number of cases from each area dealt with during the year for the first time and found to be suffering from:—									
Syphilis	124	13		1	1	***	***	2	141
Soft Chancre	4	1							5
Gonorrhœa	251	26	1	111	2	1	1	3	285
Conditions other than Venereal	61	1				***			62
Total	440	41	1	1	3	1	1	5	493
B. Total number of attendances of all patients residing in each area	9536	851	31	7	21	3	5	23	10477
C. Aggregate number of "In- patient days" of all patients residing in each area	60			***	***				60
D. Number of doses of arsenobenzene compounds	904	40	13	2	3				962
given in 2. In patient the:— Dept. to patients residing in each area.				***		***	***		

Return relating to all Persons who were Treated at the Treatment Centre at The Royal South Hants and Southampton Hospital, Southampton, during the Year ended the 31st December, 1929.

Southampton, duri	1	hilis.	S	oft	1	orrhœa	Cond	ditions r than nereal	1	TAL.
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1. Number of cases which—  (a) at the beginning of the year under report were under treatment or observation for  (b) had been marked off in a previous year as having ceased to attend or as transferred to other Centres, and which returned to the Treatment Centre during the year under report suffering from the same infection	35	32			4				39	32
Total-Items 1 (a) & 1 (b)	38	32			5				43	32
2 (a) Number of cases dealt with at the Treatment Centre during the year for the first 2. more than		5	2		9	1	123	37	140	43
time with one year's standing of	25	14	***	***	2				27	14
Total-Items 1 (a), 1 (b) & 2 (a)	69	51	2		16	1	123	37	210	89
2 (b) Number of cases included in Item 2 (a) known to have received previous treatment at other Centres for the same infection	2	3	1		1		,,,		4	3
3. Number of cases which ceased to attend—  (a) before completing the first course of treatment for	2	4			2				4	4
of treatment for (c) after completion of treatment, but before	1	1						***	1	1
final tests as to cure of 4. Number of cases trans- ferred to other Treatment	3							***	1	
Centres after treatment for	died 2	1	***		9	1			14	2
6. Number of cases which, at the end of the year under report, were under treat-	4	5	***	***	1	***			5	5
ment or observation for	56	40	2		4		***		62	40
Total-Items 3, 4, 5 and 6	69	51	2	***	16	1	141		87	52
7. Out-patient attendances:— (a) For individual attention by the Medical Officer (b) For intermediate treat- ment. e.g., irrigation,	802	580	20	***	395	3	148	37	1365	620
dressings, etc	***	***		***	***		***	***		***
Total attendances	802	580	20		395	3	148	37	1365	620
8. Aggregate number of "In- patient days" of treat- ment given to persons who were suffering from	57	16			****	***		***	57	16

Return relating to all Persons who were Treated at the Treatment Centre at The Royal South Hants and Southampton Hospital, Southampton, during the Year ended the 31st December, 1929—continued.

	F	For		
	Spirochetes.	Gonococci.	Other Organisms.	Wassermann Reaction.
9. Examinations of Pathological material:—				
(a) Specimens which were examined at, and by the Medical Officer of, the Treatment Centre		***		***
(b) Specimens from per- sons attending at the Treatment Centre which were sent for examina- tion to an approved lab-			Urine, etc.	
oratory	2	16	22	280

Statement showing the services rendered at the Treatment Centre during the year, classified according to the areas in which the patients resided.

Name of County or County Borough (or Country in the case of persons residing elsewhere than in England and Wales).	South- ampton	Hampshire	Manch'ster	Wilts	Essex	Ipswich	Oxford	TOTAL
A. Number of cases from each area dealt with during the year for the first time and found to be suffering from:—								
Syphilis	37	11			1	1	***	 50
Soft Chancre	2	***	***				***	 2
Gonorrhœa	9	2		1				 12
Conditions other than Venereal	126	32	1	***			1	 160
Total	174	45	1	1	1	1	1	 224
B. Total number of attendances of all patients residing in each area C. Aggregate number of "Inpatient days" of all patients	1874	96	3	4	1	6	1	 1985
residing in each area	73		***	***				 73
D. Number of doses of arsenobenzene compounds given in the:— to patients residing in each area.	631	207			1	1		 840

### TUBERCULOSIS.

The total deaths from all forms of Tuberculosis among residents of the Borough amounted to 239, from the following forms of the disease:—

			200
			25
m and	d Intes	tines	7
			4
			I
is			2
			239
		 m and Intes 	m and Intestines

The death-rate from Pulmonary Tuberculosis amounted to 1.16 per 1,000 persons living. This rate is 0.11 higher than in 1928, and is 0.15 higher than the average for the past five years.

The number of deaths of males amounted to 122, an increase of 6 compared with the previous year, and the deaths of females amounted to 78, a decrease of 16.

The death-rate for the year per 1,000 of the population from Pulmonary Tuberculosis was males 1.46, females 0.88, both sexes 1.16.

The percentage of deaths from Pulmonary Tuberculosis during the year to cases notified during the same period was males 60.1, females 48.1, both sexes 54.8.

Compulsory notification of all cases of Tuberculosis first came into operation on the 1st January, 1912.

Of the cases dying in 1929, the following table shows the years in which the primary notifications were received:—

1919				 		I
1920				 		I
1921				 		_
1922				 		5
1923				 		I
1924				 		4
1925				 		4
1926				 		19
1927				 		26
1928				 		37
1929				 		63
Not n	otified			 		27
Trans	ferable	Deat	hs	 		6
Posth	umous	notifi	cations	 		6
					-	-
						200
					-	

The mortality from Tuberculous Diseases other than Pulmonary was equal to a rate of 0.23 per 1,000 of the population, which is 0.08 above the previous year.

The deaths from Tuberculous Meningitis numbered 25, fourteen more than in the previous year.

Summary of Notifications Received under the Public Health (Tuberculosis) Regulations, 1912, During the 52 weeks ended 28th December, 1929.

 	 	 431
 	 	 -
 	 	 355 283
 • • • •	 	 283
		1,069

Of the above total 405 were primary notifications of new cases. In addition to the above, 72 cases came to the knowledge of the Tuberculosis Officer otherwise than by notification.

The localisation of the disease of the notified cases was :-

Lungs			3	365	Ankle		 	I
Meninge	es of B	rain		9	Cervical	Glands	 	9
Peritone	eum an	d Intes	stines	4	Kidneys		 	I
Spine				5	Eyes		 	I
Hip				7	Testicle		 	I
Knee				2				

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.

Summary of Notifications during the Period from the 3oth DECEMBER, 1928, to the 28th DECEMBER, 1929, in the Area of the County Borough of Southampton (to which this Return relates).

			4	Notifications on Form A	cati	ons	on I	,orn	1 A.					Not	ifical	rions on	Notifications on Form B.	Number tions or	Number of Notifica- tions on Form C.	÷
		Z	umh	)er 0	f Pr	ima	É	Votii	Number of Primary Notifications.	ons.		Total	Z	Number of Primary Notifications.	fumber o Primary otification	of ns.	Total	Poor Law	Conception	1
Age Periods, to	1007	0 I 5 IO I to to to to I	150 10	15 20 20	15 20 to to 20 25	25 to 35	35 45	45 to 55	25 35 45 55 to to to to to 35 45 55 65	65 & up- wards	Total		Un- to der 5 ro	10 50	to to 15	5 ro Total to to o ro rs to	on Form B.	tions.	Callatolia	43
Pulmonary—																				
Males	1	63	3 9	9 IS	20		52 46	37	37 10	6	203	218	1	1	1	1	1	89	149	
Females	1	23	5 7	6I 7	53	50	18	18	4	10	162	167	1	1	1	1	1	23	87	
Non-Pulmonary-																				
Males	60	53	6	Н	4	4	63	Н	1	1	31	34	1	1	1	1	1	IO	3	
Females	-	C1 C1	64	H	н	-	1	н	1	1	6	12	1	1	1	1	1	7	00	

### PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.

### SUPPLEMENTAL RETURN.

New Cases of Tuberculosis coming to the knowledge of the Medical Officer of Health or Chief (Administrative) Tuberculosis Officer during the period from the 30th December, 1928, to the 28th December, 1929, otherwise than by Notification on Form A or Form B under the Public Health (Tuberculosis) Regulations, 1912. (Ministry of Health, Form T137.)

5 IO 15 20 25 65 35 45 55 and Total Age Periods. to to to to to to to to to up- Cases 5 10 15 20 25 45 35 55 Pulmonary Males 6 I 26 4 Females ... 2 16 I 2 2 I 1 3 Non-Pulmonary Males 16 1 4 6 2 Females ... 6 2 2 I Ι 2 14 ...

The source or sources from which information as to the abovementioned cases was obtained are stated below:—

			No. of	Cases.
Source of Informa	ation.		Pulmonary.	Non- Pulmonary.
Death Returns from Local R	egistraı	s	 27	19
Transferable Deaths			 6	3
Posthumous notifications			 6	5
Transfers from other Areas			 2	3
Port Sanitary case			 1	_

### TUBERCULOSIS.

### New Cases and Mortality, 1928.

Including cases coming to the knowledge of the Medical Officer of Health during the year.

(Inserted by request of the Ministry of Health.)

		New	Cases.			De	eaths.	
Age Period.	Pulm	onary.	Non-Pu	lmonary.	Pulm	onary.	Non-Pu	lmonary
	М.	F.	M.	F.	М.	F.	M.	F.
0	I	ı	4	6	I	I	7	5
ı	2	3	6	4	I	I	4	3
5	3	5	II	4		2	6	2
10	9	8	II	2		2	3	
15	19	22	3	2	2 8 10			ı
20	24	31	4	2			3	I
25	53	57	5		25	14	2	I
35	50	19	2		20	II		
45	43	20	I	3	28	II		ı
55	14	5			16	6		
65 and p'ds.	11	7			7	5		
Totals	229	178	47	23	122	78	25	14

TUBERCULOSIS.

TABLE showing cases, case-rates, deaths, and death-rates from Pulmonary and Non-Pulmonary Tuberculosis in each of the Municipal Wards during the year 1929.

			CAS	ASES.					<b>DEATHS.</b>	THS.		
WARD.	Pulmonary.	mary.	Non-Pul	Non-Pulmonary.	Total.	al.	Pulmonary.	nary.	Non-Pulmonary	monary.	Total.	-i-
	Number	r Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
I Town	622	3.5	9	0.51	48	4.06	28	2.38	9	0.51	34	2.89
St. Mary's		1.76	10	0.38	28	2.I4	12	19.1	3	0.23	24	1.84
Northam		86.I	9	0.51	29	2.49	6	0.77	2	0.43	14	I.20
Trinity		2,19	4	0.44	24	2.63	14	I.54	4	0.44	18	I.98
'un		2.49	63	0.34	25	2.83	13	I.48	I	0.11	14	1.59
All Saints	18	1.83	1	1	18	1.83	9	19.0	64	0.20	0	10.0
Bevois	21	2.49	I	0.12	22	2.61	9	0.71	1	1	0	0.71
Banister	0I	1.15	I	0.12	II	1.27	7	0.46	1	1	4	0.40
Freemantle	22	2.63	I	0.12	23	2.75	0	0.72	2	0.00	II	I. 32
Millbrook		1.82	63	0.16	24	16.1	14	1.16	54	0.10	01	1.32
Shirley	25	I.85	3	0.22	28	2.07	69	0.07	I	0.07	01	0.74
Portswood		I.54	1	1	17	1.54	0	0.73	1	1	0	0./3
St. Denys		2.35	1	1	23	2.35	1.5	I.54	1	01.0	01	1.04
	1.8	1.80	13	0.30	21	2.10	17	1.71	1	1	17	1.71
rs. Bitterne and		200	,	40 0	36		10	0.03	v	0.46	15	1.30
. Smong		2 36	+	10:0	200		13	I.54	. 61	0.23		1.77
St. Nicholas		2.64	I	0.15	19	2.79	7	1.03	2	0.29	6	I.32
Boroneh	365	2.12	40	0.23	405	2.35	200	1.16	39	0.23	239	I.39

### TUBERCULOSIS.

Average case-rates and death-rates per 1,000 of the population from Tuberculosis in Municipal Wards during the ten years 1920—1929.

			(	CASE-RATI	ε.	D	EATH RAT	re.
WARD.			Pulmonary.	Non- Pulmonary.	Total.	Pulmonary.	Non- Pulmonary.	Total.
ı. Town			3.40	0.37	3.77	2.01	0.29	2.30
2. St. Mary's			2.45	0.43	2.88	I.2I	0.24	I.45
3. Northam			2.44	0.51	2.95	1.34	0.24	1.58
4. Trinity		***	2.30	0.37	2.67	I.22	0.30	I.52
5. Newtown			1.87	0.17	2.04	0.98	0.11	1.09
5. All Saints			1.76	0.20	1.96	0.92	0.08	1.00
7. Bevois			1.88	0.21	2.09	0.94	0.08	1.02
Banister		***	1.39	0.10	1.49	0.64	0.10	0.74
. Freemantle			1.90	0.17	2.07	0.86	0.14	1.00
o. Millbrook	***	***	2.05	0.21	2,26	1.13	0.16	1.29
I. Shirley			1.68	0.17	1.85	0.88	0.15	1.03
2. Portswood	***	***	I.44	0.20	1.64	0.67	0.12	0.79
3. St. Denys	oor Tro	**	2.10	0.23	2.33	0.99	0.12	1.11
Bitterne & P	boling	*	1.97	0.16	2.13	I.II	0.17	1.28
5. Bitterne & S	noning	*	1.72	0.32	2.04	0.99	0.30	1.29
<ol> <li>Woolston</li> <li>St. Nicholas</li> </ol>		*	1.35	0.21	1.56	0.83	0.12	0.95
7. St. Nicholas			2.02	0.23	2.25	0.99	0.21	1,20
Borough			2.04	0.26	2.30	1.07	0.18	1.25

<sup>\*</sup> Average for nine years only (1921-1929).

The system of dealing with cases at the Clinic has undergone no change, new cases are either sent by their own doctors or are contact cases. Once a case is diagnosed as Tuberculosis, treatment can be continued in Sanatorium or at the Clinic.

Five hundred and nine new cases were examined during the year, and of these 299 were definitely Tuberculous, a few were doubtful, the remainder being Non-Tuberculous; 58 contacts were seen, and 6 of them found to be suffering from Tuberculosis; 224 cases were admitted to the Sanatorium during the year, 119 having a positive sputum. A few observation cases and a small number of Non-Pulmonary cases were taken in, but for the most part cases had definite signs of pulmonary disease. There were 10 deaths in the institution.

The number of attendances at the Clinic has diminished slightly, as every effort is made to treat any cases with definite signs of the disease, and if after a short period of observation it is thought that the case is doubtful, then further treatment ceases, and the patient is instructed to attend again only when there is fresh evidence to bring forward.

There is still no adequate arrangement for the dental treatment of cases, which is a matter of great importance, as the secondary infection from septic mouths is undoubtedly a source of considerable danger to the patient.

Provision of a verandah for the large pavilion at the Isolation Hospital would be of value, as at present patients confined to bed are compelled to remain in the wards, even when the sun is shining.

Consideration should also be given to the provision of artificial sunlight treatment for selected cases, especially for children.

It would also be an advantage if cases on their discharge from the Sanatorium could be granted preferential treatment as regards the allotting of Council houses, and the provision of extra nourishment on a more generous scale.

The periodical cleansing and disinfection of premises occupied by patients who have much expectoration is a matter requiring attention, and considerable assistance might be given by means of pamphlets dealing with the questions of infection, use of antiseptics, disposal of sputum, etc.

During the year the Health Visitors have carried out much valuable work in visiting the homes of Tuberculosis patients, the following being a record of their visits.

### VISITS PAID BY HEALTH VISITORS TO HOMES OF

TUBERCULOSIS	PATIENTS-

Insured	 		 	1,240
Dependents	 		 	1,303
Others	 		 	153
		Total	 	2,696

Public Health (Prevention of Tuberculosis) Regulations, 1925.

These Regulations give local authorities power to require Tuberculous employees, who are in an infectious state, engaged in the milk trade, to discontinue their employment or occupation.

It was not necessary to take any action under these Regulations during the year.

Public Health Act, 1925-Section 62.

This section gives power to local authorities to enforce any person suffering from Pulmonary Tuberculosis, who is in an infectious state, without proper lodging or accommodation, and is a serious risk of infection to other persons, to be removed to a suitable hospital or institution.

No action was taken under this section during the year.

For statistical purposes, cases are divided up according to the classification suggested by the Ministry of Health:—

- All patients are grouped according to sex and age, those under 15 years of age being classed as children.
- II. Classification as to whether the disease is (a) Pulmonary or (b) Non-Pulmonary.
- III. Patients suffering from Pulmonary Tuberculosis are divided into:—
  - Class T.B. minus—viz., those in which Tubercle Bacilli have not been discovered in the sputum.
  - Class T.B. plus—viz., cases in which Tubercle Bacilli have been found in the sputum.

This latter class is further sub-divided into:—

Group I. Cases with slight constitutional disturbance and with the disease limited to the apex of one lobe only, with slight exceptions.

- Group 3. Cases with profound systemic disturbance with marked impairment of function, and with little chance of recovery.
- Group 2. All cases which cannot be included in the above groups.
- IV. Patients suffering from Non-Pulmonary Tuberculosis classified according to the site of lesion.

The tables given are also those suggested by the Ministry of Health, and adopted for the sake of uniformity throughout the service.

The results of treatment are described by the following terms:—

Quiescent.—Cases which have no signs or symptoms of disease left.

Arrested.—Cases which have been quiescent for at least two years.

Cured.—Those in which the disease has been "arrested" for three years.

Improved.—Cases in which their general condition is better.

No material improvement.—All other patients who are alive.

The following Tables I, II, and III are prepared in the form required by the Ministry of Health. They show the work carried out at the Dispensaries, at No. 1, East Park Terrace, and Sydney House, and a record of patients admitted to, and the results of treatment of patients discharged from the Borough Sanatorium during the year 1929:—

								-						
. 53.)			lren.	Ή.	13	29		e :	2.2		61	120		133
orm T	,	AL.	Children.	M.	18	32		н 0	18		н	19		116
salth, F		TOTAL.	Its.	표.	911	67		e :	11		I	81		483 19
y of He	ar 1929		Adults.	M.	148	80		н :	3		:	986		583
(Ministry of Health, Form T. 53.)	Dispensaries) during the year 1929.	.2	ren.	E.	3	: :		: :	:		:	:		30
	during	Non-Pulmonary.	Children.	M.	6	: :		: :	:		:	:		40
	saries)	ON-PUL	ilts.	표.	7	: :		: :	:		:	:		18 ::
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E I.	ary (or		ren.	E.	10	::		3	:		2	:		103
TABLE	Dispensary	NARY.	Children.	M.	6	::		Ι :	:		Н	= :		76
	of the	PULMONARY.	Adults.	F.	114	: :		£ :	:		I	:		465
			Adı	M.	148	::		I :	:		:	:		577
	Return showing the work		DIAGNOSIS.		5 5	(c) Non-Tuberculous	B.—Contacts examined during the	(a) Definitely Tuberculous (b) Doubtfully Tuberculous	Non-Tuberculous	C.—Cases written off the Dispensary	(a) Cured (b) Diagnosis not confirmed or Non-	cellation of cases notified in error)	D.—NUMBER OF PERSONS on Dispensary Register on December 31st:—	(a) Diagnosis completed (b) Diagnosis not completed

# TABLE 1-Continued.

January 1st	1,248	9. Number of patients to whom Dental Treat- ment was given, at or in connection with	
Number of nationts transferred from other		the Dispensary	:
	13 1		
Number of patients transferred to other areas and cases "lost sight of"	18	(b) Otherwise	354
	Т	II. Number of other visits by Tuberculosis Officers to Homes	11
		12. Number of visits by Nurses or Health Visitors to Homes for Disneysary Purposes	yoy c
Number of observation cases under A (b) and B (b) above in which period of observation exceeded 2 months	1 01	13. Number of— (a) Specimens of sputum &c examined	606
Number of attendances at the Dispensary (including contacts)	8,308	X-ray examinations made in connection with Dispense bumen	488
	*		
Number of attendances of Non-Pulmonary		Register on the 31st December	639
ment or supervision		15. Number of Insured Persons under Domiciliary Treatment on the 21st December	r.
Number of attendances, at General Hospitals or other Institutions approved for the purpose, of patients for—  (a) "Light" treatment  (b) Other special forms of treatment	::	16. Number of reports received during the year in respect of Insured Persons:— (a) Form G.P. 17 (b) Form G.P. 36	138

TABLE II.—RESIDENTIAL INSTITUTIONS.

(Ministry of Health, Form T. 54-)

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				Pulmonary	Pulmonary Tuberculosis.	Non-Pulmonary Tuberculosis.	y Tuberculosis.	
1			Observation.	"Sanatorium" Beds.	"Hospital" Beds.	Disease of Bones and Joints.	Other Conditions.	Total.
Adult Males	:	-:	:	22	14	:	:	36
Adult Females	:	:	:	10	2	:	:	1.2
Children under 15	:	:	:	:	:	:	:	:
Totals	:	:	:	32	91	:	:	48
The same of the sa		-						

54

TABLE II.-Residential Institutions.—Continued.

(B) Return showing the extent of Residential Treatment during the year 1929.

			In Institutions on Jan. 1st	Admitted during the year.	Discharged during the year.	Died in the Institutions.	In Institutions on Dec. 31st.	
	.etfi	M.	31	126	124	∞	25	
	ubA	Œ.	IO	75	73	:	12	
number of Fatients	ren.	M.	:	11	9	:	5	
	СРП	표.	I	7	9	:	61	54
	.stf	M.	:	3	61	÷	-	
Number of Observation Case	ubA	[년	:	ı	I	:	:	
auton cases	ren.	M.	:	:	:	:	i	
	Child	<del>.</del>		II.	DATE.	:	ы	
	Tota	Totals	42	224	212	80	46	
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Doubtful Cases discharged	n.	1 12	СЪ.	:	:	: :	:	:	:	:	:	:	:	::	:	:	:	:	::	::	:		:	:	:		n 4	:	: :
Cases	Institution	More than months.	표	:	:	: :	:	:	:	:	:	:	:	:	:	:	:	:		:	:	:	:	:	:		More than weeks.	:	: :
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Observation of year 1929.	Residential Treatment	9	M.	:	:	: :	:	:	:		:	:	:	:	5	61	:	:		:		::	:	:	:	:	61	:	I ::
	dentia	ths.	Ch.	:	:	: :	:	:	:	:	:	:	:	::	:	:	:	:		:	::	:	:	:	:		ks.	:	: :
Treatment of Patients and of dential Institutions during the		6 months	표.	1	:	: :	:	H	:	:	:	:	:	:	H	2	3	:	::	:	:	::	:	:	:	:	-2 weeks.	:	I ::
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the immediate results from R		Condition at time of discharge.				Died in Institution	-		No material improvement Died in Institution					Died in Institution	Quiescent				-			Died in Institution	Quiescent or arrested			Died in Institution		_	s. Doubtful
Return showing	noi	tssificat admiss to the totitution	по	.н.		Clas	B.	'L'	sselC	)	Β.	T s	ssel	С	B.	L SI	gd sse		38	SIS	301	In:	NON:		nJ			Observation	for purpose of diagnosis

### CANCER.

The number of deaths from Cancer amounted to 289, of which 161 were males and 128 females.

This number is an increase of 8 compared with previous year, and is equal to a death-rate of 1.68 per 1,000 of the population. The rate is an increase of 0.02 compared with the previous year, and is 0.30 above the average for 10 years.

The following table shows the death-rate from Cancer in the Municipal Wards during the year 1929, and, for comparison, the average death-rate from the disease for the previous ten years:—

					7,200	
	Ward.			Death-rate, 1929.		Death-rate, 1919—1928.
I.	Town			2.04		1.86
2.	St. Mary's			1.61		1.19
3.	Northam			1.12		1.34
4.	Trinity			1.32		1.47
5.	Newtown			1.59		1.56
6.	All Saints			1.32		1.35
7.	Bevois			3.22		1.55
8.	Banister			1.27		1.53
9.	Freemantle			2.40		1.66
IO.	Millbrook			1.16		1.19
II.	Shirley			2.22		1.37
12.	Portswood			2.19		1.27
13.	St. Denys			1.54		1.28
14.	Bitterne and P	ear Tr	ee	1.41		1.13*
15.	Bitterne and S	holing		1.30		1.14*
16.	Woolston			1.54		1.29*
17.	St. Nicholas			1.47		1.53*
	Borough			1.68		1.38
	* 1	. 1 /			0	

<sup>\*</sup> Average for eight years only, 1921—28.

### BACTERIOLOGICAL LABORATORIES.

The following report shows the amount of work carried out during the year at the Bacteriological Laboratories at No. I, East Park Terrace, and at the Isolation Hospital:—

# BACTERIOLOGICAL LABORATORY, MUNICIPAL DISPENSARY, I, EAST PARK TERRACE.

DIPHTHERIA—		
Specimens from Doctors		1289
SPUTA-		
Specimens from Doctors		494
T. B. Dispensary		665
,, ,, Sydney House		23
Estimation of Albumen		554
Typhoid Group—		
Agglutination test for T.A.B		36
Fæces		41
CEREBRO-SPINAL FEVER—		
Fluid		9
Contacts (Throat Swabs)		3
VINCENT'S ANGINA-		
Throat Swabs		7
Ringworm—		
Cases from Doctors		10
" " School Clinic		18
URINE EXAMINATIONS—		
Chemical		35
Microscopic		
Gonorrhæa—		
Urine Examinations—Bacteriological		2
,, ,, —Chemical		
Examinations of Pus, etc		
Specimens from Doctors		
Anæmia—		
Blood Films Examined		10
MISCELLANEOUS EXAMINATIONS—		
including Bacteriological tests on samp	oles	
of Milk		53

BACTERIOLOGICAL LABORATORY, ISOLATION HOSPITAL.

Total number of Ear, Nose, and Throat Swabs examined ... ... 4,045

Of this number 147 were sent in by outside practitioners with the following result:—

> Positive Diphtheria bacillus ... ... 30 Negative Diphtheria bacillus ... ... 117

Number of swabs examined of patients in Hospital, 3,898.

Of these the number showing positive Diphtheria bacillus was 608.

Number showing negative Diphtheria bacillus, 3,290.

### ISOLATION HOSPITALS.

One thousand and sixty-six cases were admitted to the Isolation Hospital and Millbrook Marsh Hospital during the year. This is an increase of 149 patients, compared with the previous year.

The following table shows the number and description of the cases admitted in each year since 1920:—

Disease Admi	tted.	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929
Small Pox		 _	14	3	*2	1	I	_	I	4	_
Scarlet Fever		 123	171	248	322	284	281	220	354	252	320
Diphtheria		 295	293	235	210	260	261	321	250	311	373
Scarlet Fever and Di	phtheria	 3	3	II	4	9	3	3	1	3	-
Enteric Fever		 18	18	20	21	26	16	16	21	39	19
Tuberculosis		 189	II3	118	133	II2	III	208	216	213	224
Cerebro-Spinal Fever		 5	4	I	2	-	4	3	2	I	2
Measles and German	Measles	 31	23	32	98	40	99		68	45	74
Chicken Pox		 7	7	14	II	9	24	64	19	37	25
Mumps		 3	IO	6	4	33	14	13	8	7	12
Erysipelas		 	1	I	2	_	I	-	-	-	2
Vincent's Angina		 1	-	-	I		-	-	-	-	-
Puerperal Fever		 I	-	-	-		_	-	-	-	-
Influenza		 4	3	-	I	1		-	-	_	-
Pneumonia		 7	I		-	-			-	-	-
Encephalitis Letharg	ica	 3	2	_	2	-		1	I	-	I
Other Diseases		 5	15	16	16	3	5	2	6	5	14
Totals		 695	678	705	829	778	820	941	947	917	1066

<sup>\*</sup> For observation.

# ISOLATION HOSPITALS.

# Cases Isolated for Treatment during the Year 1929.

This Table shows all admissions to the Isolation Hospital, and Millbrook Marsh Hospital, and includes all Cases admitted from Vessels in the Port, Cases admitted from neighbouring Districts, and Naval and Military Cases.

Case Mortality. Per cent.	1.5.0.9 1.88 1.88 1.88 1.88 1.88 1.88 1.88 1.	
Average number of Days in Hospital (Cases treated to a Conclusion)	37.0 28.0 28.0 63.0 63.0	1
Remaining in Hospital, 31st Dec., 1929.	<del>4</del> <del>4</del> <del>4</del> <del>4</del> <del>4</del> <del>4</del>     <del>4</del>	138
Died.	9 0 0 0	40
Discharged	320 327 64 64 122 123 123 123 123 123 123 123 123 123	987
Total number of Admis- sions.	3220 373 224 61 61 122 122 123 123 123 124 125 125 125 125 125 125 125 125 125 125	9901
Cases Remaining in Hospital, 1st January, 1929. A	18 1 8 2 2 4 4     1   1	66
		1
FIED D.	::::::::::::::::::::::::::::::::::::::	:
DISEASE NOTIFIED OR SUSPECTED.	Small Pox Scarlet Fever  Diphtheria  Tuberculosis  Measles  Measles and Whooping Cough  Chicken Pox  Mumps  Whooping Cough  Erysipelas  Erysipelas  Conjunctivitis  Tonsillitis  Encephalitis Lethargica	Totals

### SCARLET FEVER.

Cases were generally mild in character. Three cases of Septic Scarlet Fever died. The total number of deaths from Scarlet Fever amounted to six, including the three from Septic Scarlet Fever. It was found necessary to operate upon ten cases, and these operations were classified as follow:—

Double Mastoid disease ... ... 3 cases.

Single Mastoid disease ... ... 5 ,,

Paracentesis Tympani ... ... 2 ,,

All made a satisfactory recovery.

Complications generally were not very serious, mostly consisting of clinical Adenitis without abscess formation.

### DIPHTHERIA.

Three hundred and seventy-three cases were admitted, 19 of which proved fatal. In nearly every fatal case the patient had been suffering from the disease for some days previous to admission, and serum had not been administered until admitted to Hospital.

### ENTERIC FEVER.

There were three deaths from the disease. Two cases died from intestinal hæmorrhage and the other case from toxæmia. All were extremely ill on admission.

### ISOLATION HOSPITALS.

The following Table shows the districts from which cases were admitted during the year 1929:—

Disease Notified or Suspected.	Boro'.	Port.	New Forest Rural.	S. Stoneham Rural.	Hursley Rural.	Romsey Rural & Romsey Boro'.	Other Districts.	Military Cases.	Atlantic Park Hostel.	Total.
Small Pox Scarlet Fever Diphtheria Enteric Fever Tuberculosis Measles Measles and Whooping Cough	265 323 9 224 —	9 9 9 - 13	-8 12 1 -	5 1 —		13 15 —	- 2 - 1 - 1 - 1	11 5 — 17 1	7 - 30	320 373 19 224 61
Rubella Chicken Pox Mumps Whooping Cough Cerebro-Spinal		2 15 5 3			===	=	===	10 2 5 1	7 2 1	12 25 12 5
Erysipelas Pyrexia Conjunctivitis Tonsillitis Encephalitis Lethargica	1 2 - 5 2									2 2 1 5 2 1
Dysentery  Totals	833	67	22	7	7	28	2	52	48	1066

### DISINFECTING STATION.

The following is a list of articles disinfected at the steam disinfector, West Quay:—

Beds and	Mat	tresses	 	 1,921
Bolsters a	and F	Pillows	 	 3,583
Blankets	and (	Quilts	 	 3,932
Sheets			 	 3,084
Counterp	anes		 	 842
Books			 	 240
Sundries			 	 37,287
	Tot	tal	 	 50,889

### RATS AND MICE DESTRUCTION.

In connection with the duties imposed under the Rats and Mice (Destruction) Act, 1919, a total of 455 visits was made by the Sanitary Inspectors to farms, stores, refuse tips, and all possible places likely to be infested with rats.

The number of rats found and destroyed was 4,225.

### SANITARY INSPECTION.

### Summary of Inspections and of Work Carried Out.

General Inspection of Houses and re-visits		19,648
Inspections on Complaint		1,036
" under the Housing Act		706
of Factories		60
of Warkshape and Warkshape		I,234
" of Laundries		37
,, of Bakehouses		47.3
" under the Shops Act		1,668
" of Slaughterhouses		4,165
" of Butcher Shops		3,266
" of Sausage Factories		336
,, of Wholesale Stores, Markets, etc.		1,007
" of Fish Shops		496
, ,,		62
" Dairies, Cowsheds, and Milkshops		778
" Ice Cream Factories		21
" Common Lodging Houses		1,519
,,		180
" of Courts and Alleys		343
		209
Visits re Infectious Disease		978
Preliminary Notices served for the Abatement	of	
Nuisances		1,306
Legal Notices served for the Abatement of Nuisano	ces	959
Nuisances Abated by Verbal Notices		675
Desire Tested with Smales		49
Tested with Water		140
f1 D-fti		
		26
Premises Drained to the Public Sewer	•••	10

Drains cleared and repaired		528
,, reconstructed		69
,, retrapped		95
" intercepted and ventilated from Sewer		120
Inspection chambers provided to house drains		97
New soil pipes fixed on external walls of houses		33
Water-closets reconstructed		99
Urinals reconstructed and provided with means	of	
flushing		17
New water-closet pans fixed		182
Water laid on to closets for flushing		216
Bath, sink wastepipes, etc., disconnected from drain	ins	113
Sanitary sinks fixed in houses		76
Damp walls of houses remedied		126
Houses cleansed and whitewashed		321
Roofs of houses repaired		445
Eaves, guttering and stackpipe repaired		127
Window sashes made to open		6
Flooring, windows, etc., repaired		657
Ground floor ventilation provided under rooms		3
Means of light and ventilation provided to water-clos	sets	26
Yards paved and drained		30
Yard paving repaired		115
Sanitary dustbins provided to houses		403
Overcrowding in houses abated		2
Courts re-limewashed		25
Nuisances from keeping animals, etc., abated		IO
Manure and offensive matter removed		127
Cesspools abolished		4
Cesspools emptied		3
Privies abolished		3
Smoke nuisances abated		I

### DRAINAGE UNDER THE NEW BUILDING BYE-LAWS.

During the year 793 plans were submitted, of which 663 were approved and 130 disapproved.

The approved	plans	com	prise:—	-		
Dwelling-houses						 978
Alterations						 165
Miscellaneous build	lings,	shop	fronts,	etc.		 203
Sewers, etc						 12
Work complete	ed:—					
Houses						 896
Alterations						 143
Miscellaneous build	dings					 175
Number of inspect	ions o	luring	progre	ss of	work	 10,491
Number of drains	tested	d and	reteste	d		 3,176

# WORK CARRIED OUT UNDER THE SOUTHAMPTON CORPORATION BYE-LAWS, RELATING TO THE DRAINAGE OF EXISTING BUILDINGS.

During the year 134 notifications were received with respect to the repair and alteration of drainage in compliance with Section 11 of the above Bye-laws.

The following works were carried out and supervised by the Department after notification:—

acron.					
Sewer					4
					35
					40
					58
					38
					21
	d				35
					100
					23
	connec	ted fro	m drai	ns	24
					42
					20
					18
					68
					3
					I
-					15
provide	d with	means	s of flu	shing	2
	Sewer nstructe tc., disc ted	Sewer	Sewer	Sewer	Sewer

### WATER SUPPLY FROM WELLS.

Two samples of water were taken and submitted to the Public Analyst. Both were found to be unfit for drinking or domestic purposes, and a public supply was laid on.

### OFFENSIVE TRADES.

The following offensive trades are carried on in the Borough: Gut Scraper I, Tallow Melter I, Tripe Boiler I, Dealers in Rags, Bones, etc., 9, Fish Friers 53, Dealers in Animal Skins 3.

### SLAUGHTERHOUSES.

There are 8 Registered and 26 Licensed Slaughterhouses in the Borough.

Four thousand one hundred and sixty-five visits were made, and the premises generally were kept in a satisfactory condition.

### FOOD.

In carrying out the systematic inspection of food, the following visits were made to premises where food is prepared, stored, or sold:—

Slaughterhouses		4,165
Butcher Shops		3,266
Sausage Factories		. 336
Wholesale Stores, Markets	s, etc	. 1,007
Fish Shops		496
Ice Cream Factories		21

## MEAT AFFECTED BY TUBERCULOSIS SEIZED OR SURRENDERED.

			In Slaughter- houses.	In Shops.	Weight.
Carcases of Beef		 	 59	_	30,071 lbs.
" Pork		 	 21	_	2,399 lbs.
Part carcases of	Beef	 	 61	_	7,475 lbs.
,, ,,	Pork	 	 203	4	3,074 lbs.

The following is a summary of the diseased and unsound food destroyed during the year:—

### BEEF.

Whole Carcases 67, Quarters 73, Livers 176, Lungs 78, Hearts 28, Tongues 47, Mesenteries 25, Heads 51, Offals 109, Skirts 11, Tripes 3, sundry pieces of Beef, 2,488 lbs.

Total weight of Beef, 56,515 lbs.

### PORK.

Whole Carcases 47, Quarters 5, Offals 77, Heads 181, Plucks 230, sundry pieces of Pork, 232 lbs.

Total weight of Pork, 9,266 lbs.

### MUTTON AND LAMB.

Whole Carcases 3, Plucks 5, sundry pieces of Mutton, 163 lbs.

Total weight of Mutton, 438 lbs.

### VEAL.

Whole Carcases 4, Offals 4. Total weight of Veal, 157 lbs.

### FRUIT, VEGETABLES, ETC.

55 boxes of Pears, 40 baskets of Plums, 2 boxes of Cranberries, 227 crates of Lettuce, 30 cwt. of Carrots, 51 cwt. of Onions, 84 bags of Potatoes, 47 tins of Corned Beef, 37 tins of Milk, 54 tins of Fish, 155 tins of Fruit, 26 lbs. of Biscuits, 9 lbs. of Cheese, 66 Eggs, 81 Rabbits, 47 Turkeys.

Total weight, 27,107 lbs.

### FISH.

379 boxes of Smoked Haddock, Codling and Fillets, 42 boxes of Bloaters, 212 boxes of Kippers, 15 boxes of Smelts, 279 stone of Codfish, 50 stone of Roes, 71 stone of Whiting, 41 stone of Mixed Fish, 200 stone of Mackerel, 46 stone of Soles, Plaice and Dabs, 50 stone of Skate, 128 stone of Herrings, 21 stone of Megrims, 16 stone of Mullet, 22 stone of Gurnet, 26 stone of Hake, 21 stone of Bream, 33 stone of Pollock, 20 stone of Escallops, 155 lbs. of Lobsters, 130 lbs. of Salmon, 48 stone of Crabs, 34 tins of Prawns, 319 gallons of Shrimps.

Total weight of Fish, 26,540 lbs.

### FOOD AND DRUGS (ADULTERATION) ACT, 1928.

Four hundred and sixty-two samples were taken by the Sanitary Inspectors during the year and submitted to the Public Analyst.

One hundred and fifty-three were formally purchased in accordance with the Act, and 309 were informal or test samples, 50 of the latter being milk samples.

Twenty, including 14 informal samples, were found to be adulterated.

Proceedings were taken in four cases, and convictions obtained in each.

In one instance proceedings were taken against the consignor under the provisions of the Food and Drugs (Adulteration) Act, 1928, and in one case the vendor was cautioned.

	ARTICI	LE.			Number of Samples.	Genuine.	Adulterated
Milk					186	174	12
Butter					44	44	
Margarine					43	43	
Lard					38	38	
Cream					17	15	2
Custard Powde	Γ	***		***	3	3 8	
Sausages					8	8	
Pork Pie					I	I	***
Brawn					I	I	
Aspirin	***			444	3	3	
Cheese					12	12	
Meat Paste	***				3	3	
Arrowroot					2	2	
Dried Milk					8	8	
Pearl Barley			***		3	3	
Condensed Mill	· · · ·				5	4	I
Mustard	***			***	I	I	
Jam					4	3	I
Coffee			***		4	4	***
Pepper					7	7	
Tinned Turnip	S		***		I	I	
Fresh Salmon			***	***	I	I	
Sponge Cake					3	3	
Olive Oil					5	4	I
Ground Ginger					5	4	I
Non-Alcoholic	Wine		***		2	2	
Tartaric Acid					6	6	
Bicarbonate of	Soda				4	4	
Honey					4	4	
Stout					3	3	
Sal Volatile		***			6	5	I
Camphorated (	)il				2	2	
Epsom Salts	***	***		***	4	4	
Treacle					I	I	
Baking Powder				***	6	6	
Pressed Beef					I	I	
Rice					6	6	
Marmalade					2	2	
Glycerine					2	2	
Premier Jus					I	I	
Ginger Beer					I	I	
Preservative P	owder	***	***		2	I	I
Eggs	***	***			I	I	
Т	otals				462	442	20

The following Table shows the number of articles analysed which were found to be adulterated, and the result of proceedings taken:—

No. of Sample.	Date.	Article.	Adulteration.	Result of Proceedings.
79	Mar. 8	Condensed Milk	4.4% deficient in fat	Test sample; subsequent sample taken and found
100	Mar. 20	Jam	88 parts of SO <sub>2</sub> per 1,000,000	genuine Test sample; subsequent sample taken and found genuine
132	Apr. 19	Preserva- tive	Contained no preserva- tive	Test sample
147	Apr. 23	Powder Olive Oil	5.19% Oleic Acid	Test sample; subsequent sample taken and found
162	May 2	Ginger	6.75% mineral matter	genuine Test sample; subsequent sample taken and found
182	May 28	Cream	Contained Boric Acid	genuine Test sample; see sample No. 198
198	May 28	Cream	Contained 0.22 % of Boric Acid	Fined £5
232	June 21	Milk	5% deficient in fat	Test sample; subsequent sample taken and found
243	June 21	Milk	3.3% deficient in fat	genuine Test sample; subsequent sample taken and found
262	July 8	Milk	6.6% deficient in fat	genuine Test sample; subsequent sample taken and found
269	July 8	Milk	8.33% deficient in fat	genuine Test sample; subsequent sample taken and found
270	July 9	Milk	1.66% deficient in fat	genuine Test sample; subsequent sample taken and found
918	Aug. 15	Milk	17.66% deficient in fat	genuine Fined £2
321	Aug. 15	Milk	1.3% added water	Test sample; subsequent sample taken and found
397	Oct. 9	Sal Volatile	17.89% deficient in Ammonia	genuine Test sample; subsequent sample taken and found
411	Oct. 16	Milk	6.11% added water	See Sample No. 415
413	Oct. 16	Milk	4% deficient in fat	Vendor cautioned
414	Oct. 18	Milk	4.47% added water	Test sample; see Sample
415	Oct. 19	Milk	5.52% added water	No. 415 Fined £10
422	Nov. 1	Milk	11.66% deficient in fat	Fined £2

# MILK AND DAIRIES CONSOLIDATION ACT, 1915, and THE MILK AND DAIRIES (AMENDMENT) ACT, 1922.

There are now 193 purveyors of milk, including 24 cowkeepers, registered in the Borough.

The total includes 24 purveyors of milk who reside outside the Borough. During the year 4 purveyors of milk ceased to sell milk, and their names were removed from the Register.

Particulars.	Town Proper.	Shirley, Freemantle, and Millbrook.	Portswood and Bitterne Park.	Bassett and Swaythling.	Woolston, Itchen and Bitterne.	Outside the Borough.	Total.
Number of Cowkeepers on Register		3	I	5	15		24
Number of Purveyors of Milk on Register	67	35	12	5	26	24	169
Number of Purveyors of Milk registered during the year	2		I	I			4
Number of Cowkeepers registered during the year		***			I		ı

# NUISANCES ABATED IN DAIRIES, COWSHEDS AND MILKSHOPS.

Milkshops cleansed ar	nd whitev	vashed		 224
Dairies ,,	. ,,			 66
Cowsheds ,,	,,			 96
Dairies constructed				 4
Yard paving repaired				 9
Drains cleared and re	epaired			 4
Walls repaired				 I
Roofs repaired				 I
Eaves, guttering and s	stackpipe	repaire	ed	 2
Water provided to cov	vsheds			 I
Light and ventilation			ies	 I
				 I
			Total	 410

During the year four applications were received from purveyors of milk for licences to use the designation "Certified Milk," one to use the designation "Grade A Milk," and two to use the designation "Pasteurized Milk."

#### HOUSES LET IN LODGINGS.

There are 21 houses in the Borough registered under the Bye-laws relating to Houses Let in Lodgings.

One hundred and eighty visits were made, and the houses generally kept in conformity with the Bye-laws.

#### COMMON LODGING HOUSES.

There are 13 common lodging houses in the Borough, with registered accommodation for 502 persons.

Applications for the registration of all 13 houses were made previous to the 31st December, by the registered keepers, in accordance with the provisions of the Southampton Corporation Act, 1910.

One thousand five hundred and nineteen visits were made during the year, and the premises generally were kept in a satisfactory condition.

#### FACTORY AND WORKSHOP ACTS.

SUMMARY OF VISITS DURING YEAR 1929.

Factories			 60
Workshops and Workplaces			 1,234
Bakehouses (including Factory	y Bakel	nouses)	 473
Laundries (including Factory	Laundr	ies)	 37
Visits re Sanitary Matters			 663
	Total		 2,467

Reports received from H.M. Factory Inspector during the year, viz. :-

Nature of Report.	No. Sent in.	Action Taken.
New Workrooms and Change of Address	6	Workrooms Inspected, Measured, &c.
Workshops Notified (already on L.A. Register or re-notified after Notice from Local Authority)	. 9	No Action Taken.
Sanitary Defects	-	Notices served and Defects Remedied.
Total	. 22	

Three notifications have been sent to H.M. Factory Inspector during the year, respecting new Workshops, change of address, or infringements of the Factory and Workshop Acts.

Eleven new Workrooms have been measured during the year.

#### BAKEHOUSES.

There are 116 Bakehouses on the Register, 60 being Factories and 56 Workshops. Ninety-five of these were in use at the end of the year, and 21 were unoccupied.

They give employment to 390 males and 35 females, in addition to those employed in delivery and as shop assistants.

Four hundred and seventy-three visits of inspection were made during the year, and three nuisances abated.

All occupied Bakehouses were re-limewashed twice during the year in accordance with the Regulations.

Two new Bakehouses were constructed during the year and one old Bakehouse lapsed.

#### LAUNDRIES.

There are 27 Laundries on the Register, 15 of which use mechanical power and 12 manual labour.

Thirty-seven visits of inspection have been made during the year, and two nuisances abated.

In addition to the foregoing, 663 visits have been made during the year, comprising re-visits to Factories, Workshops, Bakehouses and Laundries, serving notices, investigating complaints of nuisances, over-crowding and various other matters.

#### HOMEWORK.

During February 43 lists were sent in containing the names and addresses of 88 Outworkers, and during August 44 lists containing the names and addresses of 91 Outworkers.

Of the 91 names received in August, 3 reside outside the district, 16 occupy premises registered as workshops, and of the remainder 71 work on wearing apparel, and 1 on upholstery.

The names and addresses of the Outworkers living outside the Borough have, in accordance with Section 107 of the Factory and Workshop Acts, been forwarded to the Authorities of the District in which they reside. One hundred and thirty-five visits of inspection have been made during the year, and six nuisances abated.

#### NUISANCES ABATED.

The number of nuisances abated during the year were 89, viz.:—Factories 23; Workshops and Workplaces 61; Bakehouses 3; Laundries 2.

# CASES OF INFECTIOUS DISEASE OCCURRING IN HOMES OF EMPLOYEES OF FACTORIES AND WORKSHOPS.

Eight cases of Scarlet Fever, and three cases of Diphtheria occurred in the homes of employees of Factories and Workshops.

Ten of these were removed to the Isolation Hospital, and one isolated at home.

The workers living in the houses in which Scarlet Fever cases occurred received a disinfecting bath, and had their clothes disinfected before resuming duties.

The premises in which cases occurred were disinfected, and bedding removed for disinfection after the removal of patients to Hospital.

#### THE RAG FLOCK ACTS, 1911 and 1928.

There are no premises in the district in which rag flock is manufactured. Bedding manufacturers and upholsterers obtain their supplies from factories outside the Borough. Inspections are made and samples taken of these supplies by the Workshop Inspectors.

Seven samples were taken during the year, the Analyst's report being as follows:—

No. of Sample.	Result of Analysis.									
I	Chlorine	as Chlorides,	5.0	parts p	er 100,000					
2	,,	,,	8.75	**	,,					
3	,,	,,	8.75	**	,,					
4	",	,,	8.75	,,	,,					
5	","	"	30.0 7.5 6.25	23	,,					
0	91	,,	7.5	,,	,,					
7	,,,	,,,	6.25	>>	,,					

Note.—The limit of Chlorine permitted by the Act is 30 parts per 100,000.

PROSECUTION CASE.

With respect to Sample No. 3, which showed on analysis 141.c parts per 100,000 of Chlorine as Chlorides, legal proceedings were taken against the local firm concerned, and adjourned to allow them to summon the wholesaler on the warranty.

The case was re-heard on July 27th, and the wholesaler was fined £25 and £10 10s. costs.

NUISANCES ABATED DURING THE YEAR.

	Factories.	Workshops.	Bakehouses.	Laundries.	Totals.
Premises drained to sewer	2				2
Drains re-laid, trapped and ventilated					
,, cleared and repaired		2			2
,, inspection chambers constructed Sanitary conveniences provided to	I				I
premises ,, cleansed and	6				6
limewashed	2	3		1	6
Water closets provided (separate for sexes)	2	I	I		4
,, ,, new pans fixed	2	2			4
,, ,, new cisterns, flush pipes, etc. Intervening ventilated spaces provided	4	2			6
between water-closets and workshops		3			3
Defective roofs of workshops repaired		4			4
,, floors, walls, etc., repaired	1	I			2
Workshops lighted and ventilated		I			I
,, cleansed and limewashed	I	32	I		34
Yards paved or repaired Eaves, guttering and stack-pipes fixed				I	I
or repaired		2			2
New hoods fixed over smithy forges					
to prevent smoke nuisances		3			3
Overcrowding abated		2			2
Smoke nuisances abated	1	2			3
etc., removed	I	1	I		3
Totals	23	61	3	2	89

#### SHOPS ACT, 1912 to 1928.

During the year 1,499 visits of inspection were made under the Act, and the following prosecutions were taken for contraventions:—

Date.	Initials of Defendants.	Nature of Offence.	Result.
Feb. 1	T.H.	Selling non-exempted goods after hours	Fined 10/-
Feb. 1	P.P.A.	Selling non-exempted goods after hours	Fined 10/-
Feb. 15	F.G.S.	Selling non-exempted goods after hours	Case dismissed
May 3	J.J.M.	Selling non-exempted goods after hours	Fined 5/-
May 28	E.C.	Selling non-exempted goods after hours	Fined 5/-
May 28	J.W.	Selling non-exempted goods after hours	Fined 10/-

In addition to the above, five letters of warning were sent for infringements of the Act.

The two following Tables are inserted by request of the Secretary of State.

## FACTORIES, WORKSHOPS AND WORKPLACES.

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

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Dramina	Number of					
Premises.	Inspections.	Written Notices. (3)	Occupiers prosecuted. (4)			
Factories (including Factory Laundries)	78	7				
Workshops (including Workshop Laundries)	1,131	14				
Workplaces	122	I				
Totals	1,331	22				

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

	Nu	mber of Defe	ects.	Number of Offences in respect to
Particulars.	Found.	Remedied.	Referred to H.M. Inspector. (4)	which Pro- secutions were instituted. (5)
Nuisances under the Public Health Acts:—*				
Want of Cleanliness	34	34		
Want of Ventilation	I	I		
Overcrowding	2	2		
Want of drainage of floors				
Other nuisances	38	38		
Sanitary (insufficient unsuitable or	6	6		
accommodation defective not separate for	4	4		
sexes	4	4		
OFFENCES UNDER THE FACTORY AND WORKSHOP ACTS:—				
Illegal occupation of underground bakehouse (s. 101)				
Other Offences (Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921).	•••		•••	
Totals	89	89		

<sup>\*</sup> Including those specified in Sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

# 3.—OUTWORK IN UNWHOLESOME PREMISES, Section 108. NIL.

#### HOUSING.

The following is a summary of houses completed for occupation from the date of the Armistice to the end of the year, 1929:—

, , ,					Erected by						
Year.				(	Council.	Private Enterprise.	Total.				
1918 to	date of (	Census,	June,	1921	209	90	299				
1921 Ju	ne to en	d of ye	ar		232	II2	344				
1922					178	261	439				
1923					50	383	433				
1924					_	636	636				
1925					_	821	821				
1926					71	776	847				
1927					437	568	1,005				
1928					196	836	1,032				
1929					644	896	1,540				
					2,017	5,379	7,396				

Total number of houses erected from 1918 to date of Census 1921—299; since the Census—7,097.

From the summary it will be seen that since the Census of June, 1921, to the 31st December, 1929, the number of new houses in the Borough completed for occupation, including those erected by the Corporation under their various Housing Schemes, totals 7,097. During the same period the Registrar-General estimates there has been an increase of 10,100 persons over the revised Census population of June, 1921. To accommodate this increased population, taking an average number of five persons per house, would require 2,020 houses.

Practically all the houses erected by private enterprise are at a rent prohibitive to the working class family, and it is the provision of houses for families in overcrowded tenements, who are able to pay only a small or very moderate rent, that accommodation is still urgently needed.

Systematic inspection has been carried out in various parts of the Borough during the year, both under the Housing Act and under the Public Health Acts, the particulars of which are shown in the following tabular statement:—

#### Dwelling-houses. Inspection of dwelling-houses during the year. (I) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) ... (2) Number of dwelling-houses which were inspected and recorded under the Housing (Consolidated) Regulations, 1925 ... 706 (3) Number of dwelling-houses found to be in a state so dangerous or injurious to health so as to be unfit for human habitation ... 23 (4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation ... Remedy of Defects without Service of formal Notices:— Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers 376 3. Action under Statutory Powers during the year. A. Proceedings under Section 3 of the Housing Nil. Act, 1925 B. Proceedings under Public Health Acts. (I) Number of dwelling-houses in respect of which notices were issued requiring defects to be remedied ... ... I,306 (2) Number of dwelling-houses in which defects were remedied after Service of formal Notices:-(a) by owners (b) by Local Authority in default of owners C. Proceedings under Sections 11, 14, and 15 of the Housing Act, 1925:— (I) Number of representations made with a view to the making of Closing Orders ... 23 (2) Number of dwelling-houses in respect of which Closing Orders were made ... 23 (3) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit ... I (4) Number of dwelling-houses in respect of which Demolition Orders were made Nil. (5) Number of dwelling-houses demolished in pursuance of Demolition Orders Nil.

# DETAILED LIST OF INSPECTIONS MADE UNDER THE HOUSING ACT, 1925.

During the year 706 houses were inspected under the provisions of the above Act.

The following is a list of Roads, Streets, etc., in which systematic inspection was carried out, the number of houses inspected, and the number of notices served:—

Stree	et or	Road			Number of Houses Inspected.	Number of Notices served under Housing Act.	Number of Notices served under Public Health Acts	
Broomfield Cottag	es				2		2	
Cannon Street					165		96	
Cossack Place					6		6	
Cossack Street					42		34	
Craven Street					74		42	
Cross Street					18		8	
Everett's Court					2		2	
Exmouth Place					12		9	
Holden Square					IO		1	
Itchen Ferry					20	20		
Kentish Road					I	I		
Middleton Street					24		20	
Mission Cottages					4		4	
New Buildings, Sp	a Roa	id		***	I	I	***	
Nightingale Court					4		4	
Northcote Road					45		35	
North Front (part	of)				- 30		12	
Peel Street					29		8	
Princes Street					95		19	
Short's Passage					2		2	
Somerset Road					36		30	
Surrey Place					4		3	
Union Street					31		23	
Union Court					2		2	
Waterloo Bridge					5		4	
William Street					37	I	20	
Winchester Place			***		5		5	
			Totals		706	23	391	

# STATISTICAL TABLES.

TABLE 1.

CASES OF INFECTIOUS DISEASES NOTIFIED DURING THE YEAR, CLASSIFIED IN AGES AND LOCALITIES.

			79	
	·su	Institutio	:04::01:: 2::8	95
		St. Nicholas.	18 6 1 1 1 1 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1	155
		Woolston.	: 17 : : : : : : : : : : : : : : : : : :	57
		Bitterne & Sholing.	:820 94 H H 4 : H : 4 : H 2 H 4	95
		Bitterne & Pear Tree.	. H H	65
Vard.		St. Denys.	:23 :: 17 :: 1 2 :: 0 E :	81
V ledi		Portswood.	: H : : 1 : : 3 12:	4 4
Total Cases Notified in each Municipal Ward.		Shirley.	: 25 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	118
ach M		Millbrook.	:44:: : +H:0 2 2	98
in es		Freemantle.	:04:::: 2 ::: 2 H	63
tified		Banister.	:72::28:: : H::2 01 H	41
es No		Bevois.	.∞∞	19
1 Cas		All Saints.	:∞ ∠ H : H . C : : 4 : : 4 . S :	56
Tota		Newtown.	:00ннин :: :::0 % м	50
		Trinity.	:44 : : H : : : 0 0 4	100
		Northam.	100 H H H H H H H H H H H H H H H H H H	80
		St. Mary's.	:824 : E : : : H 4 : : 0 E &	130
		лиоТ.	:87 :: E 2 H : : 4 :: 0 2 4 0	133
		65 and upwards.	::4:::4 + :	95
d.		45 & under 65 years.	: 42 : : : 4 : : 1 : 1 : 1 : 1 : 1 : 2 : 2 : 2 : 2 :	140
Number of Cases notified.	ITS.	25 & under	283 33 33 15 15 171 6	330
ises I	Ages-Years	15 & under 25 years.	35. 33. 33. 33. 33. 33. 33. 33. 33. 33.	215
of Ca	Ages-	5 & under 15 years.	.7212 .7212 .7254 : 2 : : : : : 4 2 2 1	505
per	At A	1 & under 5 years.	::: 95 + + + + + + + + + + + + + + + + + +	177
Nun		Under 1 year.	:: `:::: : : : : : : : : : : : : : : :	56
		At all Ages.	368 368 32 622 1 1 1 1 1 1 1 1 4 0 4 0 4	522
		DISEASE.	Small-pox Scarlet Fever Diphtheria Enteric Fever Puerperal Fever Frysipelas Cerebro-Spinal Fever Acute Poliomyelitis Encephalitis Lethargina atorum Dysentery Malaria Dysentery Malaria Culosis Other Forms of Tuberculosis	Totals I522
			SSCan SSCan Dip Dip Dip Dip Dip Dip Dip Dip Dip Dip	

TABLE 2.

TABLE SHOWING DEATHS OF PERSONS BELONGING TO SOUTHAMPTON, CLASSIFIED ACCORDING TO AGES AND SEX FOR 10 YEARS.

	AGES.												SI	SEX.		
Year	o to I	to 2	to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 to 95	95 & Up- wards	Males	Females	Total
1920 1921 1922 1923 1924 1925 1926 1927 1928	211 226 222 172 198 184 175 186 152 198	63 34 57 45 28 67 31 62 23 36	50 21 50 54 40 42 36 67 30 46	50 74 48	77 93 89 76 72 74 96	72 96 96 110 117 101 87 95 86 98	102 111 151 147 132 145 126 144 138 131	170 186 218 177 226 213 214 242 243 265	201 256 268 285 268 292 288 325 323 378	231 317 351 295 355 349 363 424 419 458	225 264 327 298 305 336 318 405 354 419	94 100 89 108	4 10 5 5 4 9 7 6 5 6	1085	986 867 904 931 908 1035	1520 1749 1975 1817 1938 1956 1880 2183 2025 2315

TABLE 3.

Causes of Deaths in Southampton for 10 years, 1920 to 1929.

CAUSE OF DEATH.	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929
Enteric Fever	. 1	3	3	2	8	3	4	2	6	3
Small Pox										
Measles	. 22	I	22	21	1	18	3	54	3	1
Scarlet Fever		I	1	1	3	4		10		3
Whooping Cough	26	3	13	28	6	16	8	12	IO	29
Diphtheria and Croup	. 17	19	25	20	17	9	20			23
Influenza	. 16	34	72	24	89	29	53	66	39	93
Erysipelas		2	3	2	6	7	7	9	12	5
Phthisis (Pulmonary Tuberculosis	3) 144	183	177	189	177	165	160	171	178	200
Tuberculous Meningitis	. 9	II	18	26	17	17	13	18	II	25
Other Tuberculous Diseases	. 13	8	21	12	14	14	10	6	14	14
Cancer, malignant disease	. 157	200	201	220	231	273	237	275	281	289
Rheumatic Fever	. 8	4	8	7	9	3	5	9	IO	9
	. 10	9	6	10	5	5	9	9	5	9
Organic Heart Disease	. 157	173	238	205	229	266	257	259		288
Bronchitis	. II2	139		131	145	135	115	161	152	214
Pneumonia (all forms)	. 134	104	115	106	132	124	134	213	164	180
Other Diseases of Respirator	y			-	100	10.00				
Organs	. II	19	22	21	22	17	8	17	12	IC
Diarrhœa and Enteritis	. 47	73	23	22	26	II	23	30	16	25
Appendicitis and Typhlitis	. 8	7	7	9	7	15	16	II	19	15
Cirrhosis of Liver	. 7	6		7	4	10	7	5	IO	7
Alcoholism			3		3	1	I	I	I	I
Nephritis and Bright's Disease	. 40	52	68	79	72	61	62	102	99	107
Puerperal Fever		3	7	4	2	7	2	4	5	6
Other accidents and Diseases of										
Pregnancy and Parturition	. 15	4	6	12	3	7	9	8	7	8
Congenital Debility and Malforma										
tion, including Premature Birth	73	109	99	66	84	96	79	85	68	82
Violent Deaths, excluding Suicide				45	56	64	50			57
Suicide	-		20		17	15	24	24	21	25
Other Diseases		518	548	523	553	564	564	547	484	587
Totals	. 1520	1749	1975	1817	1938	1956	1880	2183	2025	2315

# TABLE 4.

Table showing Deaths from All Causes belonging to the County Borough of Southampton during the Year 1929 (52 weeks ended 28th December, 1929), classified according to Diseases and Ages. (This Table includes deaths of "Residents" occurring in other districts, and excludes deaths of "Non-Residents," in accordance with the Rules of the Residents.

-		Totals		3	н 1	н (	30	2 64	93	I	5	6	61	1	200	201	7	+	I	24	9	3		419	
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	SEX	Males.		63	I	:	11	11	43	:		9	I		122	17	n	33	I	I	4	63		233	
-		95 and up- w'ds		:	:	:	:	: :		:	:	:	:	:	:	:	:	:	:	:	:	:		-	
		85 to 95		:	:	:	:	: :	9	:	:	:	:	:	:	:	:	:	:	:	:	:		9	
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		25 to 35		:	:	:	:	:	: 10	н	:::	:	:	:	39	:	н	н	:	н	63	::		50	
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		DISEASES CLASSIFIED.	IGeneral Diseases.	Enteric Fever	Malaria	Measles	Scarlet Fever	Whooping Cougn	Influenza	Dysentery		Encephalitis Lethargica	Cerebro-spinal Meningitis	Actinomycosis	Pulmonary Tuberculosis	Tuberculous Meningitis	Tuberculosis of Peritoneum and Intestines	Tuberculosis of the Spine	Tuberculosis of the Hip	Disseminated Tuberculosis	Syphilis	nia			

356

102

Females. 163 338338933893889 SEX. Males. 193 and up-w'ds : : 9 85 to 95 : 101 : : : : : :50 25 40 85 85 102 30 T 25 55 13 4 4 91 IOI 55 02 45 to 55 Ci. 35 to 45 AGES. : : : : 35 0 25 9 : : : : : 20 40 to to : Ç1 : : 68 : 400 : : : : : H 2 4 : : : : H : : : : : : : : : : : : : : 0 0 H and and General Diseases not included above. Cancer of the Female Genital System Cancer of the Intestines and Rectum III.-Diseases of the Nervous System ... Cancer of the Buccal Cavity .... Cancer of the Stomach, Liver 111 DISEASES CLASSIFIED. Totals Cancer of other Organs Cerebral Hæmorrhage Cerebral Thrombosis Cerebral Embolism Rheumatoid Arthritis Exophthalmic Goitre Chronic Rheumatism Meningitis ... Locomotor Ataxy ... Addison's Disease ... Rheumatic Fever ... Tumour of Sternum Sense Organs. Cancer of the Skin Gsophagus :: Myxœdema... Alcoholism ... Leukæmia ... Diabetes Rickets Anæmia

TABLE 4.—Continued.

Totals.

		Totals.	11 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	401
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		95 and up- w'ds		н
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		75 to 85		011
		65 to 75		911
	,	55 to 65		75
Continued.		45 to 55	[H4H [W] [HH]   0   4   HV H W 4 H H H   H	44
ntin	S.	35 to 45	H	10
Co	AGES.	25 to 35		9
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		DISEASES CLASSIFIED.	Hemiplegia Paraplegia Paraplegia General Paralysis of the Insane Epilepsy Convulsions Corebral Tumour Disseminated Sclerosis Paralysis Agitans Acute Mania Otitis Media Mastoiditis  IV.—Diseases of the Circulatory System. Pericarditis Malignant Endocarditis Acute Endocarditis Acute Endocarditis Angina Pectoris Angina Pectoris Angina Pectoris Angina Pectoris Angina Pectoris Fatty Degeneration of Heart Organic Disease of Heart Aneurysm Arterio Sclerosis Embolism Thrombosis Fhlebitis Varicose Veins	

TABLE 4.—Continued.

						AGES.	ES.							SE	SEX.	
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	DISEASES	II.—Non-Venereal Urinary Sys	Acute Nephritis	Chronic Nephritis	Pyelonephritis Pyelitis	Abscess of Kidne	Calculi	Cystitis	Urethral Strictur	Recto-vesical Fis	Iltoring Cibroid	Prerine Tumour	Overien Cust	Salpingitis			III.—The Puerner	and an and and	Post-partum Hæn	Fuerperal Albumi		XDiseases of the	Senile Gangrene	Other Gangrene	Carbuncle
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04

Totals. 06 72 Females 39 50 : 4 63 36 : : : : : : :: SEX. Males. : " : : 1 : 3 4 4 4 3 33 4 31 95 and up-w'ds н : : : : : : : : : : : : : : : : : : : 34 85 to 95 н : H : : : : : : : : 42 75 to 85 : : : : : : : : : : 1 | I 2 65 75 : : : : 4 : : : : : : : : : : : : 55 : : : TABLE 4.—Continued. : 63 : : : : : : : : : : 45 to 55 : : ... : :: : : : : : : : : : : : : : AGES. 35 to 45 : : H : : : : \*\*\* : : : : : : : " 35 55 : : : : : : : : : 15 15 25 : : : : : : : : : : : : : : : : : : : 15 : : : : : : : : 14 : : : : : : H : : : : : 400 : : : : : : : : : 10 th : : : : : : 4 91 5 : : : : : 0 0 H : : : X. - Diseases of the Osseous System. DISEASES CLASSIFIED. XII. - Diseases of Early Infancy. Totals Totals Totals Totals : : Congenital Hydrocephalus Malformation of Heart ... Debility and Marasmus : Other Malformations : Premature Birth ... ... Difficult Labour ... Icterus Neonatorum XI. Malformations. Pyloric Stenosis Injury at Birth Atelectasis ... Pemphigus ... Dermatitis ... Osteomyelitis Scoliosis ... XIII. Old Age. Senile Decay Meningocele Spina bifida Cleft Palate Ulcer

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Total.

82 57 25 390

2315 obtainable. 29 :01 No Home Address 83 SHH 3 St. Nicholas. 120 Woolston. Sholing. 114 Bitterne and Causes of Deaths in the Municipal Wards during the year 1929. Pear Tree. 92 6448 Bitteme and 126 4 4 4 4 00 St. Denys. 29 132 Portswood. 208 225 Shirley. MUNICIPAL WARD. 146 Millbrook. 128 Freemantle. III Banister. 901 H H G 45 Bevois. 128 1325:2 All Saints. W = 0 + 100 Mewtown. 142 222::222 30 H Trinity. 1+1 Northam. 237 172 : 5 St. Mary's. 2222 HEHT .nwoT (including : Pregnancy : : System and Malformations : 5 CAUSES OF DEATH. Suicide) Other accidents and Diseases of Other Diseases of the Respiratory : Nephritis and Bright's Disease TABLE Violent Deaths (excluding Organic Heart Disease... : uberculous Meningitis Diarrhoea and Enteritis Pneumonia (all forms) Congenital Debility Totals Other Tuberculous Premature Birth Puerperal Fever... Whooping Cough Cirrhosis of Liver Rheumatic Fever Other Diseases Enteric Fever Parturition Scarlet Fever Appendicitis Diphtheria Bronchitis Erysipelas Meningitis nfluenza Measles Phthisis ancer suicide

TABLE 6.

SHOWING POPULATION, BIRTH RATES, DEATH RATES, ZYMOTIC DEATH RATES, INFANTILE MORTALITY, AND MARRIAGE RATES IN SOUTHAMPTON AND ENGLAND AND WALES FOR TWENTY YEARS, 1910-1929.

Marriages.		Rate.	13.1	15.4	10.4	10.9	19.4 19.9	16.6	14.7	18.8	8.61	21.0		:	::		16.8	0.01	0 44	7/.7
9 2	ler I 000 rered. Total	England ages.		130 914		109 1032	110 120	91 1052		97 1209			83		69					604 60
Infantile	Deaths under r year per 1000 Births Registered	South- ampton.	79		400		0.88		86	92	74	67	62	67	54	62	57	56	63	CO
Zymotic Deaths.	Zymotic	Rate.	0.80	1.85	0.94	0.93	I.33	0.84	0.81	1.23	0.44	0.83	0.51	0.51	0.54	0.33	0.36	0.31	200	00.0
Zymotic	Total	Zymotic Deaths.	94	220	113	122	123	86	93	137	26	601	82	83	68	56	09	52	115	644
	Death Rate	England and Wales.	13.5	14.6	13.3	13.8	14.0	14.4	14.4	17.6	13.8	12.4	12.1	12.9	9'11	12.2	12.2	9.11	TO 9	6:27
Deaths.	1,000	Rate.	12.4	15.2	13.2	12.9	13.9	14.5	14.5	6.7I	13.0	9.11	10.8	12.1	0.11	11.4	9.11	II.I	V 0 V	6.07
1	Total	Deaths.	1,554	1,847	1,587	1,604	1,710	1,677	1,661	2,049	1,663	1,520	1,749	1,975	1,817	1,938	1,956	1,880	0 480	Cores
	Birth Rate	Kate, England and Wales,					23.0													
Births.	Birth	Kate.					23.9													
	Total	DITTIDS.	2,926	2,849	2,806	2,957	2,949	2,770	2,413	2,533	2,598	3,131	3,621	3,318	3,205	3,204	3,250	3,141	8200	~C619
	Popur- lation.		117,973	119,394	120,891	122,412	123,948	116.301	115,345	114,727	126,033	131,055	162,200	163,700	165,200	167,300	168,600	169,300	*60 Soo	70000
	Year.		0161	1161	1912	*1913	1914	10161	1017	19181	\$1919t	19201	1921	1922	1923	*1924	1925	1926	4004	1261

Note.—The Zymotic Deaths and Death Rates include the seven principal Zymotic Diseases, viz.—Whooping Cough, Measles, Diarrhoa, Diphtheria, Scarlet Fever, Typhoid Fever and Small Pox. † Estimated Civil Population. \*53 Weeks.

TABLE 7.

VACCINATION RETURNS FOR THE COUNTY BOROUGH OF SOUTHAMPTON.

(Prior to 1909 Returns were only available for the old
Parish of the Town of Southampton.)

Year.	Births.	Success- fully Vaccin- ated.	Died Unvaccin- ated.	Insus- ceptible to Vaccin- ation.	Declar- ations of Cons- cientious objection	unknown or removed	Percentage success- fully Vac- cinated.
1907	1504	1240	149	3	52	60	82.4
1908	1585	1203	134	9	145	94	75.9
1909	2681	1889	197	14	422	159	70.5
1910	2931	1863	187	5	651	225	63.6
1911	2851	1630	263	9	771	178	57.2
1912	2823	1524	164	8	908	219	54.0
1913	2886	1364	187	6	1055	274	47.3
1914	2972	1294	209	7	1176	286	43.5
1915	2559	1230	157	8	961	203	48.1
1916	2773	1243	189	6	1083	252	44.8
1917	2430	1057	161	3	983	226	43.5
1918	2532	1002	172	12	1000	346	39.6
1919	2565	1062	157	10	1034	302	41.4
1920	3210	1283	165	8	1413	341	40.0
1921	†2871	1117	155	14	1320	265	38.9
1922	†2601	1082	148	9	1161	201	41.6
1923	†2474	1231	113	4	905	221	49.8
1924	3166	1502	163	7	1202	292	47-4
1925	3262	1440	156	4	1401	261	44.1
1926	3153	1354	139	11	1373	276	42.9
1927	3003	1283	125	15	1317	263	42.7
1928	3096	1391	113	9	1398	185	44.9
1929	3144	1433‡			1481		

<sup>9</sup> Figures not available.

<sup>†</sup> Old Borough only.

<sup>‡</sup> These figures do not relate to the births registered in 1929, but are the numbers of certificates of successful vaccination and declarations of conscientious objection actually received in 1929, irrespective of the dates of birth of the children to whom they relate.

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TABLE 8.-METEOROLOGICAL TABLE.

Summary of the Records of Temperature, Rainfall and Sunshine in Southampton during the year 1929. Abstracted from the Monthly Weather Reports of the Meteorological Office.

INE.		Per	of possible.	20	22	51	42	54	47	53	45	53	33	27	28	- 27
BRIGHT SUNSHINE.	day.	Devia-		0.00	-0.55	+2.00	-0.11	+1.37	4.0.60	+1.35	-0.14	+1.25	+0.06	+0.21	99.0+	+0.57
BRIGHT	Hours per day.	I	Daily Mean.	1.71	2.18	6.03	5.69	8.37	7.67	8.41	6.47	6.72	3.54	2.41	2.21	5.14
	mm. ell.	IU	or mor	_	10	67	9	6	6	90	20	-	14	17	22	110
	Most in a day.	ep.	Date. No. of	31st	2nd	21st	29th .	5th	5th	20th	5th	30th	5th	11th	24th	11th Nov.
RAINFALL.	Most in		Amt.	Mm. 15	13	67	18	18	6	21	16	10	31	33	18	33 1
RAIN	nei.	oiti	Devision North	Mm. 28	-27	-54	-19	- 1	-16	9 -	-22	-44	+27	+150	96+	+56
			Fall.	Mm. 40	31	77	28	20	35	52	45	=	127	230	189	842
			Total Fall.	Ins. 1.58	1.20	0.17	1.09	1.97	1.40	2.03	1.77	0.42	4.99	90.6	7.44	33.14
HEIT.	and .		Date.	17th and	15th	2nd	6th and	2nd and	25th	7th and	3rd	27th	27th	15th	18th	15th Feb.
HREN	ximum	Tanta.	Min.	60	12	23	29	35	44	47	48	7	31	27	25	12
AIR TEMPERATURE IN DEGREES FAHRENHEIT.	Absolute Maximum	THE PARTY OF THE P	Date.	30th	2nd and	30th	19th	23rd	20th and	20th	24th, 28th	5th	lst	Sth	2nd, 4th, 14th & 15th	5th Sept.
N DEC	7		Max.	69	48	72	09	77	74	82	75	87	99	59	55	87
TURE I	.let	oit	Devia N mon	4.6	-8.0	+1.3	-3.2	-0.2	-1.5	8.0-	-1:1	+5.4	-0.4	+1.1	+2.6	-0.7
IPERA	Means	of	A and B.	35.5	33.3	44.9	45.3	54.3	58.3	62.3	61.3	83.8	51.1	46.5	44.4	50.1
R TEN	Means of		B Min.	31.3	27 5	34.6	36.6	45.1	49.6	53.7	54.2	54.0	44.3	40.2	39.2	42.5
AII	Mean		A Max.	39.7	39.2	55.3	54.0	63.4	67.1	71.0	68.4	73.6	58.0	52.9	49 6	57.7
		-		:	:	:	:	:	:	:	:	::	:		:	Year
	Month	THORE .		January	February	March	April	May	June	July	August	September	October	November	December	Yes

## ANALYST'S DEPARTMENT.

#### ANNUAL REPORT for the Year 1929.

To the Worshipful the Mayor, Aldermen and Councillors of the County Borough of Southampton.

LADIES AND GENTLEMEN,

I have the honour to submit herewith a summary of the work carried out by this Department during the year 1929.

# Section 1.—Food and Drugs (Adulteration) Act, 1928. Samples submitted by Inspectors ... ... 462 " Privately ... ... 66

Table I shows the articles examined under the above Act, and the number of adulterated samples submitted by Corporation Inspectors and private individuals.

TABLE I.

Name of Article.	Number of Inspectors.	Samples. Private.	Numb Adulterated Inspectors.	
Arrowroot	2			
Acrisin	2		_	
Baking Dowder	3 6	ALL LAND	_	
Barley				
D ( ID 1)	3			
Ricarbonate of Coda				
Brawn	4			
Butter				
Camphorated Oil	44			
Cheese	2		_	
Cocoo Buttor Substitute	12	-	100	
Coffee		I	_	
Cream	4	-		
Custond Douden	17	7	2	I
Custard Powder Eggs, Preserved	3			
	I	1000		
Epsom Salts	4			
Fat	I		_	_
Ginger	5	_	I	_
Ginger Beer	I		-	_
Glycerine	2	-	-	_
Honey	4		_	_
Jam	4	-	I	_
Lard	38	_	_	
Margarine	43	_	_	-
Marmalade	2		_	_
Meat Preservatives and Pastes	5		I	_
Milk	186	54	12	16
Milk (Dried)	8	_	_	_
Milk (Condensed)	5	3	I	_
Mustard	I	-	_	-
Olive Oil	5	-	I	_
Pepper	7	-	_	_
Pork Pie	I		_	_
Rice	6	_		_
Salmon	I		-	_
Sal Volatile	6	I	I	_
Sausages	8	_	_	_
Sponge Cakes	3	_		_
Stout	3 1 6		-	_
Syrup	I	-	-	_
Tartaric Acid	6	_	-	_
Tinned Turnips	I		_	-
Wine (Non-alcoholic)	2		_	-
Totals	462	66	20	17
		1000		

Table II shows the nature and amount of adulteration, and the action taken by the Local Authority, with the result of the proceedings.

This table applies only to samples submitted by Inspectors of the Southampton Sanitary Authority, under the above Act.

TABLE II.

Article Analysed	1.	No. on Register	Nature and Amount of Adulteration.	Action taken.	Result of Proceedings.
Condensed Mil		79	4.44% deficient in fat	Informal sample	_
Jam		ioo	Contained excessive amount of Sulphur Dioxide	,,	_
Pres'rvati Compou		132	Contained no preservative	,,	-
Olive Oil		147	Contained 5.19% Oleic Acid	,,	_
Ginger		162	Contained 6.75% mineral		
Cream		182	Contained Boric Acid	Informal	=
,,		198	Contained 0.22% Boric Acid	Summoned	Fined £5
Milk		232	5.0% deficient in fat	Informal	-
,,		234	3.3% ,, ,,	,,	-
,,		262	6.6% ,, ,,	**	-
,,		269	8.33% ,, ,,	,,	_
,,		270	1.66% ,, ,,	,,	_
,,		321	1.3% added water	,,	_
,,		318	17.66% deficient in fat	Summoned	Fined £2
,,		411	6.1% added water	See 415	_
,,		413	4.0% deficient in fat	Informal	_
,,		414	4.47% added water	,,	_
,,		415	5.52% ,, ,,	Summoned	Fined £10
Sal Volatil	е	397	17.89% deficient in ammonia	Informal	_
Milk		422	11.66% deficient in fat	Summoned	Fined £2

#### MILK SUPPLY.

The percentage of adulterated samples taken by Inspectors was 6.45%, as against 10.4% in 1928, and 3.57% in 1927. These percentages, however, do not give a true indication of the general supply of milk, as many of the samples were taken from sources

where the quality of the milk was in question. The milk supply, as evidenced by samples taken at random, has been of good average quality.

The monthly averages of genuine official samples are given

below:—		Fat %	Non-fatty Solids %	Total Solids %
January	 	3.61	9.03	12.64
February	 	3.66	8.94	12.60
March	 	3.36	9.11	12.47
April	 	3.52	9.08	12.60
May	 	3.73	9.10	12.83
June	 	3.33	9.11	12.44
July	 	3.35	9.09	12.44
August	 	3.51	8.90	12.41
September	 	3.64	8.98	12.62
October	 	3.57	9.01	12.58
November	 	3.56	8.96	12.52
December	 	3.71	8.89	12.60

TABLE III.

Showing the average composition of Milk received from Inspectors during the past seven years.

Year.	1923	1924	1925	1926	1927	1928	1929
Fat %	 3.77	3.59	3.65	3.59	3.65	3.56	3.54
Non-fatty Solids %	 8.89	8.90	8.95	8.92	8.91	8.99	9.02
Total Solids %	 12.66	12.49	12.60	12.51	12.56	12.55	12.56

#### Preservatives.

The Public Health (Preservatives in Food) Regulations, which are now in operation, have had a profound influence on the nature and amount of preservatives used in articles of food and drink. For example, the presence of boric acid in butter, margarine, and cream was usual for preserving purposes. Now, however, these articles must contain no preservative, and boric acid is prohibited as a preservative under any circumstances. Sulphur dioxide and benzoic acid are now the permitted preservatives, and these are allowed in certain foodstuffs in varying amounts. Naturally, much work is entailed in searching foodstuffs for prohibited preservatives, and estimating the quantity

present when allowed to see that it does not exceed the maximum permitted. On the whole, the regulations have been remarkably well observed by manufacturers, the only cases of infringement being two samples of cream, containing boric acid, and one of jam, containing a slight excess of permitted preservative.

#### Section II.—Public Health (Regulations as to Food) Act, 1907.

These samples comprised foodstuffs imported into the Docks for home consumption. The following samples were examined and reported upon to the Medical Officer of Health:—

Two cooking fats, one marsh-mallow cream, two butters, one tinned fish, three samples of oranges, one sample of apples, one dried apricots, one tinned peas, one apple pulp, one plum pulp, one raspberry pulp, two samples of raisins, one tinned salmon, one lunch tongue, one pommace, and one tinned pork and beans. One consignment of butter was condemned as being unfit for human consumption. Sulphur dioxide preservative was found in the samples of raisins and fruit pulp, but all conformed with the regulations.

#### Section III.—Gas Regulation Act, 1920.

Official testing commenced under this Act on October 27th, 1922, and tests have been made regularly at the Gas Works, in Marine Parade, upon six days in each week, including eight Sundays in each quarter. During the past year the Gas Company has fulfilled its statutory obligations which refer to the calorific value of the gas, its freedom from sulphuretted hydrogen, and the maintenance of a pressure of not less than two inches of water. The following table gives a summary of the quarterly results for 1929:—

TABLE IV.

Quarter.	Number of tests.	Highest test. B. Th. U.	Lowest test. B. Th. U.	Average test. B. Th. U.	No. of times below 460 B. Th. U.	Sulphuretted hydrogen.
ıst	76	481.5	448.4	463.7	19	Absent.
2nd	76	477.2	452.8	464.4	18	**
3rd	76	476.4	451.7	464.0	18	**
4th	76	481.7	449.2	469.9	9	**

N.B.—The Gas Company undertakes to supply gas of an average calorific value of not less than 460 British Thermal Units per cubic foot heating power, at a minimum pressure of two inches of water, and free from sulphuretted hydrogen.

#### Section IV .- Fertilizers and Feeding Stuffs Act, 1926.

Five samples have been submitted during the year by the Inspector appointed to take samples under this Act. They comprised one bone meal, one superphosphate, one ground horns and hoofs, one sulphate of ammonia, and one linseed cake. The composition of all the samples was in accordance with the statutory statement given at the time of purchase.

#### Section V.-Rag Flock Act, 1926.

Seven samples were submitted by the Inspector under this Act, and six were found to be of the required degree of cleanliness. One sample was found to contain 141 parts per 100,000 of chlorine; as a result of proceedings, a fine of £25 was imposed with £10 10s. costs.

#### Section VI.-General.

During the year 1929 the following samples of a general kind have been examined for Corporation Departments and for private individuals, and the details have been given in the Quarterly Reports submitted to the Health Committee.

Health Department				32	samples
Waterworks Departs	nent			33	,,
Engineer's Departme	ent			15	,,
Electrical Engineer's	s Dep	partment		16	,,
Police				4	,,
Borough Coroner				7	,,
Private					,,
Determinations of W	/ater	Hardness	I		,,

#### Water Softening.

The Town Water Supply has a natural hardness of about 16° (Clark's Scale), and the following table gives a summary of the results obtained by the softening process carried out at the Corporation Waterworks, one sample having been taken daily from each of the sources:—

# TABLE V. Hardness of the Borough Water Supply for the Year 1929.

Course of Coursels	Hardness.				
Source of Sample.		Highest.	Lowest.	Average.	
French Street (Otterbourne) .			14.25°	8.75°	9.85°
Butt's Road (Sholing)			10.75°	5.5°	7.66°
Isolation Hospital (Timsbury) .			9.0°	6.0°	7.67°

#### TABLE VI.

#### GENERAL SUMMARY FOR THE YEAR 1929.

GENERAL SUMMART FOR T	III	112AK 1929.	
		Number of Samples.	
Food and Drugs (Adulteration) Ac	t	528	
Public Health Regulations		25	
Rag Flock Act		7	
Gas Regulation Act		304	
General		137	
Water hardness determinations		1,098	
Total		2,099	
Fees received for private analyses		. £46 7s. od	1.

In conclusion, I should like to express my appreciation of the work done by my assistant, Mr. R. Watridge, without whose conscientious support it would be quite impossible to cope with the increasing work carried out by this Department.

I am, Ladies and Gentlemen,

Your obedient Servant,

S. EMSLEY,

Public Analyst.

# SOUTHAMPTON PORT SANITARY AUTHORITY.

# ANNUAL REPORT

For the Year ended 31st December, 1929.

#### PORT OF SOUTHAMPTON.

The Port and Harbour of Southampton are controlled by the Southampton Harbour Board as constituted by the Southampton Harbour Act, 1913.

The Port Sanitary Authority, which was permanently constituted by an Order of the Local Government Board, dated June 8th, 1893, is "the Mayor, Aldermen, and Burgesses of the Borough of Southampton acting by the Council." It exercises Port functions in waters abutting upon the Urban Sanitary District of Southampton, and upon the Rural Sanitary Districts of New Forest, South Stoneham, and Fareham.

LIMITS OF JURISDICTION.

The limits of jurisdiction are "so much of the said Port of Southampton as is comprised within the following lines; that is to say:—

" A straight line following and coincident with the common boundary of the Customs Ports of Southampton and Portsmouth, and drawn from Hill Head to that point in the said common boundary which is nearest to the Bramble Buoy; a straight line drawn from the last-mentioned point to the most northerly point of Calshot Castle, and a line coincident with the boundary of the said Port of Southampton, and drawn from the lastmentioned point up the stream called the Southampton Water, and following the said boundary to Hill Head aforesaid, together with the waters of the said Port of Southampton within such limits, and the place or places for the time being appointed as the Customs Boarding Station or Stations for such part of the said Port, and every other place for the time being appointed for the mooring or anchoring of ships for such part of the said Port, under any regulations for the prevention of the spread of diseases issued under the authority of the Statutes in that behalf, and the docks, basins, quays, wharves, rivers, creeks, streams, channels, roads, bays, and harbours within the aforesaid limits."

#### PART I.

Sections I to VII, Tables A to J, are prepared in the form and sequence requested by the Ministry of Health in Circular 1049.

Part II gives in further detail the work connected with Port Sanitary Administration.

# Section I.—AMOUNT OF SHIPPING ENTERING THE PORT DURING THE YEAR 1929.

#### TABLE A.

The following table shows the number and tonnage of vessels entering the Port during the year, and the number inspected.

			Number I	nspected.	Number	Number of Vessels	
of transmissioned fractain (brain) said to leading	Number.	Tonnage.	By the Medical Officers of Health.	By the Sanitary Inspector.	reported to be defective	on which defects were remedied	
	a	b	С	d	е	f	
Foreign— Steamers	3,075	8,931,868	1,058	1,811	47	23	
*Motor	183	805,873	51	133	I	I	
Sailing	27	1,787	-	11	-	-	
Fishing	_	ALL CO	-	_	TOTAL IS	-	
Total Foreign	3,285	9,739,528	1,109	1,955	48	24	
Coastwise— Steamers	7,600	1,357,076	5	516	41	22	
*Motor	2,647	146,940	one <u>l</u> e fi	70	_	_	
Sailing	1,741	74,318	ho <u>—</u> 110	55	3	2	
Fishing	-	- 1	-	-	-	_	
Total Coastwise	11,988	1,578,334	5	641	44	24	
Total Foreign & Coastwise	15,273	11317862	1,114	2,596	92	48	

<sup>\*</sup>Includes mechanically propelled vessels other than steamers.

# Section II.—CHARACTER OF TRADE OF PORT. TABLE B.

#### (A) PASSENGER TRAFFIC DURING 1929.

	Place	es out of E		Transmigrants.	
Number of Passengers.	1st Class. 2nd Class.		3rd Class.		
Inwards	34,332	19,049	37,004	153,815	6,638
Outwards	40,639	34,587	75,640	147,519	22,813

\* Including passengers from and to the Channel Islands, viz.:-

Inwards ... 65,701 Outwards ... 65,389

COUNTRIES FROM WHICH PASSENGERS PRINCIPALLY ARRIVE.

Passengers arrive in the Port from practically all countries in the world, but principally from the continent of Europe, North and South America, South, East and West Africa, Egypt, India, China, and Australia.

#### (B) CARGO TRAFFIC.

Principal Imports: Meat, butter, cheese, cocoa, coffee, grain, sugar, fruit and vegetables, hides, skin, and wool.

Principal Exports: Manufactured articles, machinery, etc.

COUNTRIES WITH WHICH THE PORT PRINCIPALLY TRADES.

Continent of Europe, North and South America, Africa, Australia.

#### Section III.—SOURCE OF WATER SUPPLY.

The water supplied to vessels in the Port, and for use in the Docks, is obtained from the water mains of the County Borough of Southampton. The source of the water is from wells sunk in the chalk at the foot of the South Downs, and is of exceptional purity.

There are ten water boats in the Port for supplying water to vessels and yachts. These water boats were examined at frequent intervals during the year, and found in a satisfactory condition.

Samples of drinking water are taken from the tanks of vessels when considered necessary, and submitted to the Public Analyst for examination, and, if indicated, instructions are given for the cleansing of the tanks and filtering system.

#### Section IV.—INFECTIOUS DISEASE.

 Arrangements for Detection of Infectious Disease on Inward Vessels.

All inward bound vessels from a foreign port, whether they anchor in Southampton Water or proceed up to the Docks, are boarded on arrival by a Customs Officer and an Officer of the Port Sanitary Authority. The former, by instructions laid down in the Cholera, Yellow Fever, and Plague Regulations, 1907, questions the Master or Surgeon (should the latter be carried) as to whether there is, or has been, on board during the voyage any case, or suspected case, of Cholera, Yellow Fever, or Plague, or of any other fever or sickness.

If the Customs Officer has reason to suppose that the ship is an "infected ship" or a "suspected ship," he shall instruct the Master to anchor in such a position as to be within the approved mooring place for infected vessels. No person shall leave the ship while it is thus detained, and it is the duty of the Officer of Customs to inform the Port Sanitary Authority, in order that the Medical Officer of Health may visit and inspect within twelve hours of such detention.

It is then the duty of the Medical Officer of Health to examine every person on board, and, in the case of any person suffering from either of these conditions, they shall be removed to some suitable hospital appointed for that purpose.

Where the diagnosis is in doubt, the person may be detained for a period not exceeding two days, in order that a definite diagnosis may be arrived at. Names and addresses of intended places of destination are always taken by the Port Sanitary Authority from passengers and crews on arrival of a ship that has called at an infected port during the voyage.

It is with the more common infectious diseases, such as Enteric Fever, Diphtheria, Scarlet Fever, Measles, etc., that the Port Sanitary Authority are constantly called upon to deal with.

The powers authorising the boarding of a vessel, and the inspection of any person who is suffering from an infectious disease aboard ship, are contained in the Public Health Port Sanitary (Infectious Diseases Regulations), 1920.

The procedure adopted in this Port is for the Port Medical Officer to board the vessel immediately on arrival, where he is met by the Master or Surgeon, who declares any case of known infectious disease, or any case of sickness where the diagnosis is in doubt.

The case is then seen by the Port Medical Officer, who decides whether it is one of an infectious nature, in which case the patient is removed to the Isolation Hospital, or other suitable place approved by the Port Medical Officer.

Should any vessel arrive with infectious disease on board with which other passengers or crew have recently been in contact, all the passengers and crew are seen by the Port Medical Officer prior to disembarking. The same procedure is applied to vessels on which a case of Small Pox, or suspected Small Pox, is notified.

In such cases the names and addresses of all passengers and crew are taken, the same being forwarded to the Medical Officer of Health of the district to which they are proceeding.

 Arrangements for Notification to the Port Sanitary Authority of the Arrival of Inward Vessels requiring Special Attention.

In the majority of cases, when there is infectious disease on a vessel, a wireless message is sent from the vessel to the Shipping Companies, who notify the Port Sanitary Authority of such. On some of the smaller freighters information is received from the Customs Officer, who boards the vessel, and, in some instances, from the Pilot.

#### 3. Boarding of Vessels on Arrival.

All vessels from non-infected ports are boarded on arrival by an Officer of the Port Sanitary Authority. The Port Medical Officer boards all passenger vessels, and information is given to him by one of his Officers regarding the state of health on cargo boats.

Vessels from infected ports are boarded in Southampton Water by an Officer of His Majesty's Customs and a Port Sanitary Officer before they proceed up to the Docks. The Port Sanitary launch is used on occasion for this purpose, otherwise the Port Sanitary Officers rely on the courtesy of His Majesty's Customs to board vessels from their launch. When vessels call in Southampton Water for the purpose of disembarking passengers by tender, the Port Medical Officer or an Officer of the Port Sanitary Authority proceeds to such ship in the tender provided by the Shipping Company for that purpose.

4. Arrangements for Disposal of Cases of Infectious Disease, and for Observation or Surveillance of Contacts.

Cases of infectious disease, requiring isolation, are removed by Corporation motor ambulances to the Borough Isolation Hospital. In some cases of the lesser infections, such as Chicken Pox, Whooping Cough, etc., permission is sometimes granted by the Port Medical Officer for cases to proceed to their homes in a private conveyance, on the distinct understanding that such ambulance is disinfected on return. Any Small Pox case arriving at this Port is removed to the Corporation Small Pox Huts. Notifiable infectious disease arriving on Military Transports are dealt with in a similar manner, with the exception of Dysentery, Malaria, and Enteric Fever, which are sent to Military and Naval Hospitals.

Any contacts, before being allowed to proceed to their destinations, are required to undergo disinfection when such is considered advisable, and in the cases of major infection, such as Small Pox, the names and addresses of their final destination are forwarded to the Medical Officer of the district concerned, so that they may be kept under observation.

5. Arrangements for Disinfection of Infected Quarters, Bedding, Clothing, etc.

Disinfection of all infected quarters is carried out by the Port Sanitary Authority; Formalin spray being the method used for such disinfections. All infected bedding, clothing, and effects from vessels are removed to the Disinfecting Station, by motor ambulance, for disinfection by steam.

6. Arrangements for Cleansing of Persons.

Persons suffering from certain skin diseases, such as Scabies, etc., also those found to be verminous, are sent by the Port Medical Officer to the Corporation Cleansing Station, West Quay, to be bathed and cleansed.

7. Arrangements for Ambulance Transport.

Any case of infectious disease occurring on a vessel arriving in this Port, requiring Isolation Hospital treatment, is removed by the Port Sanitary Authority motor ambulance, which is always available and in readiness for the transport of such a case.

8. Arrangements for Detection and Treatment of Venereal Disease amongst Sailors.

All cases of Venereal Disease amongst seamen, brought to the notice of the Port Sanitary Authority either by the ship's Surgeon or by the Master of the vessel, when no Surgeon is carried, or detected by the Port Medical Officer in his capacity of Medical Inspector of Aliens, are referred to the Southampton Municipal Venereal Disease Clinic. Notices stating the hours of attendance at the Clinic are given to the Surgeons of all the principal vessels, and pamphlets are posted in convenient places in the Docks so that every opportunity is given to seamen to take advantage of the free and private treatment provided under the Corporation Scheme.

#### Arrangements for Bacteriological Examinations of Rats.

All rats caught on vessels or about the Docks are examined daily by the Medical Officers, who make post-mortem and bacteriological examinations on selected specimens. Any dead rat found either on ship or about the Docks is immediately examined bacteriologically for possible plague infection.

## 10. ARRANGEMENTS FOR OTHER BACTERIOLOGICAL EXAMINATIONS.

Throat swabs and any other clinical material requiring further examination and report are sent to the Municipal Laboratory.

TABLE C.
Cases of Infectious Sickness landed from vessels.

	Diseas	se.			Number of cases during 1929.	Average Number of cases for last 5 years.
Cerebro-Spinal	Fever					0.4
Chicken Pox					18	27.4
Diphtheria					10	8.8
Dysentery	***			***	16	29.6
Diarrhœa					97	140.2
Dengue					I	1.0
Encephalitis					3	0.6
Erysipelas					2	1.6
Enteric Fever a		ra-Ty	phoid I	41	33.6	
German Measle	S				6	5.4
Influenza					101	92.8
Measles			***		17	29.2
Malta Fever			***	***	I	0.4
Malaria					27	65.6
Mumps					12	13.0
Pneumonia				***	46	40.6
Pharyngitis				***	2	0.4
Pyrexia			***		II	10.6
Scarlet Fever			***	***	II	6.2
Tonsillitis					21	21.8
Tuberculosis	***				108	146.6
Venereal Diseas					54	81.8
Whooping Coug	gh				12	10.4

TABLE D.

Cases of Infectious Sickness occurring on vessels during the voyage, but disposed of prior to arrival.

	Disea	se.			Number of cases during 1929.	Average Number of cases for last 5 years.
Cerebro-Spinal	Fever				1	0.2
Chicken Pox					7	6.2
Diphtheria						1.2
Dysentery					3	1.8
Diarrhœa					3	1.6
Dengue						
Encephalitis					***	0.2
Erysipelas					1	0.6
Enteric Fever	and Pa	ra-Ty	phoid l	Fever	9	6.6
German Measle	es					1.0
Influenza						3.4
Measles					3	9.4
Malta Fever						
Malaria					8	6.6
Mumps				***	3	3.2
Pneumonia					6	10.6
Pharyngitis						
Pyrexia					I	1.0
Scarlet Fever				***	2	1.6
Γonsillitis						****
Tuberculosis					18	15.4
Venereal Disea	ise					2.2
Whooping Cou	gh					0.4

#### PLAGUE.

No case of Plague was reported or discovered on any vessel arriving at Southampton, and no Plague-infected rats were found on ships or shore. Rat infestation of vessels has always been a serious problem, and rat suppression forms an important branch of the work delegated to the Port Sanitary Authority. Constant vigilance is necessary to protect the Port against the possibility of Plague-infected rats entering from foreign countries.

## Section V.-MEASURES AGAINST RODENTS.

Not only as carriers of disease do rats form a menace to shipping, but they cause a serious loss commercially by the depredation and waste to cargo and structures.

The black rat (rattus rattus) is the rat most commonly found on ships and in the Dock area, whereas the brown rat (rattus norvegicus) has its natural habitat in the town areas. It is an interesting fact that the brown rat is a comparatively late comer to Europe, having entered Russia in large numbers by crossing the Volga in the early part of the 18th century.

Prior to this migration, the European area was occupied by the black rat, which is supposed to have travelled from its Eastern home before the 13th century, but in England and much of the Continent, apart from the seaport towns, the brown rat has been successful in exterminating its weaker ally.

The distinguishing features of the species are:—The black rat is of lighter build, with a sharp-pointed snout, and long, almost hairless, translucent ears, which reach, when drawn forward, over the eyes, whereas the brown rat has a blunt snout and small furry ears. The tail is slender, and as long as the body and head together. The colour of the fur forms an unreliable guide as a distinguishing feature between the species.

## I. STEPS TAKEN FOR DETECTION OF RODENT PLAGUE.

The fleas from Plague-infected rats serve as a serious danger in the dissemination of Plague to human beings, and apparently healthy rats, without themselves suffering from any obvious disease, are also the means of conveying such other diseases as Spirochætal Jaundice (Weils Disease), and certain forms of food poisoning by the contamination of articles of food carried as cargo and ships' stores.

Rat-bite fever, following the bite of a rat, is a rare but often fatal condition; and, again, pig food, when contaminated with the excreta of rats suffering from such conditions as Trichinosis, infect the pigs, and later causes a human infection.

# (a) In ships in the Port.

On arrival of a vessel from a "Plague-infected" or "suspected" port, the Master has to certify if he has knowledge of dead rats being discovered during the voyage. During the vessel's stay in Port a rat-catcher is employed. Any rats caught are taken to the Port Sanitary Authority's office, where they are examined. A certain number are also submitted to post-mortem and bacteriological examination, after which the rats are destroyed by burning.

(b) On quays, wharves, warehouses, etc.

Similar conditions apply to rats caught in the vicinity of the Port.

2. Measures taken to Prevent the Passage of Rats between Ships and the Shore.

Under Article 24 of the Cholera, Yellow Fever, and Plague Regulations, 1907, the Master of a ship coming from an "infected port" is required to take such precautions as to effectually stop the access of rats from the ship to the shore.

The practice in this Port is to serve on the Master a notice requesting him to berth his ship at least six feet from the quay, all mooring ropes and hawsers to be fitted with effective rat-guards, or the moorings to be wrapped with canvas, the same to be coated with tar, which is to be renewed daily; and that any gangway, shoot, plank, etc., while connecting the ship with the shore, and not in continuous use, shall have a man in attendance day and night, and shall be provided with a light from sunset to sunrise.

# 3. METHODS OF DERATISATION.

# (a) Ships.

The fact that from a pair of rats, whose period of gestation lasts but three weeks, and in each litter there are usually six to eight rats, it can be imagined that, given suitable surroundings on board a vessel, the resulting descendants would number many hundreds in a very short time, and for this reason it is essential that some means be adopted at periodical intervals to keep this prolific breeding in check, and at present the methods adopted are:—

(I) By the regular employment of rat-catchers, who, when the ship is in Port, set traps or lay poison baits.

This necessitates an experienced man in the work, in order to decide on suitable bait, which varies on the cargo carried, and also to understand the common habits and the likely runs and breeding places on board ship, in order that the cages or breakback traps can be set in suitable places.

The poison bait is not generally favoured, for the reason that there is a danger of contaminating cargo, and the disadvantage that the poisoned rats die, and the decomposing bodies form a nuisance when between panelling, casings, etc.

# (2) Fumigation:—

Previous to the introduction of the International Sanitary Convention, 1926, it was obligatory for all ships trading with U.S.A. to be fumigated once every six months; but now, when the Port Sanitary Authority finds that the ship is free from rats, or is maintained in such a condition that the rat population is kept down to a minimum, they may issue a Deratisation Exemption Certificate, which does away with periodical fumigation.

If, however, it is found on inspecting the ship that there are more rats than one would expect, instructions are given to the Shipping Company to carry out a means of deratisation, either by intensive trapping or by fumigation.

The common methods of fumigation in vogue at present in this Port are:—

Sulphur, H.C.N. (liquid), which is carried in steel cylinders, H.C.N. (Zyklon B) method, and another method of liberating H.C.N. has recently been applied to some ships, and is known as the "Galardi" process.

The following is a brief résumé of the procedure adopted in each of the above methods of fumigation:—

Arrangements have first to be made between the Shipping Company and the fumigators, a date and time decided upon, and the Port Sanitary Authority informed. Prior to fumigation, a thorough inspection of the vessel is carried out by the Port Sanitary Authority, in order to supervise the sealing or opening up of various sections, and the prevention of any harbourage which is likely to serve as a protection against the penetration of the gas where rats may harbour.

Such things as dunnage in holds, canvas, ropes, etc., in store rooms, stacks of bedding in cabins have to be distributed; bilge boards and casings are opened up to allow free circulation of gas. Careful search is also made in order to see that no member of the crew or workman is left on board.

In all methods of Hydrocyanic fumigation the exposure varies from two hours or longer. Gas masks used by the operators contain caustic soda, soda of lime, and charcoal. Ammonia is also carried as an antidote in case of emergency.

During these operations no person, other than the fumigators or Officers of the Port Sanitary staff, is allowed on board. A notice is placed at the gangway warning all persons to keep clear, and a watchman is continuously on guard to prevent access by any unauthorised person.

After the required hours of exposure to gas, all hatches, ports, ventilators, etc., are opened up to free the vessel from gas, and every section of the vessel is visited and tested by the fumigators, who, when satisfied, issue a certificate that the vessel is free from gas, and that crew and workmen can safely enter any section of the vessel.

When testing for presence of H.C.N., filter paper soaked in Benzidene Acetate and Copper Acetate (colourless) is used, which turns blue in the presence of I part in IO,000 of H.C.N.

Hydrocyanic Acid (liquid).

H.C.N., stabilised in liquid form, is carried in steel cylinders, which are fitted with two valves. A rubber tube is connected to one of the valves, and a small air pump connected to the other valve.

The required quantity of H.C.N. is pumped into a portable container, to which is fitted an air pump and pressure gauge. Pipe lines are laid to various sections of the vessel, with spray nozzles fitted at the required points. The outlet of the portable container is then connected up to the pipe line, and the air pump operated until the pressure gauge registers 45 pounds per square inch. The outlet valve is then opened, and the gas diffused from the spray nozzles. The amount of H.C.N. required for every 1,000 cubic feet is 2 ozs.

Hydrocyanic Acid (Galardi process).

With this process the liquefied H.C.N. is carried in glass bottles, fitted with metal caps, the bottles containing from 300 to 500 grammes. The required number of bottles is placed throughout the vessel. When the bottles are opened a cork is inserted, through which a small metal tube passes, reaching nearly to the bottom of the bottle, which allows air to enter. There is another hole in the cork through which the liquid escapes, when the inverted bottle is placed in a wire stand attached to a tray, into which the acid drops and then evaporates.

Hydrocyanic Acid (Zyklon B process).

This is a patent German preparation, which consists of H.C.N. and silicic earth, which is packed in sealed canisters, and is used in the proportion of 50 grammes per 1,000 cubic feet. The canisters are opened with a special opening machine, the operator wearing a gas mask. The contents of the canister is then scattered on to sheets of paper laid on the deck, from which the H.C.N. is slowly given off.

Sulphur Dioxide.

Flowers of Sulphur, Rock Sulphur, or Sulphur Candles are placed in iron trays or buckets, the quantity used being in the ratio of three pounds per 1,000 cubic feet of air space, which gives a concentration of 4 per cent. The minimum time of exposure is six hours.

All trays or buckets are placed over water or on sand to guard against danger of fire. Flowers of Sulphur is fired by inserting a wick of cotton waste, saturated with methylated spirit, into the centre of the bucket; Rock Sulphur and Sulphur Candles being sprayed with the same spirit to ensure ignition.

- (b) Premises in the vicinity of docks or quays. By trapping.
- 4 and 5(a). Measures taken for the Detection of Rat Prevalence on Ships and on Shore, and Methods adopted for the Extension of Rat-proofing.
  - (I) In ships.

Vessels are inspected in detail by an Officer of the Port Sanitary Authority for evidence of rats, *i.e.*, excreta, gnawings, and runs. A specification of rat-proofing work required is prepared and forwarded to the owners or agents. Efficient rat-proofing work renders each section of the vessel "rat proof," thus preventing the passage of rats from one section to another in search of food and water, or for nesting. The insulating material between the walls of cold chambers are favourite breeding places for rats.

Rat-proofing work will, when efficiently carried out, eliminate to a great extent the old idea of fumigation.

As is well known, a ship becomes infested with rats during construction, and the rat population increases until the periodical fumigation becomes due, following which the majority of rats are killed, but in nearly every case a certain number are left, which form a nucleus and build up other colonies; but now, under the scheme, it appears more rational to so construct a ship, or even after construction in case of an old ship, to make her in such a state that rat life is practically impossible.

The principle aimed at in the rat-proofing of a vessel is, in the first place, to eliminate all likely breeding places such as unnecessary collections of ropes, canvas screens, covers, etc. These, in future, will be stored in compartments which are absolutely rat-proofed. By this is meant that all unnecessary openings are done away with, and all necessary openings into the compartment are effectively screened.

# 5(b). ii. On shore.

The Southern Railway Company have during recent years endeavoured to make rat-proof, as far as possible, the sheds and warehouses by removing wooden floors and replacing same with impervious floors, consisting of an underlayer of concrete and finished off with tar macadam, thus eliminating spaces between the floor and the earth which afforded harbourage. The rat-catcher is also employed in these places. All granaries in the Dock vicinity have been made rat-proof as far as possible, all wooden structures affording harbourage being removed.

RATS DESTROYED DURING 1929. TABLE E.

(I) ON VESSELS.

NUMBER OF RAIS.		Jan.	Jan. Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Mar. April. May. June. July. Aug. Sept. Oct. Nov. Dec. in Year.
Black	:	:	14	6	38	16	246	163	136	41	66	168	130	1,060
Brown	:	352	295	317	190	140	259	32	58	130	41	31	18	1,863
Species not recorded	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Examined	:	18	91	24	20	15	61	2	22	20	4	12	16	188
Infected with Plague	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Mice	:	:	:	:	:	:	14	П	1111	:	:	:	13	128

TABLE F.

(2) IN DOCKS, QUAYS, WHARVES AND WAREHOUSES.

		(7)	177	TOOL	3, 20	10,0	VILLI	(z) IN DOCING, GOALS, WHARVES AND WAREHOUSES.	D WA	VEID	Caro.		-		
NUMBER OF RAIS.	ATS.	Jài	Jan. Feb.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Mar. April. May. June. July. Aug. Sept. Oct. Nov. Dec. in Year.
Black		:	9	:	:	IO	12	61	55	34	36	22	59	37	290
Brown	:	17	173	26	611	103	92	65	54	83	56	50	61	54	965
Species not recorded		:		:	:	:	:	:	:	:	:	:	:	:	:
Examined	:	:	9	00	:	OI	10	5	IO	6	10	20	12	14	101
Infected with Plague		:		:	:	:	:	:	:	:	:	:	:	:	:

TABLE G.

Particulars relating to Plague " Infected " or " Suspected " vessels arriving in the Port during 1929.

Name of Vessel.	Date of Arrival.	Whether "infected" or "suspected."	Methods of Rat Destruction employed.	Number of dead Rats recovered. 5.	Whether a Certificate of Deratisation was issued. 6.	Remarks.
Nil	Nil	Nil	Nil	IN	Nil	N.

TABLE H.

Measures of Rat Destruction on vessels from Plague-infected ports (other than those included in Table G) arriving in the Port during 1929, and number of Certificates issued in respect of such vessels.

nber of other stificates issued.		31
Furnigation es issued ' Port 11."	Exemption.	6
Number of Certificat on Form	Deratisation.	14
er of such Vessels which measures of destruction weve carried out.	,∞ on v	179
Number of Rats killed.	7.	1,083
er of such Vessels which trapping, oning, etc., were doyed.	sioq °	58
Number of Rats killed.	iń	125
Number of such Vessels fumigated by HCN.	13	
Number of Rats killed.	÷	23
Number of Such Vessels Rats Such Vessels fumigated by SO <sub>2</sub> .	ci	I
Total Number of Vessels arriving from Plague-infected ports.	T.	251

TABLE I.

Measures of Rat Destruction on vessels (other than those included in Tables G and H) and number of Certificates issued in respect of such vessels during 1929.

icates Number of other Certificates	mption. issued. 8. 9.	30 8
Number of Certificates issued on Form " Port 11."	Deratisation. Exer	6
Number of dead Rats	6.	1,646
Number of Vessels on which trapping, poisoning,	S. 5.	228
Number of dead Rats	26 (r16 Mice)	
Number of Vessels	by HCN.	8
Number of	recovered.	20
Number of Vessels	numgated by SO <sub>2</sub> .	I

# Section VI.-HYGIENE OF CREWS' SPACES.

TABLE J. Classification of Nuisances.

Nationality of Vessel.	7 of Ve	ssel.		Number inspected during 1929.	Defects of original construction.	Structural defects through wear and tear.	Dirt, Vermin, and other conditions prejudicial to health.
British	:	:	:	1,927	н	47	70
Other Nations	:	:	:	699	:	3	00

118 Nuisances were found on 84 British vessels, and 11 on 8 foreign vessels.

## Section VII.-FOOD INSPECTION.

Action taken under the Public Health (Imported Food) Regulations, 1925, the Public Health (Imported Milk) Regulations, 1926, and the Public Health (Preservatives, etc., in Food) Regulations, 1925 to 1927.

The inspection of the food stuffs arriving in the Port is carried out under the Public Health (Imported Food) Regulations, 1925, and every assistance has been rendered by the Officers of H.M. Customs and Excise, Shipping Companies, Southern Railway Company, Shipping Agents, and Meat Importing Companies in carrying out the varied duties.

The total amount of food stuffs condemned for the year amounted to 97 tons 12 cwts. o qrs. 4 lbs.

The Public Health (Preservatives, etc., in Food) Regulations, 1925 to 1927.

Twenty-five samples of food, taken under the above regulations, were submitted to the Borough Analyst, and in all instances the samples, upon analysis, were found to comply with the regulations.

## CASEOUS LYMPHADENITIS.

The presence of this disease in importations of mutton and lambs has made it necessary to continue the examination of 10% of all consignments of mutton and lambs (which weigh 42 lbs. and over), and 16,749 carcases were examined during the year for the detection of this disease.

The quantities of beef, mutton, and lambs landed in the Port:

Whence.	Quarters. Chilled Beef.	Quarters. Frozen Beef.	Carcases. Mutton.	Carcases. Lambs.
Australia New Zealand South Africa South America	 394,902	5,680 	379 65,159 50,448	8,735 244,398 81,770
	394,902	12,646	115,986	334,903

## PORK.

Only one consignment of 200 carcases of frozen pigs were received during the year, this consignment being from New Zealand. All the carcases, upon examination, were found to be in excellent condition, and free from disease.

Three cases, containing pigs' heads, were received from South Africa, and were also found to be free from disease.

## OFFAL.

The quantity of offal landed during the year amounted to 34,891 packages.

The usual practice of de-frosting a portion of each consignment has been carried out, and upon examination has been found to be satisfactory.

## CANNED GOODS.

The quantity of canned foods amounted to 227,931 packages.

## BACON AND HAMS.

The quantities of the above received at the Port from the following places:—

Holland			 2,179	packages.
United Sta	tes of A	America	 712	,,
Canada			 1,745	,,
Other port	S		 35	,,
			4,671	
				_

In addition to the above, 10 packages of borax packed hamswere received from Canada, and 99 packages from the United States of America, all of which were dealt with according to the Public Health (Preservatives, etc., in Food) Regulations, 1925 to 1927.

Examination of mutton and lambs (42 lbs. in weight and over) for Caseous Lymphadenitis landed in the Port:—

II7
SOUTH AMERICAN.

			N	MUTTON.			LAMB.	
1929.	Carcases Mutton landed.	Carcases Lambs landed.	Examined.	Condemned.	% Affected.	Examined.	Condemned.	% Affected.
Jan. Feb. Mar. April May June July Aug. Sept. Oct. Nov. Dec.	5,522 2,159 3,815 5,951 4,145 5,418 1,447 3,516 4,737 8,373 2,982 2,383	  4,628 6,147 8,634 2,640	1,601 218 1,374 1,614 1,930 724 144 351 1,816 2,569 296 220	45 3 35 67 32 7 1 4 45 74 2	3.79 1.37 2.54 4.15 1.65 .96 .69 1.13 2.43 2.88 .67	 439 296 118 29	Exami ied out Septem 2 2 1	 .45 .67 .84
	50,448	22,049	12,857	315	2.45	882	5	.58

# Australian.

				MUTTON.			Lamb.	
1929.	Carcases Mutton landed.	Carcases Lambs landed.	Examined.	Condemned.	% Affected.	Examined.	Condemned.	% Affected.
Oct.		2,000				10		
Nov.	279	2,000	27			2		
	279	4,000	27			12		

# NEW ZEALAND.

			N	IUTTON.			LAMB.	
1929.	Carcases Mutton landed.	Carcases Lambs landed.	Examined.	Condemned.	% Affected.	Examined.	Condemned.	% Affected.
Mar.	2,383 9,698 4,503 748		120	I	.83			
April Sept. Oct.	9,698		495	I	.22			
Sept.	4,503	6,750	450	2	-44	50		
Oct.	748	18,298	74 50			50		
Nov.	500	6,625	50			12		
	17,832	31,673	1,189	4	-33	112		

Examination of mutton and lambs at Southampton, per rail or road transport from the Port of London:—

# SOUTH AMERICAN.

				MUTTON.			LAMB.	
1929.	Carcases Mutton arrived.	Carcases Lambs arrived.	Examined.	Condemned.	% Affected.	Examined.	Condemned.	% Affected.
Jan.	338		203	6	2.95			
Feb.								
Mar.	276		29					
April	200		200	14	.7	No		nation
May	450		45			carr		until
une	300		30				Septem	ber.
July	250		25					
Aug.	3,285		831	II	1.32			
Sept.	743	84	73			8		
Oct.		626				61		
Nov.		1,340				100	2	.2
Dec.	250	335	25			33		
	6,092	2,385	1,461	31	2.12	202	2	.99

# NEW ZEALAND.

Carcases Mutton arrived.				MUTTON.		LAMB.		
	Carcases Mutton arrived.	Carcases Lambs arrived.	Examined.	Condemned.	% Affected.	Examined.	Condemned.	% Affected.
Nov.		158				4		
Dec.	75		7					
	75	158	7		1	4		

Australian. Nil.

Summary of food stuffs condemned under the Public Health (Imported Food) Regulations, 1925:—

Description	Original Packages.		Loose Articles.	Approximate Total Weight of Goods Condemned.			
Description.	No.	Description.	No. Description.	Tons.	Cwts.	Qrs.	Lbs.
Apples (canned) Apples (fresh) Beef		Boxes Hindquarte	r Tin_ rs quantity of cuts and joints		17	3	7 12
Butter Bacon	15	Boxes	quantity of cuts		7 7	2 2	0
Bananas Coffee	I 12	Crate Bags	quantity of loose quantity of loose	I	5	3	0 25
Carrots Grape Fruit	390 235	Cases	= =	19	10 7	3	0 12
Ham (canned) Lamb and Mutton Mandarins	358	Carcases Boxes	Tin —	8	16 8	I	9 24
Melons Oranges	409 20 6	Cases	quantity of loose	5 I IO	2 4	3	23 0 5
Onions Ox Tails	4	Bags Bag	= =	10	4	0	0 23
Pears (canned) Pork	_	=	I Tin I Cut				7
Plums Potatoes	15 726	Packages Bags	quantity of loose	36	3 6	2	20
Parsnips Pineapples (canned) Raisins	37	Box	10 Tins	I	17	2	0 12 24
Scallops Sultanas	11 2	Bags Boxes			16	0 I	0 22
Tomatoes Tongue (potted)	2	"_			1	4 3	20 14
Total				97	12	0	4

# Disposal of unsound food :-

Method of I	Tons.	Cwts.	Qrs.	Lbs.			
Burned				2	10	0	20
Sold for cattle food				54	0	0	0
Sold for non-edible	refining	pui	rposes	8	17	0	0
Re-exported				0	7	2	0
Dumped at sea				31	17	I	12
	Total			97	12	0	4

List of food stuffs submitted for analysis under the Public Health (Preservatives, etc., in Food) Regulations, 1925 to 1927:—

No.	Nature of Sample.	Result of Analysis.
I	Lard Substitute	Negative. No preservatives present.
2	Marshmallow Cream	
3	Butter	Genuine Butter fat, devoid of moisture. Not Butter in the accepted sense.
4	,,	Genuine Butter fat, devoid of moisture. Not Butter in the accepted sense.
5	Tuna Fish	Free from preservatives.
	Vegetaline	Cocoanut Oil. Free from preservatives, and satisfactory.
7 8	Oranges	Negative. No trace of preservatives.
	,,	" " " "
9	Apples	Arsenic077 parts per million. 1.4 parts per million permitted.
IO	Oranges	Boric Acid present in natural form.
II	Dried Apricots	1,443 parts per million Sulphur Dioxide. 2,000 parts per million permitted.
12	Sultanas	0.02% Boric Acid. Natural.
13	Milk Powder	Genuine.
14	Tomato Puree	Negative. Free from preservatives.
15	Raspberry Pulp	1,443 parts per million Sulphur Dioxide. 2,000 parts per million permitted.
16	Canned Apricots	Negative. Free from preservatives.
17	Canned Beans	977.0 parts per million Sulphur Dioxide. 1,500
18	Apple Pulp	parts per million permitted.
19	Plum Pulp	947.5 parts per million Sulphur Dioxide. 1,500 parts per million permitted.
20	Raisins	342 parts per million Sulphur Dioxide. 750 parts per million permitted.
21	Canned Salmon	Negative. Free from preservatives.
22	" Tongue	" " "
23	Apple Pomace	
24	Raisins	527 parts per million Sulphur Dioxide. 750 parts per million permitted.
25	Canned Pork and Beans	Negative. Free from preservatives.

# PART II.

## PASSENGER TRAFFIC DURING 1929.

The number of vessels entering the Port of Southampton during the year was 15,273, being a decrease of 266 compared with the previous year. The net tonnage of these vessels amounted to 11,317,862 tons, compared with 10,975,616 in the year 1928.

The number of passengers arriving in the Port from countries outside Europe was 90,385, an increase of 4,053 compared with the previous year, and the number embarking was 150,866, an increase of 8,324 compared with the total in 1928.

In addition to the above, 401 vessels arrived in Southampton Water and Cowes Roads to embark and disembark passengers.

The number of passengers and crews landed by tender in the Docks from these vessels amounted to 14,391 during the year.

Sixteen transports also arrived in the Port, and landed 3,350 crew and 23,496 military passengers and troops; the statistics relating to these vessels not being included above.

The passenger traffic during the years 1928 and 1929 between ports in England and places outside Europe, and not within the Mediterranean Sea, is given in the Board of Trade Journal as follows:—

TABLE I.

NUMBER OF PASSENGERS.

	Outv	vard.	Inwa	ard.	Total.		
Port.	1928.	1929.	1928.	1929.	1928.	1929.	
Bristol	3,147	2,895	3,244	2,945	6,391	5,840	
Plymouth	3,038	3,410	32,562	33,834	35,600	39,010	
Liverpool	116,083	113,116	70,217	66,600	186,300	179,716	
London	70,661	52,801	53,147	51,188	123,808	103,989	
Southampton .	142,542	150,866	86,332	90,385	228,874	241,251	

The Board of Trade returns (from which the following particulars and tables are obtained) of the passenger movement to and from the United Kingdom, show that the total number of passengers who arrived in the United Kingdom from places out of Europe during the year 1929 amounted to 277,936, an increase of 1,231 compared with the year 1928. The number of passengers who arrived at the Port of Southampton from places out of Europe during the same period amounted to 90,385, an increase of 4,053 compared with the previous year.

The total number of passengers who left various ports in the United Kingdom for places out of Europe amounted to 399,403, an increase of 2,156 compared with 1928. The number of outward passengers who left Southampton for places out of Europe amounted to 150,866, an increase of 8,324 compared with 1928.

The following table shows the total number of passengers who arrived at ports in the United Kingdom from places out of Europe, during the years 1928 and 1929:—

## TABLE II.

Passengers who arrived in the United Kingdom from places out of Europe, distinguishing the class of travel, during the years 1928 and 1929:—

			Inward.				
Po	orts.		First.	Second.	Third.	Total.	
Liverpool		1929	10,265	19,410	36,925	66,600	
London		1928	11,278 18,595 18,679	20,845 11,162 11,592	38,094 21,431 22,876	70,217 51,188 53,147	
Plymouth		1929	13,724	11,348	8,762 8,853	33,834	
Southampton		{1929	34,332 33,483	19,049 19,501	37,004 33,348	90,385 86,332	
Bristol		{1929	2,938 3,224	5 12	8	2,945 3,244	
Glasgow		{1929	947 1,295	4,355 4,560	18,593	23,895 23,027	
Londonderry		1929	192	544 600	2,680 2,212	3,346	
Belfast		1929	33	600 647	3,355 2,361	3,988 3,008	
Other Ports		{1929	987 779	338 483	430 902	1,755 2,164	
Total, all I	Ports .	{1929	81,943 81,711	66,811 69,168	129,182 125,826	277,936 276,705	

#### TABLE III.

Passengers who left the United Kingdom for places out of Europe, distinguishing the class of travel, during the years 1928 and 1929:—

				Outward.				
	1	Ports.		First.	Second.	Third.	Total.	
Liverpool			 1929	20,838	27,027	65,251	113,116	
			1928	21,582	27,988	66,513	116,083	
London			 1929	19,694	10,795	22,312	52,801	
			1928	19,397	10,829	40,435	70,661	
Plymouth			 1929	2,600	494	316	3,410	
*************			1928	2,344	534	160	3,038	
Southampt	on		 1929	40,639	34,587	75,640	150,866	
			1928	39,370	34,338	68,834	142,542	
Bristol			 1929	2,895	_		2,895	
			1928	3,146	I		3,147	
Glasgow			 1929	1,939	5,707	45,736	53,382	
			 1928	1,835	7,135	35,434	44,404	
Londonder	rv		 1929	103	732	4,639	5,474	
DOII GOILGO	- 2		 1928	136	1,112	5,115	6,363	
Belfast			 1929	33	1,213	12,799	14,045	
Dellace			 1928	3	757	8,195	8,955	
Other Por	ts		1929	1,621	348	1,445	3,414	
Other rer			 1928	1,573	436	45	2,054	
Total,	all D	orte	1929	90,362	80,903	228,138	399,403	
Total,	all P	orts	 1928	89,386	83,130	224,731	397,247	

Of the total of 677,339 passengers outward and inward in 1929, about 36 per cent. were recorded at Southampton, 26 per cent. at Liverpool, and 15 per cent. at London, as compared with percentages of 34, 28 and 18 respectively in 1928. The decrease in 1929 of nearly 18,000 in the outward passenger movement from London, as compared with the movement in 1928, is largely due to the diminution in the emigrant traffic to Australia. Glasgow accounted for about 11 per cent. of the total in 1929, and 10 per cent. in 1928. About 12 per cent. of the total number of inward passengers in 1929 disembarked at Plymouth.

Class of Travel.—Passengers travelling in the first, second, and third class represented about 25, 22, and 53 per cent. respectively of the total traffic in 1929, as compared with 25, 23, and 52 per cent. respectively in 1928. During 1925 a class of travel entitled "Third Class Tourist" was instituted, accommodation superior to that for ordinary third-class passengers being provided for passengers so described. The numbers reported as travelling in this class increased from 37,000 in 1926 to about 78,000 in 1927, to more than 91,000 in 1928, and to nearly 105,000 in 1929; the figures for 1928 and 1929 are included in the table with other third-class passengers. In both years third-class tourist services were in operation between the principal English and Scottish ports and the North American Continent. The increased popularity of this class of travel has been to some extent reflected in the decreased numbers travelling second class in the years mentioned as compared with the figures for earlier years.

# PASSENGER MOVEMENT BETWEEN THE UNITED KINGDOM AND THE CONTINENT.

The "Continent" is regarded as including the Channel Islands and all ports within the Mediterranean Sea.

The following table shows the number of passengers of all nationalities who left the United Kingdom for the Continent, and the number who arrived in the United Kingdom from the Continent in each of the years 1927, 1928, and 1929, distinguishing the number of persons who travelled by sea and by air, and showing the principal British ports of arrival and departure:—

PASSENGERS BY SEA AND BY AIR BETWEEN THE UNITED KINGDOM
AND THE CONTINENT.

				Total Number of Passengers.							
Port.		(	Outward.		Inward.						
			1929.	1928.	1927.	1929.	1928.	1927.			
Channel Ports	:										
Dover			473,659	492,806	435,420	484,088	489,842	451,097			
Folkestone			257,598		242,966	283,885	274,568	268,146			
Southampto	n		147,519		135,539	153,815					
Newhaven			123,815	129,678	137,304	112,783	129,386	135,898			
Weymouth			56,949	53,142	50,280	57,475	54,999	54,292			
East Coast Po	rts:										
Harwich			172,593	168,511	150,978	170,226					
London			92,377		57,983	106,624	99,483	76,790			
Hull			15,042	16,341	15,275	18,744					
Other			61,651	61,124	26,579	65,825					
Other Ports			43,382	50,838	41,933	47,832	51,674	43,197			
Air Stations*			23,630	21,112	13,739	25,040	22,388	15,025			
ıst Quarter			194,608	169,332	157,665	183,430	187,602				
2nd ,,			313,084	356,349	315,958	371,604	383,867	354,810			
3rd ,,			757,610		636,172	779,310					
4th ,,			202,913		198,201	191,993					
	Total		1,468,215	1,454,183	1,307,996	1,526,337	1,516,344	1,386,910			

<sup>\*</sup> As reported by the Air Ministry.

The numbers of passengers (included in the previous table) who were carried to and from Calais and Boulogne *via* Dover and Folkestone in 1929 and 1928 were as follow:—

Outv	vard.	Inward.			
1929.	1928.	1929.	1928.		
526,297	540,125	545,775	556,493		

The numbers of passengers (likewise included in the previous table) who were carried to and from the Channel Islands via Southampton and Weymouth in 1929 and 1928 were as follow:—

		Outv	vard.	Inward.		
		1929.	1928.	1929.	1928.	
Southampton	 	65,389	56,231	65,701	57,255	
Weymouth	 	56,949	49,822	57,475	50,759	

British and Alien Passengers.—The particulars furnished to the Board of Trade, with regard to the passengers to and from the Continent, do not include information as to their nationality, but the annual statistics in respect of alien passengers, which are prepared by the Home Office, show the number of aliens travelling between the United Kingdom and European ports.

From those figures it may be deduced that the movement to and from the Continent was made up approximately as follows:—

Passengers betw	EEN THE UNITE	D KINGDOM AND	THE CONTINENT.
-----------------	---------------	---------------	----------------

Von	**		Outward.			Inward.	
Yea	1.	British.	Aliens.	Total.	British.	Aliens.	Total.
1929		*	*	1,468,215	*	*	1,526,337
1928		1,093,715	360,468	1,454,183	1,113,831	402,513	1,516,344
1927		976,494	331,502	1,307,996	1,002,350	384,560	1,386,910

<sup>\*</sup> Not yet available.

It appears from the above figures that the recorded movement of British passengers between this country and the Continent in 1928 was nearly 12 per cent. greater than in 1927, while the number of passengers of all nationalities in 1929 was only slightly (under 1 per cent.) greater than in 1928. The excess number of inward alien passengers from the Continent over outward alien passengers to the Continent in 1927 and 1928 was counterbalanced by the outward excess of aliens in the traffic between this country and non-European countries.

TABLE V.

RETURN OF SHIPS' TONNAGE, PASSENGER ARRIVALS, ETC., FOR THE YEARS, 1920-1929. (This table is supplied by H.M. Customs).

				The second second				
Year.	Number of Arrivals from Foreign Ports.	Number of Arrivals from Home Ports (Coasters).	Number of Passengers arriving at the Port from Ports other than Jersey.	Number of Passengers arriving from Jersey.	Number of Crews Arriving.	Number of Ships of 2,000 Tons and upwards.	Number of Ships under 2,000 Tons (including Coasters).	Net Tonnage of Vessels entering the Port.
1920	2,258	8,007	116,351	44,955	154,541	569	9,646	3,327,754
1921	2,270	8,127	158,869	49,811	187,767	523	7,188	5,347,766
1922	2,470	120.6	173,301	43,568	187,296	728	10,813	7,646,502
1923	3,044	7,045	187,136	49,508	320,453	206	9,182	9,350,234
1924	3,088	2,066	176,265	56,953	309,926	816	9,236	9,548,984
1925	3,186	11,420	208,109	54,288	335,453	873	13,733	9,989,300
1926	3,191	10,152	174,679	41,309	343,976	854	12,489	8,861,178
1927	3,352	11,060	190,931	53,423	337,142	016	13,502	9,669,794
1928	3,344	12,195	199,579	58,343	400,905	984	14,555	10,975,616
1929	3,285	11,988	199,261	68,559	384,023	1,014	14,259	11,317,862

The above figures include Troops and Passengers arriving by H.M. Transports.

TABLE VI.

Statistical summary of ships, passengers, crew, and net tonnage of vessels entering the Port of Southampton from 1906 to 1929:—

	Number arrived		Total number of Passengers landed from the Continent of	Number	Net Tonnage
YEAR.	Foreign.	Home Ports.	Europe (including Jersey) and Foreign Countries.	of Crew landed.	of Vessels entering the Port.
1906	2,555	11,013	149,137	135,551	4,487,304
1907	2,759	11,460	181,111	158,454	5,662,585
1908	2,764	11,470	175,834	171,343	5,878,566
1909	2,848	11,908	167,317	166,260	6,314,410
1910	2,848	11,986	170,083	163,229	6,399,101
1911	2,783	11,446	175,113	167,642	6,514,152
1912	2,724	11,173	173,266	167,556	7,021,578
1913	2,979	11,515	206,545	179,816	7,939,869
1914	2,296	5,617	136,089	128,731	4,674,696
1919	1,369	6,697	113,413	144,501	2,191,329
1920	2,258	8,007	161,306	154,541	3,327,754
1921	2,270	8,127	208,680	187,767	5,347,766
1922	2,470	9,071	216,869	187,296	7,646,502
1923	3,044	7,048	236,644	320,453	9,350,234
1924	3,088	7,066	233,218	309,926	9,548,984
1925	3,186	11,420	262,397	335,453	9,989,300
1926	3,191	10,152	215,988	343,976	9,861,178
1927	3,352	11,060	244,354	337,142	9,669,794
1928	3,344	12,195	257,922	400,905	10,975,616
1929	3,285	11,988	267,850	384,023	11,317,862

## INFECTIOUS DISEASE.

The cases of infectious disease reported by vessels on arrival at Southampton are shown in Table VII, which includes all cases reported on the bills of health on both H.M. Transports and other vessels.

Many of the cases reported on Transports were convalescent cases from India or the Mediterranean, who proceeded to Netley Hospital or Haslar Hospital for discharge, on furlough, or otherwise. This especially applies to the cases of Diarrhœa, Dysentery, Enteric Fever, Malaria, Tuberculosis, and Venereal Disease shown in the said table.

The cases reported among the civil population of the Port who were suffering from infectious diseases at the time of arrival, and the number of such cases removed to the Isolation Hospital were:—

		1	Cases Notified.	Cases removed to Isolation Hospital.
Small Pox			_	100
Scarlet Fever			9	9
Diphtheria			8	9
Enteric Fever and	Para-T	yphoid	12	9
Erysipelas			I	_
Pneumonia			19	_
Encephalitis Letha	argica		1	_
Measles			13	13
Tuberculosis			36	_
Whooping Cough			16	3
Chicken Pox			17	15
Venereal Disease			27	_
Mumps			9	5
Dysentery			3	I
Malaria			2	I
Rubella			2	2

The above cases are included in the total of infectious cases reported by vessels which arrived in the Port shown in Tables VII and VIII.

# TABLE VII. INFECTIOUS AND OTHER DISEASES.

Table showing the number of cases reported on vessels arriving in the Port of Southampton, and how they were dealt with during the year 1929:—

				H	low DE.	ALT WI	тн.		
Disease.		Total Cases reported.	Removed to Borough Hospitals or Nursing Homes.	Removed to Naval or Military Hospitals.	Landed at other Ports before arriving at Southampton.	Proceeded in Vessels to other Ports.	Landed at South- ampton, but did not proceed to Hospital.	Died at Sea.	Convalescent on Arrival.
Appendicitis		14	6			4	4		
Accidents	100000	9	I			5	I	2	,
Bronchitis		46	4			17	3	I	21
Cancer		9	2		***		I	6	
C-Halisia	ver	I		25	I				
Combible		47	4 I	35		2	I	2	3
Colitis		3							3
Chicken Pox		26	15		7	1	2		I
Conjunctivitis		12					12		
Diphtheria		10	9	I					
Dysentery		22	3	10	3	I	3	2	
Diarrhœa		169		I	3	69	10		86
Dengue		I					I		
Diabetes		1			***		***	I	
Enteric Fever and Para-Typhoi	d Fover	ET	**	07	0	I			
Thomashalitie		51	II	27 I	9		2	I	2
Eczema		I					ī		
Erysipelas		3	2		1				
Filariasis		I				1			
Glandular Swellin	gs	12	***		I	6	5		
Gastritis		19	2		I	2	4		10
German Measles	***	7	2	***	***	I	I		3
Heart Disease		38	2			4	5	27	
Influenza		137	***	***	***	36	84		17
Insanity Impetigo		38	14		2	9	12	I	
Tride on This same		3 8	I			3	3	2	
Measles		40	13		3	20	3		ī
Malta Fever		I		I					
Malaria		69	I	5	8	30	5	4	16
Mumps		16	7	2	3	I			3
Otitis Media		4	I			2			I
Pneumonia		59	21	13	6	3	I	4	II
Pleurisy		10	I	***	3		I	4	I
Pyrexia of unknow	wn origin	20	2	1		8			
Peritonitis		20	3	***	1		5	2	3
Pharyngitis		2			***		2		***
Rheumatism		II	3		1	2	4	1	
Scarlet Fever		13	II		2				
Tonsillitis		31	I			10	7	***	13
Tuberculosis		137	II	62	18	6	35	5	
Venereal Disease		81	2	9		26	43		I
Whooping Cough		12	3	***	***		9	***	
Other Diseases re	ported	26	3		I	5	9	8	
Totals		1,228	160	167	74	275	282	73	197

## TABLE VIII.

## INFECTIOUS DISEASES.

Reported by vessels which arrived in the Port of Southampton during the 10 years 1920—1929:—

DISEASE.		1920	1921	1922	1923	1924	1925	1926	1927	1928	1929
Small Pox		6	6	6	5	3	4	3	I	2	
Scarlet Fever		7	8	10	8	7	5	5	10	9	13
Enteric Fever and Para-Typhoid F		104	35	32	26	28	24	46	31	66	51
Diphtheria		14	15	5	9	11	II	18	II	8	10
Typhus Fever		54									
Plague		2									
Cholera											
Cerebro-Spinal Fe	ver	3			2				2		ı
Tuberculosis		262	210	149	194	166	194	183	174	200	137
Measles		122	44	48	65	40	42	54	51	65	40

### DEATHS AT SEA.

Seventy-three deaths were reported to have occurred on vessels on their voyage to Southampton, and were buried at sea:—

Accidents		 2	Nephritis	2
Cancer		 6	Pneumonia & Pleurisy	8
Cellulitis		 2	Pulmonary Tuberculosis	5
Malaria		 4	Peritonitis	2
Dysentery		 2	Other Causes	13
Heart Diseas	ses	 27		

## FUMIGATION OF VESSELS.

Fumigation was carried out on 23 vessels during the year, three being fumigated with Sulphur, seven with Liquid H.C.N., nine with Zyklon H.C.N., and four with Galardi H.C.N.

Arrangements are made by the shipping companies with firms making a speciality of this class of work to carry out the fumigation. The fumigation is carried out under the supervision of the Port Sanitary Staff, and a certificate is issued if the fumigation is satisfactory.

## TABLE IX.

The following table gives particulars of the vessels fumigated under the supervision of the Port Sanitary Authority.

Date.	Vessel.	Fumigant used.	Rats found after Fumigation.
5th Jan. 19th ,, 31st ,, 26th Mar. 18th June 22nd ,, 26th ,, 27th ,, 13th July 13th ,, 27th ,, 3rd Aug. 10th ,, 27th ,, 28th Sept. 5th Oct. 2nd Nov. 16th ,, 23rd ,, 28th ,, 30th ,, 21st Dec. 28th ,,	Asturias Berengaria Sandgate Castle Mauretania City of Marseilles Scottish Strath Nevasa Neuralia Almanzora City of Marseilles Alcantara Calgaric Andes Asturias Arlanza Empress of Australia Almanzora Alcantara Arcadian Araguaya Aquitania Walmer Castle Empress of Scotland	H.C.N. (Zyklon)  Sulphur H.C.N. (Liquid) Sulphur H.C.N. (Liquid)  H.C.N. (Zyklon) Sulphur H.C.N. (Zyklon) Sulphur H.C.N. (Zyklon)  H.C.N. (Zyklon)  H.C.N. (Zyklon)  H.C.N. (Liquid) H.C.N. (Zyklon) H.C.N. (Galardi)  H.C.N. (Galardi)	15 20 8 2 6 (12 Mice) 52 18 21 1 (93 Mice) 2 6 4 12 — 1 1 19
_		Total 23	190 (105 Mice

### DISINFECTION.

Disinfection was carried out by the Port Sanitary Authority on 79 vessels, and 5,344 articles of bedding and other articles, including 369 parcels of passengers' effects, were removed to Disinfecting Station at West Quay, and to the Isolation Hospital for disinfection.

## OIL TANKERS.

One hundred and twelve oil tankers arrived in the Southampton Water during the year to discharge fuel oil at the oil wharves at Fawley and Hamble.

The vessels came from the following ports:—Abadan 8, Aruba 4, Baton Rouge 3, Balik Papam 4, Baytown 3, Cartagena 18, Curacao 12, Las Piedras 11, New Orleans 21, Poulo Sambe 1, Puerto Mexico 3, Singapore 1, San Pedro 8, Tampico 15.

## TRANSPORTS.

Sixteen transports arrived at Southampton during the year; the total crew landed amounted to 3,350, and the military passengers, troops, women and children to 23,496. In the previous year, 17 transports, 3,572 crew and 25,937 military passengers arrived in the Port.

All the vessels arrived from ports on the "infected" list, and were boarded and examined on arrival in conjunction with the naval and military authorities at the Port.

## TABLE X.

Statement showing the number of H.M. Transports which arrived in the Port during the year 1929, the ports from which they arrived, and the number of military passengers and troops landed at Southampton.

Who	ence.			Number of Transports which arrived.	Number of Crew landed.	Number of Military Passengers and Troops landed at Southampton
Basra			***	I	236	1,517
Bombay				5	1,007	6,903
Karachi				3	654	4,520
Port Said				2	427	3,294
Hong Kong				I	242	1,569
Shanghai		·		3	603	4,303
Chingwangtao				I	181	1,390
To	tals			16	3,350	23,496

# GENERAL SUMMARY OF INSPECTIONS CARRIED OUT BY THE PORT SANITARY STAFF, AND OTHER STATISTICS DURING THE YEAR 1929.

				-	
Steamers (from foreign)					. 1,811
Motor vessels (from foreign)					. 133
Sailing vessels (from foreign)					. II
Fishing vessels (from foreign)					. –
Steamers (coastwise)					516
Motor vessels (coastwise)					. 70
Sailing vessels (coastwise)					. 55
Fishing vessels (coastwise)					—
Total steam, motor and	1 sailin	g vess	els		. 2,596
Crow (from foreign)					200 575
Crew (from foreign)		roops)	•••	•••	399,715
Passengers (from foreign) (inclu	AND THE REAL PROPERTY.			•••	399,175
Crew (coastwise)			•••	•••	44,219
Passengers (coastwise)				•••	10,816
Total Crew and Passenge	rs (inc.	luding	troops	)	853,925
British vessels					1,927
British vessels (re-visited)					1,824
Foreign vessels					669
Foreign vessels (re-visited)					68
Satisfactory					2,504
Defective					92
Re-visits total					1,892
Passengers landed by tender f					14,391
Number of rats captured and					
vessels fumigated					23
rats found on 50					-3
infected ports					1,231
,, rats found after fu					
,, Rat Orders served			-		153
,, vessels from Plague					249
,, vessels where disinfe		-			79
,, articles of bedding,					13
packages of eff					
moved for disinf					5,344

TABLE XI.

Showing number of vessels inspected, including re-visits, with percentage of defects.

YEAR.	Vessels from Foreign visited.	Coasting Vessels visited.	Total Inspections.	Number found defective.	Percentage defective.
1920	1,217	2,570	3.787	61	1.61
1921	3,157	1,470	4,627	26	0.5
1922	1,452	2,928	4,380	15	0.34
1923	2,741	988	3,729	19	0.5
1924	3,253	1,109	4,362	30	0.7
1925	3,188	929	4,117	18	0.43
1926	3,124	776	3,900	32	0.82
1927	3,510	948	4,458	44	0.98
1928	1,951	757	2,708	53	1.95
1929	3,818	670	4,488	92	2.04

# HYGIENE OF CREWS' SPACES.

CLASSIFICATION OF NUISANCES.

Details of structural and other defects on vessels:-

Details of structural and other defects on	vess	ers.	
	efects ound.		complied with.
Leaky decks, hawse pipes, cable casings, etc.	2I		IO
Defective port lights	17		8
Forecastles and glory holes uncleanly	31		14
W.C.s, urinals, and wash-places choked and			
	II		8
No flush to w.c.s and defective flush	4		I
Defective w.c.s, etc	2		0
	12		7
Ship's gear or stores stowed in crew's quarters	I		0
Storage of drinking water; dirty or defective tanks	4		2
No proper receptacle for storing drinking water	I		I
Verminous quarters or bedding	II		7
Defective bulkheads or floors	I		I
Accumulation of foul water and rubbish	5		2
Defective stoves in crews' quarters	5		3
Want of stoves in crew's quarters	I		I
Insufficient drainage to wash-places	I		0
Choked ventilator in paint store under crew's			
quarters	I		0
Totals I	29		65

## TABLE XII.

Table showing the number of vessels visited, showing nationality, description and number defective during 1929, not including re-visits.

Nationality.		Steam.	Motor.	Sail.	Total.	Defective	
American			67			67	
Brazilian			I			I	
British			1,764	100	63	1,927	84
Danish			7	6	I	14	
Dantzig, Free	State	of	2			2	
Dutch	***		158	38		196	
Finnish			2			2	I
French			3	I	2	6	I
German			255	53		308	
Greek	***		I			1	I
Italian			4			4	
apanese			I			I	
Lithuanian	***	***	I	***		I	I
Norwegian			26	4		30	2
Spanish		***	5		***	5	***
Swedish			30	I		31	2
To	otals		2,327	203	66	2,596	92

# ALIENS' ORDER, 1920.

The Aliens' Order, 1920, which came into operation on the 12th April, 1920, prohibited the landing of aliens in the United Kingdom, except with the leave of an immigration officer appointed by H.M. Government. The Order further restricted an alien from landing except at an approved port, of which there are eighteen in the United Kingdom.

Southampton is one of the approved ports, and the work of inspection and examination of all aliens arriving is carried out by the Port Sanitary Medical Staff.

The work necessitates a Medical Officer being always available for duty. Many aliens arrive from the Continent by the Channel steamers which arrive daily at between 6 a.m. and 7 a.m., others by vessels of the Royal Mail, Cunard, White Star, Red Star, Union-Castle and other lines which arrive regularly but at uncertain hours.

The inspection of aliens is carried out on board the large vessels on arrival, those aliens requiring a more detailed medical examination being sent ashore to a room specially provided in the Docks.

The following figures show the amount of work carried out in connection with the inspection of aliens during the year:—

	Total Number.	Number dealt with by Medical Inspector of Aliens.
Passenger vessels carrying aliens which		
arrived during the year	1,492	1,337
Cargo vessels carrying aliens which		
arrived during the year	56	56
Total number of aliens who arrived in		
the Port	53,421	_
Total number of aliens subjected to		
medical inspection	-	50,513

The following is an analysis of the total number of aliens who arrived in the Port during the year:—

Sitt in additional alit mans	O	Number.	Number Subjected to Medical Examination.
Temporary visitors, i.e., al stay in this country will			
three months		 38,240	369
Aliens who intend to settle p or remain in this count			
than three months		 3,859	1,595
Aliens in transit		 4,684	472
Transmigrants		 6,638	472
		53,421	2,908

Particulars relating to detailed examination of aliens:—

Number of aliens who were subjected to detailed medical examination, and were not certified by the Medical Inspector of Aliens ... ... ... 2,389

imber of each of the following certificates issued by the Medical Inspector:—	
(a) Certificate that an alien is a lunatic, idiot or mentally deficient	13
(b) Certificate that for medical reasons it is undesirable that an alien should be permitted to land	18
(c) Certificate that an alien is suffering from some disease, defect or deformity which may interfere with his capacity to support himself or his	
dependents	2
(d) Certificate that an alien is suffering from one of the acute infectious diseases	14
ansmigrants:—	
(a) Number of transmigrants who were subjected to medical examination, and were not certified by the Medical Inspector of Aliens	468
(b) Number of certificates of the cleansing of verminous transmigrants given to Immigration Officer	0
(c) Number of certificates of transmigrants suffering from Trachoma, etc., given to Immigration	
Officer	4
Total	2,908

# FOOD STUFFS LANDED IN THE PORT DURING THE YEAR 1929.

The following is a record of the food stuffs landed at Southampton during the year:—

FRUIT.—Country of origin: South Africa, North and South America, Spain, Continent, etc.

Food Stuff.		Tons.	Food Stuff.			Tons.	
Apricots			241	Lemons			1553
Oranges			43,684	Naartjges			2401
Mandarins			3011	Grapes			$5,273\frac{1}{2}$
Pomegranates			89	Apples			17,7003
Pears			$9,336\frac{1}{2}$	Cherries			120
Grape Fruit			3,553	Plums			2,192
Bananas			5694	Pineapples			5193
Tangerines			24	Nectarines			2001
Peaches			1,1704	Tomatoes			21,0791
Fruit, not	otherv	vise		Currants			991
specified			$1,326\frac{3}{4}$				
			T-4-10	1 4			

Total, 108,551½ tons.

Vegetables.—Country of origin: South Africa, Continent, Spain, Channel Isles, Scotland.

F	ood S	Stuff.	Tons.	Food Stu	ff.		Tons.
Onions			 4,0654	Beans			1,0094
Carrots			 $445\frac{1}{2}$	Gherkins			24
Broccoli		 8,8051	Vegetables, not otherwi				
				specified			1,628
			Total, 15,	$977\frac{1}{2}$ tons.			
Dotatoon			#6 occ1				

Potatoes ...  $56,093\frac{1}{2}$ 

Meat.—Country of origin: South America, South Africa, New Zealand, Australia.

	Food	Stuff.	Tons.	Fo	ood Stu	ff.	Tons.
Muttor	and	Lamb	 8,4564	Beef			 31,0844
Offal			 1,2714	Pork			 $6\frac{1}{2}$
			Total, 40,	8184 tons.			

Provisions.—Country of origin: South Africa, North and South America, Spain, Continent, etc.

Food Stuff.	Tons.	Food Stuff.				Tons.	
Canned Tomatoes		$27\frac{1}{2}$	Coffee				3943
Preserves		$23\frac{1}{2}$	Cocoa				3304
Bacon		7612	Tea				916

# PROVISIONS—Continued.

Food Stuff.	Tons.	Food Stuff.	Tons .
Lard	3,0963	Cornflower	$54\frac{1}{4}$
Pickled Salmon	24	Cheese	5833
Cereals	139	Walnuts	3094
Canned Foods	4742	Corn Syrup	20
Confectionery	76	Meats (boxed & canned)	1461
Tongues	4342	Cornflakes	2503
Fat	1,1763	Dried Fruits	3,4101
Quaker Oats	868	Milk (evaporated and	
Canned Fruits	2,1631	powder)	1,3753
Cocoanuts	354	Chestnuts	497
Muffets	283	Oysters	39
Glucose	40	Oatmeal	2273
Fish	2384	Biscuits	33
Pineapple Juice	494	Crayfish and Lobster	2,694
Eggs	9,752	Poultry	1,317
Apricot Kernels	421	Ground Nuts	20
Mealie Cobs	30	Force	1591
Groats	27	Sugar	2,0101
Butter and Margarine	8,541	Provisions, not otherwise	
Tomato puree	281	specified	3001

Total, 43,614 tons.

# GRAIN AND GRAIN OFFALS.—Country of origin: North and South America, South Africa, Spain, Egypt.

Food Stuff.		Tons.	Food Stuff	f.	Tons.	
Rice		 	$557\frac{3}{4}$	Maize Meal		 1,5331
Flour		 	6,1881	Linseed Cake	***	 610
Seed		 	1,9563	Middlings		 2,0451
Meal		 	4,3961	Pollards		 1,0671
Bran		 	1,2064	Casein		 93
Maize		 	12,6192	Hominy Chop		 4,3234
Oats		 	5,7531	Barley		 4,463
Wheat		 	16,054	Buckwheat		 1991
Linseed		 	1,3764	Cotton Seed		 5,769
Wheat (	Germ	 	1412	Sharps		 1244

Total, 70,3951 tons.

# TABLE XIII.

Table showing for comparison the food stuffs condemned during the years 1909 to 1929:—

		Tons.	Cwts.	Qrs.	Lbs.
1909	 	90	14	3	8
1910	 	137	6	2	25
1911	 	115	4	0	25
1912	 	96	15	3	25
1913	 	99	15	I	5
1914	 	53	II	0	19
1915	 	22	18	I	4
1916	 	28	4	3	25
1917	 	586	7	2	8
1918	 	538	9	0	7
1919	 	79	15	3	6
1920	 	324	I	0	4
1921	 	91	8	3	22
1922	 	30	8	0	10
1923	 	26	9	I	22
1924	 	80	5	0	27
1925	 	158	0	2	19
1926	 	90	IO	2	15
1927	 	58	2	3	24
1928	 	129	15	3	18
1929	 	97	12	0	4

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