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CITY OF DUNDEE

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# REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE

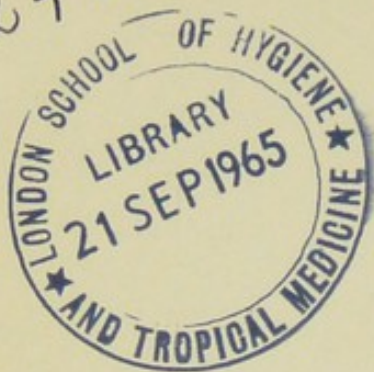
YEAR ENDING 31ST DECEMBER, 1921.

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DUNDEE:

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Public Health Department,  
West Bell Street,  
Dundee, July 1922.

To

The Lord Provost, Magistrates, and Town Councillors  
of the City of Dundee.

GENTLEMEN,

I have the honour to submit my Annual Report on the health of the City of Dundee for the year 1921.

During the year the city suffered very severely from the prolonged industrial depression, and, as a consequence, unemployment and its attendant circumstances—poverty and distress—was very prevalent. I am glad to be able to report, however, that in spite of these adverse conditions, the health statistics for the year are exceedingly satisfactory. These statistics may be considered very accurate as they are based on the population as ascertained at the decennial census in June. While the estimated population, at any rate in the later intercensal years, was undoubtedly too high, I am inclined to think that the figure obtained at the 1921 census is too low, because, although a reduction in population since 1911 may have been expected, a fall of over 8,000 is very difficult to explain. The fact that the census was taken in the holiday season, and also that unemployment was very prevalent, probably played a considerable part in producing such a low figure.

There were no developments of note in any of the branches of the Public Health Department. I had hoped to see some progress towards the establishment of the proposed new venereal diseases treatment centre, but the position is pretty much the same as last year. The comparatively small expenditure involved in this improvement is undoubtedly justified even at the present time.

Housing conditions in the city received a good deal of attention during the year, and are dealt with by me on page 63, and also by the Chief Sanitary Inspector on page 144. Housing still remains one of the most urgent public health problems in the city.

The Child Welfare Scheme was rather hampered in its work by the necessity for providing, on an exceptionally extensive scale, free milk and other food to mothers and children. Undoubtedly, the health of many persons was protected thereby,

but I am afraid there were too many authorities in the town engaged in the same form of relief work, with the result that overlapping must have occurred. The importance of the matter justified the establishment of one efficient scheme for the whole town in charge of a single authority.

As usual co-operation with other local authorities was very complete. I have to thank particularly the Chief Medical Officer of the Education Authority for his assistance on numerous occasions throughout the year, especially in connection with the control of infectious disease.

The Report of Mr Mitchell and the various executive officers are included in this volume, and will be found to be of considerable interest.

I have again to acknowledge with gratitude the whole-hearted support which the members of the staff have given me during the year.

I am, Gentlemen,

Your obedient Servant,

*W. R. Burgess.*

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Medical Officer of Health.

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## STAFF OF THE HEALTH DEPARTMENT.

Medical Officer of Health	-	W. L. BURGESS, M.D., D.P.H., D.T.M. & H.
Chief Sanitary Inspector	- - - - -	- ROBERT MITCHELL.
Veterinary Inspector	- - - - -	- HUGH FERRIER, M.R.C.V.S.
Chief Tuberculosis Medical Officer	- - - - -	- J. H. HUNTER, M.B., D.P.H.
Assistant Tuberculosis Medical Officer	-	G. S. JOHNSTONE, M.D., D.P.H.
Child Welfare Medical Officer	- - - - -	MARGARET SCOTT-DICKSON, M.B.
Medical Officer, Ante-Natal Clinic (part time)	-	MARGARET FAIRLIE, M.B.
Dental Surgeon—Special Child Welfare Dental Clinic (part time)—		H. GORDON CAMPBELL, L.R.C.P., L.D.S.
Medical Officer Venereal Disease Scheme	-	A. C. PROFFIT, M.D., D.P.H.
Medical Officer Women's Section, Venereal Disease Scheme—		ANDREWINA LAIRD, M.B.
Matron, King's Cross Hospital	- - - - -	- Miss M. A. CLARK.
Resident Medical Officer, King's Cross Hospital—		WALTER ALEXANDER, M.B., D.P.H.
Matron, Ashludie Sanatorium	- - - - -	- Miss HENRY.
Clerical Staff	- - - - -	- 7 Clerks.
Sanitary Staff	- - - - -	1 Superintendent and 17 Inspectors.
Health Visitors—Child Welfare—		Miss HUNTER, Superintendent, and 9 others.
Tuberculosis	- - - - -	- 3 Nurses.
Venereal Diseases	- - - - -	1 Male Nurse and 1 Female Nurse.
Day Nursery Staff	- - - - -	4 Matrons, 8 Nurses, &c.
Disinfecting Officers, Ambulance Drivers, Hospital Staff, Staff of Nursing Mothers' Restaurants, etc., etc.		

## ANCILLARY INSTITUTIONS.

Bacteriological Laboratory, University College.

Director—Professor W. J. TULLOCH.

Assistant—G. R. ROSS, M.B., D.P.H.

Infant Hospital, The Lodge, Broughty Ferry.

Matron—Miss EDWARDS.

Resident Medical Officer—JANET HELEN HODGE, M.B., D.P.H.

Seafield Hostel, Lochee Day Nursery, etc., etc.

## Population and Vital Statistics.

The following is a summary of the principal :—

### STATISTICS FOR 1921.

Population (Census 1921) ... ..	168,217
Number of Deaths (corrected) ... ..	2,566
Death-rate per 1,000 of population ... ..	15.8
Deaths of Infants under One Year ... ..	509
Infantile Death-rate per 1,000 Births ... ..	114
Number of Births Registered (corrected) ... ..	4,450
Birth-rate per 1,000 of population ... ..	26.5
Number of Deaths from Pulmonary Tuberculosis ... ..	168
Death-rate per 1,000 from Pulmonary Tuberculosis ... ..	1.00
Death-rate per 1,000 from all forms of Tuberculosis ... ..	1.35
Death-rate from Principal Epidemic Diseases ... ..	1.09

The population of Dundee at the Census taken at the middle of 1921 was 168,217, and this figure is used in preparing the vital statistics for the year. The age and sex distribution of the population is shown in the following table, which has been prepared for me recently by the Registrar-General. The total population shows a slight increase on the original count :—

Ages.	Both Sexes	Males.	Females.
All ages ...	168,315	74,679	93,636
0 ... ..	3,961	2,029	1,932
1 ... ..	10,719	5,409	5,310
5 ... ..	15,088	7,535	7,553
10 ... ..	16,320	8,113	8,207
15 ... ..	31,856	14,072	17,784
25 ... ..	24,529	10,187	14,342
35 ... ..	21,674	9,028	12,646
45 ... ..	20,082	8,777	11,305
55 ... ..	13,803	5,793	8,010
65 ... ..	7,558	2,891	4,667
75 ... ..	2,439	782	1,657
85 and over	278	59	219
Not stated	8	4	4

The combined population of Dundee and Broughty Ferry at the 1911 Census was 176,351, so that during the ten intercensal years the population was reduced by over 8,000. This big reduction is very difficult to explain, and while it is advisable to wait until the complete Census return is available before discussing the matter at any length, still one feels that the taking of the Census at the end of June instead of in April had a certain effect, for at that time many people were out of town, and, further, unemployment was very prevalent in Dundee during the Census year, and this may have caused an excessive temporary emigration from the city.

This is the first intercensal period during which the population has shown a decrease. The following figures, representing the difference in population during the intercensal periods since 1821, are of interest :—

Intercensal Period.			Increase.	Decrease.
1821-1831	...	...	14,780	—
1831-1841	...	...	17,439	—
1841-1851	...	...	16,137	—
1851-1861	...	...	12,733	—
1861-1871	...	...	29,060	—
1871-1881	...	...	21,430	—
1881-1891	...	...	11,664	—
1891-1901	...	...	7,586	—
1901-1911	...	...	3,831	—
*1911-1921	...	...	—	8,036

\*Broughty Ferry included for first time.

During the period 1911-1921 the natural increase of the population—that is, the excess of births over deaths—was 9,058, so that the actual decrease is all the more surprising, although the natural increase makes no allowance for war casualties. The emigration from the city has therefore greatly exceeded the immigration. The reduction is practically the same for both sexes. It is limited to the age periods under 45. Other age periods show an increase.

The Census figure for 1921 is very different from the figure estimated by the Registrar-General for the middle of 1920, which was 184,081, or 15,766 above the actual Census population of 1921. This is a very considerable error, and vitiates all our statistics, which are based on the estimated populations. It demonstrates that the methods of estimating the population are not by any means reliable, and it also serves as a further argument for a more frequent enumeration of

the population. The statistics, especially those for the later years of the intercensal period, are lower than they should be, and this must be taken into account when comparing them with the figures for last year. This, of course, does not apply to the infantile mortality rate, which is based on the actual number of births, and not on the estimated population living at ages under 1 year.

The death-rate corrected for transfers and also for age and sex distribution was 15.8, exactly the same as for the year 1920, the total number of deaths being 2,811 in 1920 and 2,566 in 1921. The death-rate has therefore fallen considerably, but the error in estimating the 1920 population renders the figure for that year unreliable. The infantile mortality is the lowest yet recorded for Dundee, the figure being 114, compared with 131 for 1920. The tuberculosis death-rate is also a record for Dundee.

The age periods at which the deaths occurred were as follows:—

Age.	Number of deaths	Corresponding number for 1919.	Census population.	Death-rate per 1000.
0-5 (under school age)	660	849	14,680	38.1
5-15 (school age)	63	208	31,408	2.0
15-45 ... ..	395	318	78,059	5.06
45-65 ... ..	601	633	33,885	17.7
65-75 ... ..	433	399	7,558	57.2
75 and upwards	414	404	2,717	152.3

These figures are very much the same as for recent years. As is usual, the death-rates at the early and late age periods are very high.

In the following table the deaths are allocated to the different Wards:—

Ward	Population.	No. of Deaths.	Death-rate per 1000.
1 ... ..	14,277	217	15.2
2 ... ..	12,136	201	16.5
3 ... ..	16,212	247	15.2
4 ... ..	19,016	292	15.3
5 ... ..	22,525	311	13.8
6 ... ..	17,272	301	17.4
7 ... ..	17,511	249	14.2
8 ... ..	18,485	313	16.9
9 ... ..	20,055	271	13.5
10 and 11 ... ..	10,728	138	12.8

15 deaths were not allocated, being either homeless or dying in institutions.

On page 14 there is a table showing the certified causes of the 2,566 deaths which occurred in Dundee during 1921. The same table shows the age periods at which the deaths occurred. It may be noted here that 25 per cent. of the deaths occurred at the age period 0-5 years. In 1920, 30 per cent. of the total occurred at this age period.

---

Return Showing the Causes of Death (Corrected for Transfers) at the Different Age periods during 1921 :—

CAUSE OF DEATH.	ALL AGES			AGE											Over 85
	Total	Males	Females	—1	1—	5—	10—	15—	25—	35—	45—	55—	65—	75—	
Enteric Fever	1	...	1	...	...	...	...	...	...	...	1	...	...	...	...
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	14	6	8	5	8	1	...	...	...	...	...	...	...	...	...
Scarlet Fever	12	5	7	1	4	4	...	...	...	...	1	...	...	...	...
Whooping Cough	66	23	43	35	31	...	...	...	...	...	...	...	...	...	...
Diphtheria	15	8	7	3	7	1	1	1	1	...	1	...	...	...	...
Influenza	33	13	20	...	...	...	1	2	1	1	7	2	12	7	...
Encephalitis Lethargica	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Meningitis	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Other Epidemic Diseases	9	4	5	4	2	...	...	...	...	...	...	1	1	...	...
Tuberculosis of Respiratory System	168	81	87	1	2	4	1	38	37	39	20	18	6	2	...
Tuberculous Meningitis	17	8	9	4	4	4	3	1	1	...	...	...	...	...	...
Tuberculosis of Intestines and Peritoneum	13	7	6	2	3	3	2	2	1	...	...	...	...	...	...
Other Tuberculous Diseases	29	9	20	2	2	...	4	8	2	4	2	2	3	...	...
Malignant Tumours	289	113	176	...	...	...	...	...	10	25	55	94	71	31	3
Rheumatic Fever	6	2	4	...	...	...	1	3	...	...	2	...	...	...	...
Meningitis (not. Cer.-Spin. or T.B.)	13	3	10	5	2	...	...	2	3	...	1	...	...	...	...
Apoplexy	208	84	124	1	...	...	...	2	...	6	19	39	77	53	11
Heart Disease	249	123	126	1	...	...	5	8	9	20	29	58	60	55	4
Disease of Arteries	50	24	26	...	...	...	...	...	...	1	1	12	21	13	2
Bronchitis	166	74	92	21	6	...	...	...	2	7	6	32	41	43	8
Pneumonia (all forms)	200	106	94	57	37	7	...	3	17	8	16	18	20	14	3
Other Diseases of Respiratory System	36	15	21	6	2	...	...	...	1	...	4	7	10	5	1
Diarrhoea and Enteritis (under 2 years)	75	35	40	63	12	...	...	...	...	...	...	...	...	...	...
Appendicitis	7	5	2	...	1	...	2	2	1	...	...	...	1	...	...
All Liver Diseases (not Malignant)	15	8	7	...	...	...	...	...	1	4	4	1	5	...	...
Nephritis (Acute and Chronic)	51	24	27	2	...	...	1	3	3	2	6	12	16	5	1
Puerperal Sepsis	9	...	9	...	...	...	...	1	5	3	...	...	...	...	...
Other Diseases and Accidents of Pregnancy and Parturition	16	...	16	...	...	...	...	3	8	5	...	...	...	...	...
Disease of Early Infancy and Malformations	242	142	100	242	...	...	...	...	...	...	...	...	...	...	...
Suicide	14	12	2	...	...	...	...	1	1	2	5	3	2	...	...
Other Violent Deaths	87	55	32	11	8	6	2	1	6	11	11	9	8	10	4
Other Defined Diseases	404	168	236	41	16	3	6	13	15	31	31	52	64	93	39
Causes Ill-Defined or Unknown	51	36	15	1	4	...	1	...	1	3	5	14	15	5	2
Totals	2566	1193	1373	509	151	33	30	94	128	173	227	374	433	336	78

## INFECTIOUS DISEASES.

The year was very free from infectious disease in epidemic form. Notifications received under the Infectious Diseases (Notification) Act, 1889, and under Regulations made under Section 78 of the Public Health (Scotland) Act, 1897, numbered 1,854, as compared with 2,412 in 1920. This reduction is due to the diminished prevalence of all the infectious diseases, and especially to the reduced number of notifications of influenzal pneumonia. As regards measles and whooping-cough, which are not notifiable, the Department received information of 586 cases of the former disease, compared with 589 the previous year, and 504 cases of the latter disease, as compared with 309 in 1920. The death-rate from the principal epidemic diseases (enteric fever, measles, scarlet fever, whooping-cough, diphtheria, diarrhoea, and enteritis) was 1.09, the figure for 1920 being 1.05, this slight increase being due to the error in estimating the 1920 population. The actual number of deaths in 1920 was 193, and in 1921, 183. As is usual, the infectious diseases were much more prevalent in the winter months.

The fee payable to medical practitioners for the notification of a case of infectious disease was increased from 1/- to 2/6 on 1st September.

The following is a return of cases of infectious diseases notified, &c., during the year ending 31st December, 1921 :—

DISEASE.	NUMBER OF CASES COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.								
	At all ages.	At Age—Years.						Cases removed to Hospital.	Cases not removed to Hospital.
		Under 1.	1 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards	

**A.—Notified under the Infectious Disease (Notification) Act, 1889.**

Typhoid or Enteric Fever	10	...	...	3	1	3	3	...	9	1
Typhus Fever	...	...	...	...	...	...	...	...	...	...
Smallpox	...	...	...	...	...	...	...	...	...	...
Scarlet Fever or Scarlatina	380	3	69	251	40	13	4	...	296	84
Diphtheria and Membranous	...	...	...	...	...	...	...	...	...	...
Croup	274	15	72	130	30	22	4	1	255	19
Erysipelas	145	4	3	8	19	50	48	13	12	133
Puerperal Fever	14	...	...	...	2	12	...	...	7	7
Cholera	...	...	...	...	...	...	...	...	...	...
Relapsing Fever	...	...	...	...	...	...	...	...	...	...
Continued Fever	...	...	...	...	...	...	...	...	...	...

**B.—Notified in terms of Regulations made under Section 78 of the Public Health (Scotland) Act, 1897.**

Ophthalmia	...	...	...	...	...	...	...	...	...	...
Neonatorum	177	177	...	...	...	...	...	...	5	172
Chickenpox	215	22	66	125	2	...	...	...	2	213
Malaria	2	...	...	...	...	1	1	...	...	2
Dysentery	1	...	...	...	...	1	...	...	...	1
Trench Fever	...	...	...	...	...	...	...	...	...	...
Acute Primary Pneumonia	127	10	31	30	18	19	13	6	...	127
Acute Influenzal Pneumonia	12	...	...	1	2	1	6	2	6	6
Pulmonary Tuberculosis	373	4	17	57	105	128	54	8	174	199
Non-Pulmonary Tuberculosis	101	10	14	47	15	8	5	2	14	87
Total of A and B	1831	245	272	652	234	258	138	32	780	1051

**C.—Diseases to which the Provisions of the Infectious Disease (Notification) Act have been extended by the Local Authority.**

Chickenpox	22	1	7	14	...	...	...	...	1	21
Cerebro-Spinal Meningitis	1	1	...	...	...	...	...	...	...	1

**D.—Notified under Local Provisions not under the Infectious Disease (Notification) Act, 1889.**

Measles	586	39	173	356	14	4	...	...	36	550
Whooping Cough	54	72	174	258	...	...	...	...	18	486

Name of Hospitals in which cases were treated—

King's Cross Hospital.	Sidlaw Sanatorium.
Smallpox Hospital.	Royal Infirmary.
Ashludie Sanatorium.	

Number of persons resident in the burgh as at 31st December, 1921, who were known to be suffering from tuberculosis—

Pulmonary Tuberculosis only	...	...	...	...	1,911
Non-Pulmonary Tuberculosis only	...	...	...	...	469
Both Pulmonary and Non-Pulmonary Tuberculosis	...	...	...	...	18
Total	...	...	...	...	2,398

Monthly Notifications of Notifiable Diseases During the Year 1921.

DISEASE.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Pulmonary Tuberculosis ...	31	39	47	18	31	26	25	31	29	32	31	33	373
Non-Pulmonary Tuberculosis	8	5	10	8	11	6	6	5	16	7	11	8	101
Smallpox ...	...	...	*	...	...	...	...	...	...	...	...	...	0
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	0
Enteric Fever ...	1	0	2	1	1	0	1	1	1	0	1	1	10
Puerperal Fever ...	2	0	2	1	0	1	1	3	0	1	1	2	14
Diphtheria ...	26	42	30	19	20	15	10	21	25	21	22	23	274
Scarlet Fever ...	21	28	19	9	9	17	14	12	51	71	62	67	380
Erysipelas ...	11	15	8	4	5	11	5	10	17	19	14	26	145
Cerebro-Spinal Fever ...	1	0	0	0	0	0	0	0	0	0	0	0	1
Ophthalmia Neonatorum ...	27	29	28	20	7	8	14	10	8	13	8	5	177
Pneumonia (Primary) ...	11	13	12	4	9	10	3	6	1	15	20	23	127
Pneumonia (Influenzal)	2	1	2	1	0	0	1	0	1	0	1	3	12
Trench Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	0
Dysentery ...	0	1	0	0	0	0	0	0	0	0	0	0	1
Malaria ...	1	0	0	0	0	0	1	0	0	0	0	0	2
Total ...	142	173	160	85	93	94	81	99	149	179	171	191	1617

Chickenpox is not included in this Table.

Non-Notifiable Diseases.													
Measles ...	101	116	186	75	79	20	4	1	0	0	2	2	586
Whooping Cough ..	115	137	116	60	40	31	3	0	2	0	0	0	504
Total ...	216	253	302	135	119	51	7	1	2	0	2	2	1090

### Smallpox and Typhus Fever.

No cases of the above diseases occurred.

#### Chickenpox.

Under the Public Health (Chickenpox) Regulation (Scotland), 1920, chickenpox became compulsorily notifiable by medical practitioners for the six months ending 31st March, 1921. The Public Health (Chickenpox) Amendment Regulations (Scotland), 1921, made the disease notifiable for a further period of six months, and on 31st October the disease ceased to be notifiable. By that time Scotland was quite free from smallpox.

Up to 1st October, when the Regulations ceased to operate, there were 215 cases of chickenpox notified. When considered advisable cases were examined by a medical member of the staff of the Department. From 1st October until the end of the year 22 notifications were received—that is, 237 cases in all for the year. Only 3 cases were treated in hospital.

#### Diphtheria.

There were 274 cases of diphtheria notified during the year, compared with 315 for 1920. There was nothing of the nature of an epidemic, the cases occurring at all seasons fairly equally.

The case mortality was very low, viz., 5.5 per cent., there being 15 deaths.

The figures for the last 21 years are as follows:—

Year.	Cases.	Deaths.	Percentage	
			Case	Mortality.
1901	143	18	12.5	
1902	143	20	14.0	
1903	132	15	11.3	
1904	100	22	22.0	
1905	143	24	16.7	
1906	183	38	20.7	
1907	169	30	17.7	
1908	200	39	19.5	
1909	303	38	12.5	
1910	498	67	13.4	
1911	367	37	10.0	
1912	409	43	10.5	
1913	265	34	12.8	
1914	319	30	9.4	
1915	267	32	12.0	
1916	261	32	12.2	
1917	328	43	13.1	
1918	362	39	11.8	
1919	274	24	8.7	
1920	315	30	9.5	
1921	274	15	5.5	

Total cases for 21 years, 5,455; total deaths, 670; case mortality, 12.2 per cent.

The following table shows the number of cases at the different age periods :—

	Cases.	Deaths.
Under 1 year	15	3
1—5 years	72	7
5—15 years	130	2
15—25 years	30	1
25—45 years	22	1
45—65 years	4	1
65 and upwards	1	0

255 cases were removed to King's Cross Hospital.

As many of the contacts as possible of each notified case were examined bacteriologically for the detection of carriers.

### Scarlet Fever.

There were 380 notifications of this disease received throughout the year, as compared with 424 in 1920. The disease was more prevalent in the late autumn and early winter, but it never assumed epidemic form. There were 12 deaths, giving a case mortality of 3.1 per cent., a rather higher figure than usual

The corresponding figures for the last eleven years were as follows :—

	Notifications.	Deaths.
1911	674	13
1912	833	15
1913	442	14
1914	816	29
1915	1173	21
1916	452	11
1917	195	3
1918	87	1
1919	410	4
1920	424	6
1921	380	12
Total for 11 years	5886	129

The case mortality for the eleven years was therefore 2.2 per cent.

296 cases were removed to the Infectious Disease Hospital.

The following table shows the number of cases reported and the number of deaths at the various age periods :—

				Notifications.	Deaths.
Under 1 year	...	...	3	3	1
1 year and under 5 years			69	69	4
5	"	15	"	251	4
15	"	25	"	40	0
25	"	45	"	13	2
45	"	65	"	4	1
65 years and upwards	...		0	0	0
Totals ...				380	12

### Enteric Fever.

The year was a very satisfactory one as regards this disease. Only 10 notifications were received, as compared with 30 during 1920. Of the 10 notified cases 7 proved to be suffering from enteric fever. The cases were spread equally over the year, and apparently were not connected with one another in any way. They occurred in different parts of the town, including Lochee and Broughty Ferry. As usual, Dallfield Walk district did not escape, two cases occurring there early in the year. As stated in my last Report, one or two cases occur nearly every year in this district.

It is very satisfactory that the prevalence of enteric fever is gradually diminishing, but we cannot be too confident that it will disappear until we improve the sanitary conditions in many areas. Once this standard is permanently raised we may hope to remain free from enteric fever. We must, of course, keep in mind the possibility of outbreaks due to milk infection. The occurrence of such outbreaks is still quite possible, and depends on the methods of producing and handling the milk. In Dundee the danger of a water-borne outbreak of this disease is practically non-existent, thanks to the care taken in protecting the water from pollution.

Of the 10 cases, 9 were treated in the Infectious Diseases Hospital, and of the 9, 3 were found not to be suffering from enteric fever.

There was one death, giving a case mortality of 14.3 per cent.

The number of cases of the disease notified, the number of deaths, and the case mortality each year since 1901 are shown below :—

Year.	Cases.	Deaths.	Percentage. Case Mortality.
1901	76	10	13.1
1902	51	11	21.5
1903	180	32	17.7
1904	206	21	10.2
1905	62	10	16.1
1906	78	13	16.6
1907	48	6	12.5
1908	39	3	7.7
1909	34	4	11.7
1910	69	5	7.2
1911	30	2	6.6
1912	26	2	7.7
1913	42	7	16.7
1914	79	6	7.7
1915	131	14	10.7
1916	63	8	12.7
1917	26	1	3.8
1918	26	5	19.2
1919	103	7	6.8
1920	30	4	13.3
1921	7	1	14.3

Total for 21 years, 1,406 cases—172 deaths; case mortality, 12.2 per cent.

With the object of detecting carriers bacteriological examination was made of the fæces of 47 of the people who were affected with enteric fever during the milk outbreak of 1919-20. No positive results were obtained.

### Influenza.

Influenza had an appreciable effect on the death-rate last year, but not to the same extent as in the years 1918 and 1919, or even 1920. The following table shows the monthly number of deaths in which influenza was certified as the only cause or as a contributory cause :—

		1918.	1919.	1920.	1921.
January	...	1	31	4	5
February	...	0	58	0	6
March	...	0	40	4	8
April	...	1	8	55	4
May	...	0	3	24	2
June	...	0	0	0	0
July	...	35	1	1	0
August	...	3	0	0	0
September	...	0	0	0	1
October	...	59	0	2	0
November	...	235	2	0	2
December	...	113	0	0	5
		<hr/> 447	<hr/> 143	<hr/> 90	<hr/> 33

The following table classifies these deaths in age periods, and shows the death-rate per 1,000 population :—

	No. of Deaths.	Death-rate per 1,000 Population.
0—5 years	...	0
5—15 „	...	1
15—25 „	...	2
25—45 „	...	2
45—65 „	...	9
65 and upwards	...	19
	<hr/> 33	<hr/> .19

Of the 33 deaths, 7 were certified as being due to influenza alone, while in the remaining 26 influenza was associated with :—

Pneumonia	...	13
Bronchitis	...	3
Pneumonia and Erysipelas	...	1
Heart Failure	...	4
Myocarditis	...	1
Senile Heart	...	1
Senile Decay	...	1
Meningitis	...	1
Gastric and Intestinal Catarrh	...	1
	<hr/> Total	<hr/> 26

### Pneumonia.

During the year the following notifications were received :—

Acute Primary Pneumonia	...	127
Acute Influenzal Pneumonia	...	12

These cases occurred at the following age periods :—

Under 1 year	...	...	10
1—5 years	...	...	31
5—15 "	...	...	31
15—25 "	...	...	20
25—45 "	...	...	20
45—65 "	...	...	19
65 and upwards	...	...	8

Enquiries were made by the epidemic officers in each case, and isolation as far as possible carried out.

There occurred 200 deaths certified as due to pneumonia.

Everything points to the fact that notification of this disease is not being carried out very efficiently by medical practitioners in the city. A comparison of the notifications and deaths is sufficient evidence. In some infectious diseases, as for example, ophthalmia neonatorum, one feels bound to push for immediate notification of every case, but I must admit that I am not inclined to take any action in regard to pneumonia. One can do so little to prevent the spread of the disease that the value of notification seems very doubtful, except possibly from a statistical point of view. Medical practitioners have no difficulty in securing hospital treatment of their cases either at the Royal Infirmary or at King's Cross Hospital, and, indeed, if the home is not suitable from the treatment point of view, removal is a public health measure of great importance. Apart from removal to hospital, education in regard to isolation and cleanliness in the home is very helpful.

### **Dysentery.**

Only one case of dysentery was notified during the year. The patient was a discharged soldier who had served abroad. No action was considered necessary. The presence of the infection was not confirmed.

The fæces of the survivors of the dysentery outbreak due to the Shiga bacillus which occurred in 1920 were examined last year. The results were negative.

### **Trench Fever and Malaria.**

No cases of trench fever were notified during 1921, and only 2 cases of malaria. In both cases the disease was contracted abroad.

No special action was called for.

### Measles.

Information was received by this Department of 586 cases of measles. As is usual, these were reported chiefly by the Education Authority, but a certain number were discovered by the health visitors of the Child Welfare Department in the course of their work. The health visitors paid 526 visits to the homes of patients suffering from measles. There were 14 deaths, giving a case mortality of 2.4 per cent., but as the disease is not notifiable this figure is not reliable, being too high.

The following table shows the number of cases reported and the number of deaths at the various age periods :—

Under 1 year	...	...	39	5
1 year and under 5 years			173	8
5	"	15	356	1
15	"	25	14	—
25	"	45	4	—
			<hr/> 586	<hr/> 14

The majority of the cases are shown to have occurred at the age period 5-15, but that is because our information regarding cases occurring at school ages is much more complete than for the other age periods.

28 cases were removed for treatment in the Infectious Diseases Hospital. The health visitors continue to visit the homes of infants and children suffering from measles. They can, however, except in urgent cases, pay only one visit to each house.

The majority of the cases occurred during the first six months of the year, but there was nothing of the nature of an extensive outbreak.

### Whooping-Cough.

Information was received by the Department of 504 cases of whooping-cough. The cases occurred chiefly during the first six months of the year. The health visitors paid 638 visits to the homes of infants and children suffering, and 16 cases were removed for treatment to King's Cross Hospital.

There were 66 deaths, 35 occurring at ages under 1 year and 31 between 1 and 5. This disease was therefore a very important cause of death in infants and children, and requires the very special attention of the Child Welfare Department. Unfortunately the duties of the health visitor are now so numerous that she is unable to pay as many visits to cases of whooping-cough as its importance requires.

### **Puerperal Fever.**

There were 14 cases of puerperal fever notified, but a total of 16 cases came under the notice of the Child Welfare Department. This disease is dealt with in the chapter on the Midwives Act on page 53, and also by Dr Dickson, the Inspector of Midwives, in her report (page 106). There are, however, one or two points which might be mentioned here. In the first place, it is very obvious that the notification of this disease is not being efficiently carried out by medical practitioners as required by the Infectious Diseases (Notification) Act, 1889. This is shown by the fact that while the Child Welfare Department received information of 16 cases, only 14 were notified. It is fair to assume that there are others, and I suspect a fair number which do not come under our notice at all. This is supported by an examination of the death returns. There were 9 deaths due to puerperal sepsis. Nine deaths out of 16 cases certainly suggests that the latter figure is not a reliable one. Notification of this disease should be prompt in every case, and perhaps it would be more efficiently carried out if the disease was more clearly defined for purposes of notification, as, for example, has been done in the Regulations making ophthalmia neonatorum notifiable. At anyrate, one could then insist on notification without introducing any argument as to diagnosis.

The second point which strikes me is that, according to the information available, puerperal fever is about equally prevalent in the practice of doctors and in the practice of midwives. It is not so prevalent in the practice of the Maternity Hospital. The midwives are kept under careful supervision, and should a case occur in their practice it is not likely to escape the attention of the Inspector of Midwives or her staff.

Undoubtedly this disease is too prevalent. It should not be an element in the death-rate of the country, and I hope it is a factor which will rapidly disappear.

### Ophthalmia Neonatorum.

There were 193 notifications of this disease during the year, or 1 case in 23 births, compared with 265 notifications, or 1 in 19 births, last year.

Number of notifications each year since 1914:—

1914	...	...	9	1918	...	...	36
1915	...	...	7	1919	...	...	75
1916	...	...	13	1920	...	...	265
1917	...	...	15	1921	...	...	193

The notification of this disease has been fairly efficient since the Regulations came into force in 1918. As in 1920, the majority of the cases were notified from the Maternity Hospital. Many of these were not true cases of ophthalmia neonatorum as defined in the Regulations, but it is much more satisfactory to have too many cases notified than that there should be neglect of notification. The subject is dealt with on page 54, and also in the report of the Inspector of Midwives. In no other disease is it more important to receive early information of the occurrence of cases in order that prompt and active measures may be taken to prevent permanent disability. Preventive measures should, of course, be taken at an earlier stage by the person in charge of the confinement, and were this done in every case the notifications would be few and a great deal of trouble avoided.

The result of the action taken during the year is given below. The health visitors paid 1,428 visits to these cases, 193 initial visits, and 1,235 revisits. The results are extremely satisfactory, and justify the work of the health visitors. We hope, however, that in the near future very little time will have to be spent by the Child Welfare staff on the treatment of this disease.

	1920.	1921.
Complete recovery ...	261	193
Slight corneal opacity ...	0	0
Loss of vision of one eye ...	3 (2 died)	0
Complete blindness ...	1 (died)	0

Of the 193 cases, 27 were considered to be serious, and were probably gonorrheal in nature. Bacteriological examinations were not carried out. Seven cases were treated in Hospital.

### **Infantile Diarrhœa.**

There were 75 deaths from diarrhœa and enteritis at ages under 2 years. Of these 63 were of infants under 1 year and 12 of children between 1 and 2 years.

The following table shows the deaths from this disease during 1919, 1920, and 1921 :—

			Under 1 Year.	1-2 Years	Total.
1919	...	...	35	5	40
1920	...	...	95	7	102
1921	...	...	63	12	75

Infantile diarrhœa is probably the cause of a greater number of infant deaths than any other single disease. It is largely responsible for our high infantile mortality. Dr Dickson in her Report has given details of the feeding, &c., of 69 of these fatal cases.

Professor Tulloch on investigating an outbreak at the Infant Hospital in 1920 found marked abnormality of the intestinal flora in severe cases. Last year only five specimens were submitted for examination, and the abnormality was not so marked. There is urgent need for further enquiry into the causation of this disease. Unfortunately there is usually plenty of material available in Dundee for such an enquiry.

### **Public Health (Infectious Disease Carriers) Regulations (Scotland), 1921.**

Attempts were made during the year to discover carriers of disease, and many specimens were submitted to the bacteriological laboratory with this object in view. Special attention was given to typhoid fever, dysentery, and diphtheria, but no carriers were found, and, accordingly, no action was necessary under the above Regulations.

### **Tuberculosis.**

That section of the campaign against tuberculosis which is known as the Tuberculosis Scheme has continued in active operation during the year under the capable supervision of Dr. Hunter, the Chief Tuberculosis Officer, and his assistant Dr. G. S. Johnstone.

As the result of the National Health Insurance Act, 1920, Sanatorium Benefit ceased to be included among the benefits conferred upon insured persons by the National Insurance Act, 1911. As the medical adviser to the Insurance Committee for some years, I must express my appreciation of the work done by that Committee in connection with tuberculosis. Every member of the Sanatorium Sub-Committee took a great interest in each case brought up for their consideration, and many useful suggestions came from that body. It is a pity that they should no longer have the same opportunity of showing their interest in this class of social work. Still, there is no doubt that the step is in the right direction, and simplifies the administration of the scheme. There is now one authority in each area responsible for the supervision and treatment of all cases of tuberculosis, instead of two as formerly, viz. :—the Health Authority for non-insured persons and the Insurance Committee for insured persons and possibly also their dependents. In Dundee, the Town Council is now responsible for all cases of tuberculosis and the change over to this new arrangement was very easily carried out, for under the old scheme the Dundee Insurance Committee handed over to the Town Council all the funds they had available for the treatment of tuberculosis, and the Town Council agreed to provide the form of treatment recommended in each case by the Insurance Committee. The new arrangement is working smoothly and well.

The 10 years' agreement with the Directors of the Royal Infirmary in regard to Sidlaw Sanatorium came to an end in April. Under that agreement the Public Health Department had the use of seven beds at the Sanatorium. A new arrangement began on 1st November whereby the Town Council pay at the rate of 7/6 per patient day, there being no limit as regards number of patients. The Town Council are, however, willing to spend up to £2,000 per annum for the treatment of patients in that institution if the facilities provided are satisfactory. This accommodation is intended for children suffering from all forms of tuberculosis, and we have occupied as a rule 15 beds. We have now fairly complete provision for the institutional treatment of tuberculosis consisting of over 140 beds in all. The cost of maintaining these beds is very

high, but they are very necessary in Dundee, as only a very small number of patients can be treated or isolated properly in their own homes.

Dr. Hunter reports that there were 18,180 attendances at the Dispensary compared with 21,514 in 1920, and 13,911 in 1919. As stated in last year's Report the efficiency of such an institution as a tuberculosis dispensary cannot be measured by the number of consultations, and the smaller number in 1921 as compared with 1920 makes useful work more possible. Many of the visits paid are undoubtedly formal for purposes of certification to satisfy the demands of National Insurance and of the Pensions Ministry. This is not the work of a doctor, and to occupy a medical man's time in such clerical duties is not in the best interests of the patients. In fact, the carrying out of treatment of any kind at the Dispensary is a procedure of doubtful value, and I am inclined to think that such institutions should concentrate their energies on diagnosis, including especially the examination of contacts, the supervision and education of patients, and the arranging for the treatment of patients at other institutions. This work should, of course, be supplemented by the tuberculosis officer and his nurses in the homes of the patients.

The value of the examination of contacts was again demonstrated, 16 out of 114 examined (or 14 per cent.) being found to be suffering from tuberculosis. This is an exceedingly high percentage, but the number of contacts examined was again too low. I would like to see a very much larger number examined.

#### NOTIFICATIONS.

Nearly 50 per cent. of the cases of tuberculosis discovered in 1921 were detected by the tuberculosis officers, viz. :—203 out of 474. Medical practitioners notified 164 cases, but notification is not too efficiently carried out, as 54 cases were discovered as the result of a scrutiny of the death returns. The figure last year was 38. I have recently made enquiries into the history of many of these unnotified cases, and I must admit that, although in some cases there may have been neglect of notification, the patients received adequate treatment and did not suffer in any way. There

is no doubt that the search for cases was very vigorous last year. This is evident from the large number of cases (43 per cent. of total) discovered at the Dispensary, and along with this, the attack rate or notification rate, continues to fall as is shown in the following table, which gives the number of notifications of pulmonary and non-pulmonary tuberculosis each year since notification became compulsory:—

YEAR.	Estimated Population.	Pulmonary Tuberculosis	Attack-rate per 1000 of Population.	Non-Pul. Tuberculosis	Attack-rate per 1000 of Population.	All Forms of Tuberculosis	Pulmonary and Non-Pul. Tuberculosis
1913	164,975	410	2.48	Non-Pulmonary Tuberculosis notifiable in March, 1914.			
*1914	176,584	590	3.34				
1915	177,300	485	2.73	377	2.12	862	4.86
1916	181,437	522	2.87	213	1.17	735	4.05
1917	181,773	432	2.37	171	.94	603	3.31
1918	181,777	393	2.16	201	1.11	594	3.26
1919	185,388	442	2.38	137	.73	579	3.12
1920	184,084	423	2.29	132	.71	555	3.01
1921	168,217	375	2.23	99	.58	474	2.81

\*Broughty Ferry included for the first time.

The attack-rate is not by any means a too reliable index of the prevalence of the disease, but it serves as evidence suggesting that the disease is becoming less widespread. Further proof of this is also provided by the steadily falling death-rate.

As is usually the case in pulmonary tuberculosis, the attack-rate was highest at the age-period 15-45.

Attack-rate in age groups—1914 and 1917-21—pulmonary tuberculosis:—

Ages.	1914.	1917.	1918.	1919.	1920.	1921.
0-5 ...	.92	.81	1.27	.64	.67	1.43
5-15 ...	2.31	1.52	1.55	1.92	2.05	1.81
15-45 ...	4.48	3.22	2.70	3.25	2.8	2.9
45-65 ...	3.21	2.58	2.52	2.02	2.4	1.62
65 and upwards	2.08	.71	.40	1.10	.84	.77
	3.34	2.37	2.16	2.38	2.29	2.22

The number of notifications of pulmonary tuberculosis among males was greater than that among the females.

The following are the figures since notification began :—

	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921
Males	171	255	216	227	181	198	238	223	197
Females	229	335	269	295	251	195	204	200	178
Total	400	590	485	522	432	393	442	423	375

In the case of non-pulmonary tuberculosis the attack-rate was highest at the early age-periods.

Attack-rate in age groups—1914 and 1917-21—non-pulmonary tuberculosis :—

Ages.	1914.	1917.	1918.	1919.	1920.	1921.
0-5 ...	3.36	2.75	2.54	1.79	2.3	1.5
5-15 ...	2.0	1.25	1.52	1.01	1.05	1.46
15-45 ...	.78	.75	.90	.58	.49	.31
45-65 ...	.33	.19	.42	.32	.16	.14
65 and upwards	.33	.10	.50	.30	—	.19
	1.10	.94	1.10	.74	.71	.58

The following table shows the notifications of pulmonary and non-pulmonary tuberculosis in the various wards of the city, and also the corresponding and combined attack-rates. The numbers are small and cannot be considered as reliable indices of the prevalence of tuberculosis in the different areas of the town :—

WARDS.	Pulmonary Tuberculosis.	Attack rate per 1000 of population.	Non-Pulmonary Tuberculosis.	Attack rate per 1000 of population.	Pulmonary and Non-Pulmonary Tuberculosis.	Pulmonary & Non-Pulmonary Tuberculosis. — Attack rate per 1000.
1	34	2.37	10	.69	44	3.06
2	36	2.97	3	.25	39	3.22
3	35	2.16	17	1.05	52	3.21
4	42	2.22	12	.63	54	2.85
5	48	2.15	14	.62	62	2.75
6	52	2.98	9	.61	61	2.50
7	31	1.77	11	.63	42	2.40
8	46	2.49	12	.65	58	3.14
9	38	1.90	9	.44	47	2.34
10 & 11	7	.65	3	.27	10	.92
No fixed place of abode	4	—	1	—	5	—
TOTAL	373	2.21	101	.60	474	2.81

Ward 2 shows the highest rate for pulmonary and for all forms of tuberculosis. Wards 3, 8, and 1 follow very closely.

#### DEATHS FROM TUBERCULOSIS.

The figures for 1921 were again very satisfactory. The death-rate from pulmonary tuberculosis was the same as 1920, in spite of the reduced population, and the rate for non-pulmonary tuberculosis was the lowest on record. The following table gives the particulars for the years 1912-1921 :—

YEAR.	Estimated Population.	Pulmonary Tuberculosis.	Death-rate per 1000 of Population.	Non-Pulmonary Tuberculosis.	Death-rate per 1000 of Population.	Total Deaths from Tuberculosis.	Death-rates per 1000 of Population.
1912	165,300	283	1·71	167	1·01	450	2·72
1913	164,975	191	1·16	128	·77	319	1·93
*1914	176,584	249	1·41	126	1·71	375	2·12
1915	177,300	275	1·55	113	·64	388	2·19
1916	181,437	259	1·42	95	·52	354	1·95
1917	181,773	218	1·20	140	·77	358	1·97
1918	181,777	256	1·40	90	·49	346	1·90
1919	185,388	165	·89	83	·44	248	1·33
1920	184,084	183	·99	69	·38	252	1·37
1921	168,217	168	·99	59	·35	227	1·34

\* Broughty Ferry included for the first time.

The total number of deaths from all forms of tuberculosis was 227, the lowest yet recorded. The deaths from pulmonary tuberculosis numbered 168, being 3 higher than in 1919, the record year, while there were 59 deaths from non-pulmonary tuberculosis, which constitutes another record.

Pulmonary tuberculosis—deaths and death-rates (male and female) 1913-1921 :—

Year.	MALES.		FEMALES.	
	Deaths.	Rate per 1000.	Deaths.	Rate per 1000.
1913	82	1·11	109	1·18
1914	113	1·44	136	1·39
1915	106	1·35	169	1·71
1916	99	1·23	160	1·58
1917	100	1·24	118	1·16
1918	117	1·45	139	1·37
1919	90	1·09	75	·72
1920	95	1·16	88	·85
1921	81	1·08	87	·92

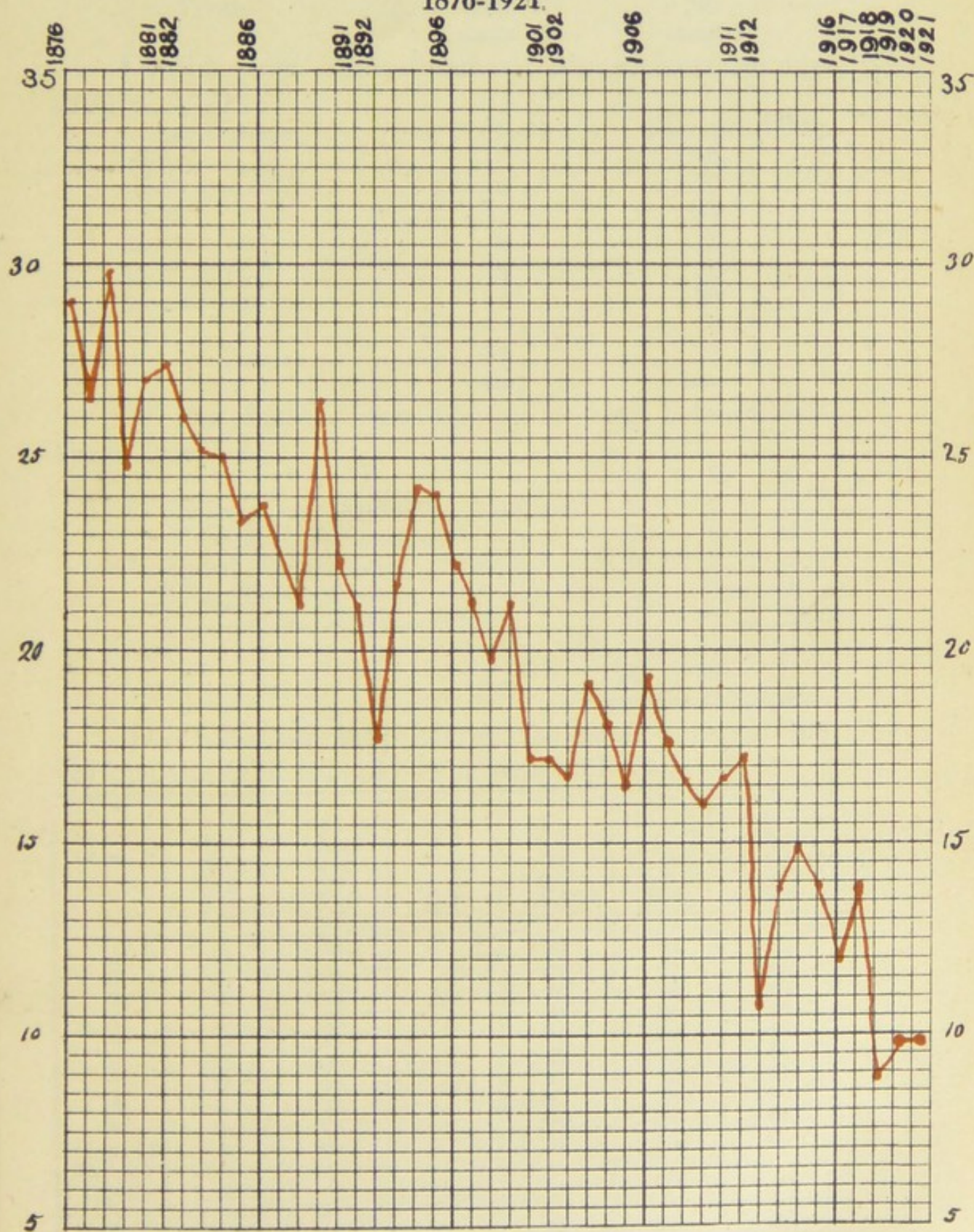
# CITY OF DUNDEE

## CHART

### PULMONARY TUBERCULOSIS.

DEATH RATE per 10,000 population

1876-1921.





Deaths from pulmonary tuberculosis in age groups 1921 :—

Age Groups.	No. of Deaths.	Rate per 1,000.
0-5 ... ..	3	.204
5-15 ... ..	5	.15
15-25 ... ..	38	1.19
25-45 ... ..	76	1.64
45-65 ... ..	38	1.12
65 and upwards ...	8	.77
Totals ... ..	168	.99

Deaths from non-pulmonary tuberculosis in age groups, 1921 :—

Age Groups.	No. of Deaths.	Rate per 1,000.
0-5 ... ..	17	1.15
5-15 ... ..	16	.50
15-25 ... ..	11	.34
25-45 ... ..	8	.17
45-65 ... ..	4	.12
65 and upwards ...	3	.29
Totals ... ..	59	.35

Of the deaths from non-pulmonary tuberculosis those from :—

	M.	F.	Tl.
Tuberculous Meningitis numbered	8	9	17
Abdominal Tuberculosis ..	7	6	13
Spinal Tuberculosis ..	3	2	5
Joint Tuberculosis ..	1	1	2
Other forms of Tuberculosis ..	5	17	22
	24	35	59

The following table shows the death-rates in the various wards of the city from tuberculosis :—

WARD.	Pulmonary Tuberculosis	Death-rate per 1000.	Non-Puly. Tuberculosis	Death-rate per 1000.	Total deaths from all forms of Tub.	Death-rate per 1000.
1	16	1.12	7	.49	23	1.62
2	15	1.23	7	.57	22	1.81
3	17	1.04	9	.55	26	1.60
4	19	.99	6	.31	25	1.30
5	18	.80	4	.18	22	.98
6	24	1.38	5	.28	29	1.68
7	15	.85	8	.45	23	1.31
8	21	1.13	5	.27	26	1.40
9	15	.74	6	.30	21	1.04
10 and 11	6	.56	1	.09	7	.65
No fixed abode.	2	—	1	—	3	—
Total	168	.99	59	.35	227	1.34

These figures are so small that the rates in the various wards are not of much value for comparative purposes.

Of the 168 deaths from pulmonary tuberculosis 91 (or 54.1 per cent.) occurred in institutions. The figures for the years 1913-1921 are as follows:—

	1913	1914	1915	1916	1917	1918	1919	1920	1921
Total Deaths from Pulm.									
T.B. ... ..	191	249	275	259	218	256	165	183	168
No. of Deaths from Pulm.									
T.B. in Institutions ...	19	24	25	66	64	98	67	93	91
Percentage of Total Deaths from Pulm. T.B.									
Dying in Institutions	9.94	9.63	9.09	25.52	29.35	38.28	40.6	50.8	54.1

The Report of Dr. Hunter, Chief Tuberculosis Officer, will be found on page 71.

### Venereal Disease.

My Annual Report for 1920 contained a statement by Mr D. M. Greig, who was, until the end of 1920, the special medical officer under the Dundee Venereal Diseases Scheme. That statement pointed out clearly and succinctly the necessity for and the aim and objects of the scheme. Mr Greig's opinions are not based on his three years' connection with an organised scheme, but on a life-long study of the diseases and their effects on the national health. He pointed out that the work was being carried on under difficulties and disadvantages which could only be obviated by the acquisition of a self-contained establishment where the beneficent work could be carried on without interruption. He also stated that "the tackling of the venereal problem is the greatest work in Public Health that has been undertaken within the memory of man, and is an inseparable part of that great social improvement which is the strenuous work of every civilised community." These words were written over a year ago, yet unfortunately I have to report that very little progress has been made during the year in connection with the establishment of a new centre for the treatment of venereal diseases. The work is being continued under the same difficulties and disadvantages due to unsuitability of premises. Last year I pointed out that the Directors of the Royal Infirmary had intimated their inability to accommodate us in their Institution, and I also reported on the scheme as approved of at that time.

This scheme provided for a new treatment centre in the Bleaching Green immediately beyond the eastern boundary of the Infirmary. Since that time difficulties of a legal nature have presented themselves, and this site has had to be abandoned, and as a consequence, the proposed scheme amended. As it happens, certain changes in the Child Welfare Scheme have provided us with a site which I venture to think is as good as, if not better than, that on the Bleaching Green. It will be remembered that in 1916, Mr F. B. Sharp generously gifted to the Town Council certain funds for the erection after the war of a new child welfare centre, and an area of ground extending to approximately 24 poles at the corner of Constitution Road and Salem Street was purchased by him for the purpose. At the beginning of the present year, however, a house suitable for conversion into a child welfare centre was purchased and handed over to us by Mr Sharp. The ground in Constitution Road is, therefore, available as a site for a venereal diseases treatment centre. The present proposal is to erect on this ground a treatment centre of cheap construction, and of simple design for men only, to continue the present premises at the Royal Infirmary for the treatment of women patients, and to hold a clinic in one of the rooms at the new Child Welfare Centre for the diagnosis and treatment of venereal disease affecting expectant mothers, nursing mothers, and infants and children under school age. From the financial point of view, the new arrangements will not involve any more expenditure than the old scheme. There is no question of amenity necessitating a building of a costly nature in Constitution Road, as it will be some distance from the street, and the ground is surrounded by a high wall. The fact that the centre will be of the ad hoc type may raise the question as to its efficiency, but it must be noted that the centre is for men only, and I do not think there is any evidence to show that ad hoc clinics are less efficient than those attached to hospitals. It would be quite near the Royal Infirmary, and quite convenient for medical students, so that no difficulty presents itself on this account. The centre for the treatment of women patients should, I think, form part of a larger institution, partly because the women patients might not care to attend an ad hoc clinic so readily, and partly also

because there is an advantage in being in close touch with other departments such as midwifery, gynecology, and child welfare, where many cases of venereal disease may be discovered. The separation of the male from the female centre is, I think, also advisable. The arrangements for the indoor hospital treatment of patients is not yet on a too satisfactory footing, but the special medical officer assures me that very few patients require such treatment. This matter should, however, receive consideration when the more important question of treatment centre is settled.

The unsuitability of the premises has seriously interfered with another very important part of the scheme, namely, the instruction of students in the diagnosis and treatment of venereal disease. The eradication of such a scourge depends very largely on the skill of the medical practitioner, present and future, and all facilities for clinical instruction should be taken advantage of by the University. Indeed, a course of instruction in venereal disease should form a compulsory part of the curriculum of every student before graduating in medicine. Better accommodation will also facilitate post-graduate study.

On Mr Greig leaving the city, the Council agreed to make the post of special medical officer a whole time appointment, and Dr. A. C. Profeit, who was appointed in January, commenced duty on 15th February. During January and the first fortnight of February the work was carried on by interim medical officers, Dr. P. E. Brandon Barrow and Dr. Andrewina Laird. The latter is now the special medical officer of the women's section.

As usual the subject was kept before the public as much as possible, and a course of lectures of an educational nature was held in February and March, under the joint auspices of the Public Health Committee of Dundee Town Council, the Dundee and District Branch of the National Council for Combating Venereal Disease, and the Dundee Branch of the Alliance of Honour. These lectures were open to the public, and were very well attended.

The subjects of the lectures and the lecturers were as follows :—

FEBRUARY 27th.

James Ritchie, Esq., D.Sc., Director, Royal Scottish Museum, Edinburgh.

"The Generation of Man" (Lantern).

Chairman—Rev. Thos. Templeton, M.A., Dundee.

Lord Provost Alexander Spence also addressed the Meeting.

MARCH 6th.

W. H. Love, Esq., M.A. (Hons.), Training College, Glasgow.

"The Psychology of Sex."

Chairman—Rev. James Weatherhead, B.D.

Simon G. Fraser, Esq., J.P., also addressed the Meeting.

MARCH 13th.

James Knight, Esq., M.A., D.Sc., F.R.S.E., Rector, Queen's Park High School, Glasgow.

"Vitai Lampada."

"Model Lesson to Class of Boys"—age 14-16.

Chairman—Most Rev. W. J. F. Robberds, D.D., LL.D., Primus.

MARCH 20th.

A. C. Profeit, Esq., M.D., D.P.H., Dundee.

"Venereal Diseases in Relation to Physical and Mental Efficiency."

Chairman—Rev. A. W. Fergusson, B.D.

ATTENDANCES AT TREATMENT CENTRE.—Details regarding the attendances, &c., will be found on page , and the following table gives the totals for the years 1918, 1919, 1920, and 1921 :—

Number of new cases attending Treatment Centre :—

	1918.	1919.	1920.	1921.
Suffering from Syphilis ...	455	637	1,085	877
Suffering from Gonorrhœa ...	78	353	286	332
Suffering from other V.D. ...	—	—	—	445
Found not to be suffering from Syphilis or Gonorrhœa ...	253	447	494	—
Total	786	1,437	1,865	1,654

Total attendances of all persons :—

	1918.	1919.	1920.	1921.
Suffering from Syphilis ...	2,181	4,121	14,343	23,437
Suffering from Gonorrhœa ...	182	2,343	8,964	10,842
Suffering from other V.D. ...	—	—	—	1,178
Found not to be suffering from Syphilis or Gonorrhœa ...	412	973	2,580	—
Total	2,775	7,437	25,887	35,457

	1918.	1919.	1920.	1921.
Number of Doses of Salvarsan Substitutes administered ...	810	1,958	6,362	6,222

As compared with 1920 these figures show a reduction in the number of new cases, but an increase in the number of attendances of nearly 10,000. This is in the right direction, if it can be interpreted as a sign of diminishing prevalence, and of an increased number of attendances per person. It is rather early yet to come to any conclusion regarding the prevalence based on the number of new cases, and one would require some information regarding the number of old cases attending before saying anything of the number of visits per patient. This information will be available when Form V.R.1 (Scotland) is completed by the special medical officer.

The number of new cases attending V.D. centres differs very markedly in different areas. In my opinion, this has very little relation to prevalence, but leaving out of count the question of the efficiency of the organisation, depends largely on the point of view of the medical officer in charge regarding the cases which should be selected for treatment. This is a very big problem, and involves, among other things, the interpretation of the Wassermann reaction. I personally tend to take a rather wide view, and am of opinion that in the case of syphilis, any person who is at all likely to benefit from anti-syphilitic treatment should at least have the opportunity, and that opportunity should be provided by the Local Authority at their venereal diseases centre.

SALVARSAN SUBSTITUTES.—Altogether 6,877 doses of salvarsan substitutes were administered during 1921 :—

		Treatment Centre.	Other Institutions.	Medical Practitioners.	Total.
1919	...	1,958	13	141	2,112
1920	...	6,362	18	472	6,852
1921	...	6,280	239	358	6,877

While the number of doses applied for by medical practitioners shows a reduction, there is a marked increase for "other institutions." These are Ashludie Sanatorium, Eastern Poorhouse Hospital, and the Royal Infirmary (apart from the Treatment Centre).

LABORATORY WORK.—The pathological work in connection with the scheme was performed in the usual reliable manner by Professor W. J. Tulloch, Director of the Bacteriological Laboratory, University College. The following examinations were carried out by him during the year:—

	From Treatment Centre.	Other Institutions.	Medical Practitioners.	Total.
Wassermann Tests ...	2,104	1,405	575	4,084
Microscopical Exami- nations ...	706	88	76	870
Total	2,810	1,493	651	4,954

The totals for each of the three years, 1919, 1920, and 1921, were:—

	1919.	1920.	1921.
Wassermann Tests ...	1,301	3,019	4,084
Microscopical Examinations ...	691	900	870
	1,992	3,919	4,954

These figures speak for themselves. Reference should be made to page 85, where Professor Tulloch in his Report gives some interesting observations on his work in connection with the venereal diseases scheme.

DEATHS FROM VENEREAL DISEASE.—There were 19 deaths certified as due to syphilis. Of these, 9 were males and 10 females. 14 occurred at ages under 1 year.

Besides those certified as due to syphilis, many others can undoubtedly be ascribed to this cause. According to the suggestions of Dr. Dittmar, contained in a paper read at an Annual Meeting of the Sanitary Association of Scotland, 159 deaths occurred in Dundee during 1921 which may be said to have been caused by syphilis. This figure is, of course, very provisional, but it is probably an under-estimate.

The following table indicates how it is arrived at:—

Deaths from Diseases probably due to syphilitic virus (Dundee, 1921):—

DISEASE.					Total Deaths.	Deaths probably due to Syphilis.
Syphilis	...	...	...	...	19	19
General Paralysis of Insane	...	...	...	...	6	6
Locomotor Ataxy	...	...	...	...	4	4
Aneurysm	...	...	...	...	5	5
Premature Birth	...	...	...	...	92	46
Abortion, Miscarriage	...	...	...	...	—	—
Congenital Debility, Icterus, Sclerema	...	...	...	...	111	55
Other Diseases of Spinal Cord	...	...	...	...	13	6
Softening of Brain	...	...	...	...	—	—
Angina Pectoris	...	...	...	...	4	2
Cerebral Hæmorrhage	...	...	...	...	14	7
Apoplexy	...	...	...	...	6	3
Hemiplegia	...	...	...	...	3	1
					—	—
					277	154

The total deaths from all causes was 2,566, so that the deaths probably due to syphilis equalled 6 per cent. of the total.

On page 81 will be found the Report of Dr A. C. Profeit, the Special Medical Officer.

# VENEREAL DISEASES, 1921.

MONTH.	NEW CASES.						TOTAL ATTENDANCES.						Injections of Salvarsan.	
	Syphilis.		Other V.D.		Gonorrhoea.		Syphilis.		Other V.D.		Gonorrhoea.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
January	41	47	26	19	11	1	704	1108	134	38	506	5	367	252
February	55	45	50	13	15	4	749	988	140	20	488	23	345	257
March	34	53	35	23	25	3	906	1119	122	39	605	61	286	275
April	29	65	20	15	24	4	841	1195	59	27	668	91	250	255
May...	34	38	19	18	20	2	950	1630	53	30	689	135	275	236
June	42	44	17	13	19	4	1154	1705	32	21	684	191	348	194
July...	48	63	24	9	23	5	957	1206	69	17	614	226	302	124
August	49	35	20	10	38	5	990	877	53	38	881	233	330	129
September	30	16	21	12	41	2	1062	647	40	31	1060	140	429	127
October	19	23	24	23	28	4	1049	599	43	46	1112	146	396	130
November	25	14	15	2	22	3	938	597	44	10	1028	111	347	124
December	17	11	9	8	26	3	894	572	39	33	1061	84	337	107
	423	454	280	165	292	40	11194	12243	828	350	9396	1446	4012	2210

## TOTAL NEW CASES.

	M.	F.
Syphilis	423	454
Other V.D.	280	165
Gonorrhoea	292	40
	995	659
		1654

## TOTAL ATTENDANCES.

	M.	F.
Syphilis	11,194	12,243
Other V.D.	828	350
Gonorrhoea	9,396	1,446
	21,418	14,039
		35,457

SALVARSAN—Males, 4,012; Females, 2,210 = 6,222.

## **The Public Health (Port Administration Infectious Diseases) Regulations (Scotland), 1921.**

These Regulations were issued last year, and form the subject of a Report which I submitted to the Public Health Committee in August. The Report gave the main lines of the action proposed to be taken in Dundee, and recommended among other things the addition to the staff of the Chief Sanitary Inspector of one district inspector, whose duties would be confined to the Port. The Committee approved of the scheme, but decided to postpone the appointment of an additional inspector for a time. The work under the Regulations is therefore being done by the existing staff, and no new expenditure has been incurred.

### **Hospital Accommodation.**

The hospital accommodation available has been sufficient for our purpose. It is very much the same as described in last year's Report, and need not be discussed again. The work done during the year at King's Cross Hospital is dealt with by Dr Alexander, the resident medical officer, in his Report on page 121. The Smallpox Hospital and the Reception House were not in use during 1921. The accommodation at Ashludie Sanatorium has not changed, but, as stated under "Tuberculosis," an increased number of beds is available at Sidlaw Sanatorium. Both these Institutions are dealt with by Dr Hunter in his Report.

The agreement between the Town Council and the Directors of the Infant Hospital is working exceedingly well, and we have, as before, the use of 15 beds for the treatment of infants suffering from malnutrition. This Hospital is dealt with under "Child Welfare."

We have now two motor ambulances for the removal of patients to the various hospitals. They are giving every satisfaction

## Bacteriological Laboratory.

The bacteriological work of the Department was carried on as before in the University College Laboratory by Professor W. J. Tulloch. The work maintained its usual high standard, and the medical practitioners in the city very much appreciate the assistance rendered to them by the Laboratory in the diagnosis of infectious disease.

The following table shows the bacteriological examinations carried out during the three years 1919, 1920, and 1921 :—

	1919.	1920.	1921.
Wassermann ... ..	1,301	3,019	4,084
Microscopical Examination under V.D. Scheme for—			
Syphilis ... ..	47	163	208
Gonorrhœa ... ..	644	827	662
Swabs for Diphtheria ... ..	125	429	470
Widal Tests of Enteric Fever ...	185	55	52
Sputum Examinations ... ..	48	127	280
Examination of Fæces for—			
Enteric Fever ... ..	163	118	47
Dysentery ... ..	0	21	4
Infantile Diarrhœa ... ..	0	38	5
Special Examinations ... ..	0	23	50
Total	2,513	4,820	5,862

These figures serve as an indication of the usefulness of the laboratory, and show that it is being taken advantage of to an increasing extent. Besides the examinations carried out on behalf of medical practitioners, the laboratory is made use of by the Department for special work in connection with milk examinations, detection of carriers, investigation of disease outbreaks, &c., and probably in the future, this work will develop considerably. Last year the necessity for keeping down expenditure limited to some extent these investigations. The premises at the University College are now much more extensive, and much more suitable for the work.

Besides the above examinations, 1,726 throat swabs (of contacts, &c.) and 163 sputums were examined at the laboratory at King's Cross Hospital.

Professor Tulloch's Report will be found on page 85.

### Disinfection.

The disinfection of infected articles was carried out as usual at the Disinfecting Station, King's Cross Hospital. During the year the following articles were removed from houses in which infectious diseases occurred, and were disinfected:—

MONTH.	Beds.	Mattresses.	Rugs.	Blankets.	Sheets.	Wearing Apparel.	Miscellaneous Articles.	Total No. of Articles.	No. of Houses from which clothes were removed.
January ...	8	15	149	348	135	509	569	1,733	87
February ...	7	16	178	211	180	513	997	2,102	107
March ...	9	33	180	200	177	478	625	1,702	106
April ...	21	11	116	195	112	247	362	1,064	67
May ...	32	8	111	295	93	864	312	1,715	101
June ...	19	18	89	298	93	248	280	1,045	74
July ...	5	33	65	126	62	227	237	755	52
August ...	233	14	115	406	121	338	372	1,599	68
September	4	30	147	193	135	349	378	1,236	98
October ...	2	43	248	263	190	372	469	1,587	115
November	8	33	228	471	234	665	565	2,204	117
December	7	35	236	335	195	563	565	1,936	111
	355	289	1,862	3,341	1,727	5,373	5,731	18,678	1,103

The following table shows the number of articles disinfected, and the number of houses concerned during the years 1917-1921:—

	1917.	1918.	1919.	1920.	1921.
Articles ...	30,691	33,542	26,591	20,917	18,678
Houses concerned	1,025	891	1,181	1,204	1,103

The scheme of disinfection was subjected to revision during the year, and the lines now followed are pretty much those suggested in the Memorandum on Methods of Disinfection issued by The Incorporated Sanitary Association of Scotland.

In April I submitted a Report on "Typhus Fever and Verminous Persons," which was intended as a review of the position in Dundee as regards facilities for the cleansing of verminous persons, clothing, &c.

In that Report I recommended that the Local Authority should not, in the meantime, consider the establishment of a Special Cleansing Station for verminous adults, but that the facilities already existing at King's Cross Hospital and the Reception House should be used to deal with as many cases as possible. Only a small number have been dealt with since, but the arrangement has proved quite satisfactory. Co-operation with the Medical Department of the Dundee Education Authority is of great importance in this matter.

### **Malignant Disease.**

The number of deaths from cancer during the year was 289—113 males and 176 females. The majority of these deaths were persons over 45 years of age, only 40 occurring at earlier ages.

The deaths from cancer during the last five years were as follows:—

Year.	Males.	Females.	Total.
1917	92	141	233
1918	70	141	211
1919	73	138	211
1920	89	127	216
1921	113	176	289

The death-rates per 10,000 persons above the age of 20, arranged in quinquennia, since the year 1877, were:—

Year.	Males.	Females.	Total.
1877-1881	4.98	9.25	7.27
1882-1886	5.45	11.46	8.77
1887-1891	9.83	13.87	12.24
1892-1896	11.27	15.27	13.65
1897-1901	14.02	18.90	16.92
1902-1906	14.99	19.91	17.84
1907-1911	15.16	16.71	17.24
1912-1916	16.71	23.48	20.57
1917	20.69	22.90	21.76
1918	15.75	22.90	19.66
1919	16.01	21.68	19.16
1920	19.35	19.64	19.52
1921	25.39	30.42	28.33

The accompanying table shows the sex and ages of the fatal cases, as well as parts of the body affected:—

Ages.	Stomach and Oesophagus.	Liver.	Bowel.	Rectum.	Generative Organ.	Breast.	Jaw.	Throat.	Tongue.	Bladder.	Other parts.	Not specified.	Totals.
Under 20 { M. F.	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	...
20—25 { M. F.	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	...
25—35 { M. F.	2 ...	... ...	... 2	... 1	... 4	... ...	... ...	... ...	... ...	... ...	1 1	... ...	3) 8) 11
35—45 { M. F.	10 2	... ...	2 ...	... ...	... 7	... 3	... ...	... ...	... ...	... 3	1 1	... ...	13) 16) 29
45—55 { M. F.	11 6	1 3	1 4	... 1	... 9	... 8	... 2	... 2	... 2	... ...	1 2	... ...	14) 39) 53
55—65 { M. F.	18 10	3 2	13 7	2 4	... 11	... 4	... 3	1 3	... 5	... .	5 3	... ...	42) 52) 94
65—75 { M. F.	17 8	1 4	3 5	4 3	... 4	... 4	... 4	... 1	... 1	... 2	4 2	1 1	30) 39) 69
75 and up'ds. { M. F.	6 4	... 1	2 4	1 2	... ...	... 6	... ...	... ...	... ...	1 3	1 2	... ...	11) 22) 33
Total ...	94	15	43	18	35	25	9	7	8	9	24	2	289

### Maternal and Child Welfare.

BIRTHS.—There were 4,511 births registered in Dundee during the year. Corrected for transcripts, the actual number of births was 4,450 (2,282 males and 2,168 females), which represents a birth-rate of 26.5 per 1,000 of the population. The excess of births over deaths (natural increase of the population) was 1,884. The corresponding figure for 1920 was 2,236.

The following table shows the birth-rate per 1,000 population, the illegitimate-rate per 100 births, and the marriage-rate per 1,000 population each year since 1912:—

Year.	Birth-rate.	Illegitimate-rate.	Marriage-rate.
1912	25.2	9.9	8.1
1913	24.6	9.8	7.7
1914	25.2	9.1	8.3
1915	22.1	8.0	9.5
1916	20.5	8.0	7.1
1917	15.6	11.2	7.0
1918	16.0	10.6	7.5
1919	18.7	11.1	10.6
1920	27.4	8.5	11.4
1921	26.5	7.7	10.0

The number of illegitimate infants born during the year was 344, which is equal to 7.7 per cent. of the total births.

Under the Notification of Births Act, 4,396 births were notified. Of these 216 were stillbirths, so that of the 4,511 registered live births, 4,180, or 92.6 per cent., were notified under the above Act. In 1919 92 per cent., and in 1920 89.2 per cent. of the registered births were notified.

Of the 4,396 notifications :—

610	were received from doctors.
2,120	„ midwives.
1,186	„ Maternity Wards, Royal Infirmary.
311	„ parents.
164	„ other sources.
5	„ handywomen.
<hr/>	
4,396	
<hr/>	

The number of stillbirths notified was 216, equal to 4.8 per cent. of the registered births. The figure for 1920 was 4.9 per cent. The notified stillbirths represented 4.9 per cent. of the total notified births.

VACCINATION.—Of the 4,532 children born between 1st July, 1920, and 30th June, 1921, for whom certificates of successful vaccination should have been lodged in 1921, 353 died before reaching the age of 6 months, certificates of conscientious objections to the operation were lodged in 2,713 cases, and in 279 cases no returns of successful vaccination were made to the Registrar.

This means that only 28 per cent. of the infants who reached the age of 6 months were successfully vaccinated.

MARRIAGES.—There were 1,689 marriages celebrated in Dundee during 1921, representing a marriage-rate of 10.04 per 1,000 population. The corresponding rates for the last 10 years are shown in the table on the previous page.

DEATHS OF WOMEN FROM DISEASES AND ACCIDENTS CONNECTED WITH PREGNANCY AND CHILD-BIRTH.—There were 25 deaths of women under this heading, repre-

senting a rate of 5.27 per 1,000 births (4,511 registered births plus 216 notified stillbirths). The figures for the years 1914-1921 are:—

1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.
5.78	6.36	6.71	3.87	6.20	5.40	6.71	5.27

INFANT DEATHS.—509 infants died during the first year of life, and, calculated on the number of births during the year, the infantile death-rate was 114 per 1,000 births. The infantile mortality rate among illegitimate children was 189, there being 344 illegitimate births with 65 deaths. The death-rate among legitimate infants was 108.

The following table given the certified cause of death at various ages under 1 year:—

RETURN OF INFANT MORTALITY FOR YEAR ENDING  
31ST DECEMBER, 1921.

CAUSE OF DEATH.		Under one week.	1 and under 2 weeks.	2 and under 3 weeks.	3 and under 4 weeks.	Total under 4 weeks.	4 weeks and under 3 mths.	3 and under 6 months.	6 and under 9 months.	9 and under 12 months.	Total deaths under 1 year.
All causes	Certified Uncertified	118 4	37 1	26 1	22 1	203 7	85 1	80 ...	69 ...	64 ...	501 8
Smallpox	-	...	...	...	...	...	...	...	...	...	...
Chickenpox	-	...	...	...	...	...	...	...	...	...	...
Measles	-	...	...	...	...	...	...	1	...	4	5
Scarlet Fever	-	...	...	...	...	...	...	...	1	...	1
Whooping-Cough	-	...	...	...	1	1	5	5	9	15	35
Diphtheria and Croup	-	...	...	...	...	...	...	...	1	2	3
Erysipelas	-	...	...	...	...	...	1	1	1	...	3
Tuberculous Meningitis	-	...	...	...	...	...	1	1	...	3	5
Abdominal Tuberculosis	-	...	...	...	...	...	...	...	1	1	2
Other Tuber. Diseases	-	...	...	...	...	...	...	...	2	...	2
Meningitis (not T.B.)	-	...	...	1	1	2	...	1	2	...	5
Convulsions	-	2	...	...	...	2	3	1	4	1	11
Pneumonia (all forms)	-	1	...	...	1	2	4	12	17	22	57
Bronchitis	-	...	...	...	1	1	2	5	7	6	21
Laryngitis	-	1	...	...	...	1	...	...	...	1	2
Diarrhoea and Enteritis	-	1	1	2	1	5	16	25	13	4	63
Other Digestive Diseases	-	2	...	1	1	4	1	1	2	1	9
Congenital Malformations	-	11	1	2	1	15	4	1	...	...	20
Premature Births	-	59	9	9	8	85	3	4	...	...	92
Atrophy, Debility, and Marasmus	-	38	22	10	6	76	33	14	3	2	128
Atelectasis	-	...	...	...	...	...	...	...	...	...	...
Injury at Birth	-	1	1	...	...	2	...	...	...	...	2
Suffocation, overlying	-	1	1	2	...	4	4	2	1	...	11
Syphilis	-	...	1	...	1	2	5	4	1	1	13
Rickets	-	...	...	...	...	...	...	...	...	...	...
All other causes	-	5	2	...	1	8	4	2	4	1	19
Total	-	122	38	27	23	210	86	80	69	64	509

Of the total deaths of infants 122 or 24 per cent. occurred among infants under 1 week old, and 210 or 41 per cent. among infants under 4 weeks old. The deaths at the four three-monthly age periods were as follows:—

	Under 3 mths.	3-6 mths.	6-9 mths.	9-12 mths.
No. of deaths	296	80	69	64
Percentage of total under 1 year	58	15.7	13.5	12.6

As is always the case, more than half of the deaths during the first year of life occurred at ages under three months.

The following table shows the infantile death-rate each year since 1890:—

1890	208	1901	180	1912	159
1891	181	1902	143	1913	162
1892	146	1903	142	1914	136
1893	217	1904	174	1915	209
1894	163	1905	133	1916	126
1895	176	1906	170	1917	137
1896	159	1907	148	1918	126
1897	194	1908	149	1919	126
1898	181	1909	144	1920	131
1899	169	1910	168	1921	114
1900	177	1911	154		

The figure for 1921 is the lowest on record, the next lowest figure, viz. 126, having prevailed during three separate years, 1916, 1918, and 1919.

The principal causes of death were congenital causes (atrophy, debility, marasmus, premature birth, congenital malformations, syphilis, injury at birth), 255; digestive diseases (including infantile diarrhœa), 72; respiratory diseases, 80; and infectious diseases (including tuberculosis), 56. Of the 122 deaths which occurred during the first week of life, 104 were due to congenital causes.

The infantile death-rates from the various causes each year from 1913-21 were as follows:—

DISEASES.	1913	1914	1915	1916	1917	1918	1919	1920	1921
Congenital - -	62	58	64	63	57	53	60	53	58
Digestive - -	40	33	38	20	24	16	13	21	16
Respiratory - -	28	15	38	15	24	24	30	36	19
Infectious Diseases	12	17	51	13	13	20	8	10	13
All other causes -	20	13	18	15	19	13	15	11	8
Total - - -	162	136	209	126	137	126	126	131	114

Average Infantile Death-rate from the various groups, 1913-1917 and 1917-1921 :—

Diseases.	1913-1917.	1917-1921.
Congenital ... ..	61	56
Digestive ... ..	31	18
Respiratory ... ..	24	27
Infectious Diseases ... ..	21	13
All other causes ... ..	17	13
	—	—
Total ... ..	154	127

Birth-rate per 1,000 population, and Infantile Mortality Rate per 1,000 births in the various wards in the city :—

WARD.	Population.	Number of Births.	Birth-rate per 1000.	Deaths under 1 year.	Infantile Mortality per 1000 Births.
1	14,277	399	27.94	52	130
2	12,136	346	27.68	43	124
3	16,212	409	25.22	42	103
4	19,016	478	25.13	48	101
5	22,525	604	26.81	66	109
6	17,272	506	29.29	66	130
7	17,511	436	24.90	57	131
8	18,485	597	32.29	68	114
9	20,058	484	24.13	48	96
10 & 11	10,725	191	17.81	19	99
	—	—	—	—	—
	168,217	4,450	26.43	509	114

CHILD DEATHS.—At ages over 1 year and under 5 years there were 151 deaths compared with 189 in 1920. Of these 63 were due to infectious diseases (measles, 8; scarlet fever, 4; whooping cough, 31; diphtheria, 7; tuberculosis, 13; 45 to the respiratory diseases, and 13 to digestive diseases.

MATERNITY AND CHILD WELFARE SCHEME.—While no development in the direction of new institutions has taken place in this scheme, the work has been carried on in the usual efficient manner under the guidance of Dr. Margaret Scott Dickson. The ordinary attendances at the various clinics have increased from 16,001 in 1920 to 17,629, but to the latter figure must be added 8,300 attendances by expectant mothers, nursing mothers, infants and children in necessitous circumstances, who were applying for relief in the form of free milk and other food. Besides the number of persons represented by the 8,300 relief attendances, a certain number were granted assistance from the

ordinary clinics. Over 30 per cent. of the attendances were, therefore, made with the object of obtaining material assistance. Dr. Dickson in her Report (page 93), describes the details of the arrangements, and it is evident that the real objects of the Child Welfare Scheme have been to some extent interfered with by the necessity for making provision for the relief of distress. During the years ending 15th May, 1919, 1920, 1921, and 1922, the amounts expended by the Department in supplying food to necessitous cases were as follows:—

1919.	1920.	1921.	1922.
£491 12s 9d.	£615 5s 0d.	£2,257 14s 7d.	£6,054 1s 7d.

Dundee suffered very seriously from the industrial depression which prevailed during 1921, and this made necessary the establishment of machinery for the relief of those in distress through unemployment, who were qualified to benefit under the Child Welfare Scheme. Undoubtedly, a great deal of good was done, but the amount of work and the expenditure involved were much greater than was anticipated. As far as possible, co-operation was maintained with other authorities granting relief, such as the Special Relief Committees, the Education Authority, and the Parish Council, and in dealing with each case, consideration was given to relief obtained from these and other sources, before granting assistance. Undoubtedly, however, overlapping occurred, and one must admit that the arrangements made for the relief of distress were unsatisfactory. This was due to the fact that the work was divided among too many authorities, and the responsibility of each was not clearly defined in such a way as to avoid overlapping, and to make good organisation possible. Such a scheme should, undoubtedly, be in the hands of one authority.

INFANT HOSPITAL.—This Institution has during the past year again been of much value to the community. The necessity for such a hospital in any complete child welfare scheme is undoubted, but this is especially the case in an industrial community like Dundee. The following is the Report of the Medical Officer:—

In Hospital, 1st January, 1921 ...	...	32
Admitted ...	...	128
		<hr/>
		160
Discharged :—		
Relieved ...	...	84
Unrelieved ...	...	2
Sent out for disinfection ...	...	5
Taken home by parents ...	...	7
Sent to King's Cross Hospital ...	...	6
		<hr/>
		104
		<hr/>
		56
Died :—		
Broncho-Pneumonia ...	...	4
Marasmus ...	...	16
Enteritis ...	...	2
Congenital heart and cleft palate		1
Bronchitis ...	...	1
Tubercular meningitis ...	...	1
		<hr/>
		25
		<hr/>
In Hospital 31st December, 1921 ...		31
The cases treated were :—		
Marasmus ...	...	74
Enteritis ...	...	10
Broncho-Pneumonia ...	...	5
Bronchitis ...	...	5
Rickets ...	...	5
Mongolianism ...	...	2
Dermatitis ...	...	1
Chronic Mastoid Suppuration ...	...	1
Tubercular Peritonitis ...	...	1
		<hr/>
		104
Highest daily number ...	...	35
Lowest daily number ...	...	19
Average daily number ...	...	30.01

Infectious disease, which is so easily introduced and which spreads so readily in an infant hospital, was, fortunately, absent during the year. This is very satisfactory, and justifies the careful procedure adopted to avoid the introduction of such infections into the hospital.

The excellent co-operation which continues to exist between the Committee of Management and the Public Health Authority prevents any overlapping of activities, and ensures that the right type of case is being dealt with in the Institution.

MIDWIVES (SCOTLAND) ACT, 1915.—The following is a list of midwives who, during January, 1922, intimated their intention to practice midwifery in the City of Dundee:—

Reg. No.	NAME AND ADDRESS.
2863	Mrs Isabella Anderson, 97 Princes Street.
3057	Mrs Clementina Angus, 96 King Street, Broughty Ferry.
1182	Miss Jean Arnott, 36 Dundonald Street.
4950	Mrs Jessie Bowman, 58 Victoria Road.
2611	Mrs Mary Casey, 78 Peddie Street.
3373	Mrs Ann Cartmill, 61 Hill Street.
400	Miss Alexandrina Clark, 287 Hilltown.
995	Mrs N. A. Cowley, 8 Molison Street.
537	Mrs Margaret Cunningham, 249 Hilltown.
418	Mrs Jane Egan, 26 Isles Lane.
395	Mrs Annie Forbes, 175 Hawkhill.
3561	Mrs Jessie Howe, 143 Victoria Road.
1479	Mrs Clementina Jack, 52 Constable Street.
755	Mrs Ellen King, 4 Miller's Wynd.
3122	Mrs Jane Masson, 3 Tayview Buildings, Broughty Ferry.
410	Mrs Helen M'Donald, 31 Brook Street.
733	Mrs Ann C. Ramsay, 4 Ogilvie's Road.
4258	Mrs Minnie Robertson, 1 Benvie Road.
1850	Mrs Isabella Scott, 49 Fort Street, Broughty Ferry.
4688	Miss Flora Thomas, Seafeld Lodge, Magdalen Green.
2279	Mrs Elizabeth Wallace, 77 Hilltown.
411	Mrs Elizabeth Webster, 48 Blackscroft.

During 1921, 22 midwives notified the Local Supervising Authority of their intention to practice midwifery in Dundee, but during the same period two, both practising in the north-west district of the city, gave up practice, and undoubtedly their departure is a distinct loss, as they were both very skilled midwives, and the Lochee district of the town is now without one, although it must be noted that this district is well served by the Maternity Department of the Dundee Royal Infirmary. Another midwife, although still residing in the city, has not yet notified her intention to practice during the present year. As she had a very limited practice her absence does not make much difference to the midwifery service. Three new names appear on the list. One of these is attached to an institution in the city, and does no district work. Of the other two, one has commenced practice in Broughty Ferry, and the other has become established in the east end, where, as stated in last year's Report, the service was insufficient.

Apart from Lochee, therefore, the number of practising midwives is adequate for the city. Apparently in this area it is exceedingly difficult for a midwife to make a satisfactory living, probably owing to the fact that the Maternity Department of the Dundee Royal Infirmary undertakes cases at a smaller fee.

The standard of midwifery among midwives was fairly satisfactory. It was not found necessary to report any case to the Central Midwives' Board, and while 17 midwives were reprimanded for neglecting to conform to rules, the corresponding figure for 1920 was 32. The details are given by the Inspector of Midwives in her Report. The change in the personnel has not resulted in any lowering in the standard of midwifery, but merely in an alteration in the distribution of the practising midwives. As usual, the instructional lectures arranged by the Inspector of Midwives and by the Dundee Branch of the Scottish Midwives' Association, were well taken advantage of.

During the year 1921, 4,770 births (including stillbirths) occurred in Dundee, and these were attended as follows:—Doctors, 1,421; midwives, 2,128; Maternity Hospital, 1,206; handywomen, 15, so that midwives attended 44.6 per cent. of the total births. While handywomen attended 15 cases, this form of attendance should cease as from January, 1922, and steps have been taken to inform all handywomen with regard to the section of the Act, which comes into operation for the first time in 1922.

The panel of doctors for the purposes of Section 22 of the Act now consists of 28 names compared with 23 at the end of last year. This increase in number is mainly due to doctors who have within the year commenced practice in the city, and it is also due to a small extent to the more generous scale of fees which came into operation in July last. During the year, the Local Supervising Authority paid £68 11s 6d in fees to 10 doctors involving 130 cases. Of this amount £11 3s 6d was recovered from the patients or relatives.

There were notified 193 cases of ophthalmia neonatorum as compared with 265 in 1920. Of these 37

cases occurred in the practice of midwives, who attended 2,128 confinements (1 in 57); 14 occurred in the practice of medical practitioners, who attended 1,421 cases (1 in 102); while 140 cases occurred in the practice of the Maternity Hospital, who attended 1,206 confinements (1 in 9). Two cases were transferred from districts outwith Dundee after the birth of the child. As was the case in 1920, the majority of the cases notified from the Maternity Hospital were not true cases of ophthalmia neonatorum, according to the definition contained in the Regulations. Of the 193 cases, 27 were reported from the Child Welfare Department as being serious cases, but it is very satisfactory to have to report that no case of permanently damaged eyes occurred during 1921. 7 cases received hospital treatment, 4 at King's Cross, and 3 at the Eastern Hospital.

16 cases of puerperal sepsis occurred (14 in 1920). Of these 16, 2 were un-notified, but these came under the attention of the Department at a very early stage. Of the total, 8 (or 1 in 266 confinements) occurred in the practice of midwives; 5 (or 1 in 284 confinements) in the practice of doctors; 3 (or 1 in 402 confinements) in the practice of the Maternity Hospital. 11 of the cases were treated in the Maternity Wards of the Royal Infirmary, and of the 16 cases, 9 died.

79 stillbirths occurred in the practice of midwives, i.e. 1 in 27 births, as compared with 1 in 24 during 1920.

The following table gives the certified causes of deaths of women from diseases and accidents connected with childbirth for the two years 1920 and 1921. (From the Long List of the Registrar-General).

	1920.	1921.
Abortion, Miscarriage ... ..	4	0
Uncontrolled vomiting ... ..	0	0
Ectopic gestation ... ..	1	0
Other diseases and accidents of pregnancy	1	1
Puerperal hæmorrhage ... ..	0	3
Other accidents to parturition ... ..	5	2
Puerperal sepsis ... ..	9	9
Phlegmasia alba dolens, Embolism ... ..	1	1
Albuminuria of pregnancy, Eclampsia ...	11	6
Other diseases of puerperium ... ..	4	3
Puerperal diseases of breast ... ..	0	0
	<hr/> 36	<hr/> 25

The following is the Report of Dr. M. Scott Dickson, the Inspector of Midwives, on the working of the Act during 1921:—

During the year 1921, 24 midwives gave notice of their intention to practice midwifery in Dundee.

These midwives attended a total of 2,128 births, which equals 44.6 per cent. of the total births (including stillbirths) occurring in the city during the year.

413 notifications have been received from midwives as follows:—

(a) Application for medical assistance (mother, 205; child, 100) ... ..	305
(b) Notification of death (mother, 1; child, 16) ... ..	17
(c) Stillbirths ... ..	79
(d) Laying out a dead body ... ..	0
(e) Liability to be a source of infection ... ..	11
(f) Notification of artificial feeding ... ..	1

Details of complications necessitating medical assistance:—

ANTE-NATAL (45 cases).		POST-NATAL (46 cases).	
Abdominal Pain ... ..	10	High Temperature ... ..	26
Excessive Sickness ... ..	3	Perineal Abscess ... ..	1
Abortion ... ..	9	Abdominal Pain ... ..	8
Threatened Abortion ... ..	2	Puerperal Insanity ... ..	1
Swelling of Hands and Feet ... ..	2	Vomiting and Diarrhoea ... ..	2
Prolapse uteri ... ..	1	Pain in Leg ... ..	2
Unclassified ... ..	16	Fainting ... ..	1
		Chill ... ..	1
		Pain in Breast ... ..	2
		Weakness ... ..	2
<i>Complications of Pregnancy.</i>		INFANT (100 cases).	
Gastritis ... ..	1	Premature or Feeble Infant ... ..	30
Fainting ... ..	1	Discharging Eyes ... ..	26
		Discharging Umbilicus ... ..	1
		Retention of Urine ... ..	1
		Swelling behind Ear ... ..	1
		Swelling on Head ... ..	1
		Swelling on Abdomen ... ..	1
		Swelling of Hands ... ..	1
		Congenital Malformations ... ..	12
		Icterus Neonatorum ... ..	6
		Tetanus Neonatorum ... ..	1
		Br. Catarrh ... ..	3
		Septic Penis ... ..	1
		Vomiting ... ..	2
		Hernia ... ..	2
		Mammary Abscess ... ..	1
		Rash ... ..	4
		Thrush ... ..	1
		Sudden Death ... ..	3
		Unclassified ... ..	2
LABOUR (114 cases).			
Abnormal Presentations ... ..	13		
Prolonged Labour ... ..	37		
Ruptured Perinæum ... ..	31		
Prolapse Cord ... ..	2		
Contracted Pelvis ... ..	4		
Adherent Placenta or Membrane ... ..	7		
Accidental Hæmorrhage ... ..	3		
Ante-partum Hæmorrhage ... ..	6		
Post-partum Hæmorrhage ... ..	3		
Cardiac Disease ... ..	2		
Placenta Prævia ... ..	1		
Eclampsia ... ..	1		
Prolapse Uteri ... ..	1		
Collapse ... ..	3		

17 midwives were reprimanded during 1921 for neglecting to conform to C.M.B. rules, as follows:—

- 4 midwives omitted to notify and send for medical aid in cases of discharging eyes,
- 1 midwife omitted to notify and send for medical aid in case of discharging eyes and discharging umbilicus.
- 1 midwife omitted to send for medical aid in case of discharging umbilicus.
- 1 midwife omitted to send for medical aid in case of abscess of breast (baby).
- 3 midwives omitted to send for medical aid in cases of abortion.
- 1 midwife omitted to send for medical aid in case of tongue tie, which she cut herself, causing hæmorrhage; as the child was a "congenital hæmophilic" the bleeding could not be controlled and the child died. The case was reported to C.M.B., who caused a letter to be framed and sent to midwives that they must treat "tongue-tie" as a congenital deformity, and send for medical assistance.
- 1 midwife omitted to notify at once 2 cases of puerperal sepsis, and, having failed to disinfect herself, was suspended for over 24 hours for disinfection—C.M.B. was notified.
- 4 midwives neglected to send in forms and keep register and charts accurately.
- 1 midwife was reprimanded seven times for neglect in general care of patients during puerperium according to Rule E. para. 12 C.M.B. Rules, neglecting to fill in Register and send in forms, and for not keeping charts accurately.

3 complaints were received from doctors regarding midwives, as follows:—

- 1 midwife omitted to send for him when patient was in labour, as he was engaged for case.
- 1 midwife who questioned his treatment of a case, and discussed it with the patient.
- 1 midwife for not reporting that a case which he had sent to Maternity Hospital had refused to go, and that the midwife, instead of sending for him again, had allowed the people to call in another doctor who finally had to have the woman sent in to the Maternity Hospital where she was delivered of a still-born child.

The extent of the practice of individual midwives varies—one midwife having attended 252 cases, while another attended only 7 cases during 1921.

The average to each midwife in practice is 88 cases.

93 visits were paid by the Inspector of Midwives and her Assistant to midwives' homes, and 13 visits were paid to cases attended by midwives.

7 handywomen were visited and reprimanded for taking cases without a doctor.

3 lectures were given to midwives on special subjects connected with their work.

OPHTHALMIA NEONATORUM.—193 cases were reported during 1921. Of these :—

26 were notified by midwives who attended 2,128 confinements.

13 were notified by doctors who attended 1,421 confinements.

134 were notified by Maternity Hospital who attended 1,206 confinements.

5 were notified by the Eye Institution.

These cases were reported to have been attended as follows :—

1 midwife.

2 were transferred from other towns (reported to be doctors' cases).

1 In-patient, Royal Infirmary.

1 doctor's case.

9 were notified by doctor and midwife. All these cases were attended at birth by a midwife.

6 were notified from the Child Welfare Department (3 in-patients and 2 out-patients, Royal Infirmary, and 1 midwife.

27 of these cases were of a severe type. Of these :—

15 were Maternity Hospital cases.

10 were midwives' cases.

2 were doctors' cases.

No eyes were damaged during the year.

4 cases were admitted for treatment to King's Cross Hospital.

3 cases were admitted for treatment to Eastern Hospital.

4 cases died from other causes during treatment.

PUERPERAL SEPSIS.—17 cases of puerperal sepsis occurred in 1921, of which :—

10 died.

7 recovered.

8 of these cases were attended by midwives, of which :—

4 died.

4 recovered.

5 were attended by the Maternity Wards, Dundee Royal Infirmary, of which :—

5 died.

2 cases were attended by doctor and midwife, of which :—

2 recovered.

2 cases were attended by doctor, of which :—

1 died.

1 recovered.

(One of the deaths occurred in 1922, although onset occurred in 1921.)

STILL-BIRTHS.—216 still-births were notified in 1921. 79 of these occurred in the practice of midwives.

Of the 79 still-births notified by midwives :—

41 were full-time (15 macerated, 16 difficult labour of malpresentation, 10 not stated).

38 were premature (26 macerated, 12 probably due to prematurity).

### Sanitary Department.

Mr Mitchell, the Chief Sanitary Inspector, has dealt very fully with the work of this Department in his Report, which is included in this volume. The Report is an admirable one, and it is quite unnecessary for me to make any observations except in regard to a few matters which have received the particular attention of both of us during the year.

FACTORY AND WORKSHOPS ACT, 1901.—The work of inspection was carried out by the staff of the Sanitary Department, 1,162 visits of inspection being made.

The conditions found were fairly satisfactory. A detailed list of workshops, &c., on the register will be found on page 164, and also details regarding matters referred by H.M. Inspector as remediable under the Public Health Act.

As regards bakehouses, along with the Chief Sanitary Inspector, I visited and examined all workshop bakehouses and all underground bakehouses. There is no question that many of the premises at present in use are quite unsuitable for the purpose, but the same difficulty exists as in connection with housing; there is no alternative accommodation. This fact makes it exceedingly difficult for us to take action, and a certain number of bakehouses are approved by the Local Authority which are not quite up to the standard which we would like to establish in regard to construction, lighting, ventilation, &c. During the course of our visits we had in several instances to express our dissatisfaction with the cleanliness of the floors, walls, ceilings, tables, &c., and letters on this subject had to be sent to a certain number of the occupiers. This resulted in some improvement, and we hope that we will find a higher standard of cleanliness this year. The Local Authority have now factory bakehouses under their supervision. Until November last, these were inspected by H.M. Factory Inspector. The number of bakehouses, &c., is noted by Mr Mitchell in his Report.

**MEAT INSPECTION.**—It was with great regret that we learned of the death of Mr Baxter, who had been for 17 years Superintendent of the Slaughter-House, and Meat Inspector. He was succeeded by Mr Anderson, of the Sanitary Department Staff, and I am sure he will make an admirable successor to Mr Baxter. His experience as a food inspector will be of great service to him, and ensures that the standard of meat inspection will maintain a high level. Again, I must refer to the advisability of appointing one or more whole time meat inspectors to assist the Superintendent. Mr Anderson has a tremendous amount of work to do, and cannot possibly inspect thoroughly the carcass of every animal slaughtered, a procedure which is very necessary.

**MILK SUPPLY.**—This subject received a considerable amount of attention during the year. Mr Mitchell and I visited a number of dairies while the milking was in operation in order to examine the methods of production and handling. We also examined the methods of handling the milk arriving at the West Station in the morning. We were not satisfied, and the matter was brought before the Public Health Committee on various occasions. The following is an extract of a Report on the Quality of the Local Milk Supply, and also on the Quantity and Cost of Milk for the various Institutions in the Public Health Department, which I submitted in June of last year:—

“The hygienic qualities of milk can only be measured by inspection of the methods of production and handling and also by bacteriological examination. It is estimated that more than half of the milk consumed in Dundee is produced outside the city, and we have no direct information regarding the methods of production of such milk. Recently Mr Mitchell, the Chief Sanitary Inspector, prepared a Report on the Distribution of Milk at Dundee Stations. About one-third of the total comes by rail, and a perusal of Mr Mitchell's Report indicates that the method of handling this milk is susceptible of much improvement. With this object in view, the Town Council are at present considering alterations in the Regulations under the Dairies, Cowsheds, and Milkshops Order of 1885.

With regard to the milk produced and consumed within the city, we can form a fairly good opinion of its soundness, basing our opinion on inspection of methods of production and handling, and also on bacteriological examinations. Speaking generally, the methods of production and handling of milk from the hygienic standpoint are bad. The milk has numerous opportunities of becoming seriously contaminated at the byre and during distribution. Undoubtedly, the main source of contamination is at the byre, and I must say that proper precautions are not in every case being taken to protect the milk during the process of milking.”

During the year 16 samples of milk were taken and submitted to a bacteriological examination. The following table shows the results:—

No.	Source of Milk.	No. of Bacteria per C.C.	Bacillus Coli present in.	Sporogenes present in.
1b	Taken from shop where butter eggs, confectionery sold	Not counted	1 cc	...
2b	Taken on delivery to purveyor ... ..	Not counted	1 cc	...
3b	Taken from shop where butter eggs sold ... ..	Not counted	1 cc	...
4b	Taken from shop in connection with dairy; eggs, butter, confectionery sold	Not counted	1 cc	...
5b	Delivered at King's Cross Hospital ... ..	Nil	1 cc	...
6b	Purchased from shop where groceries, vegetables also sold ... ..	1,140,000	001 cc	...
7b	From Milk Depot before pasteurisation ... ..	30,000	01 cc	...
8b	From Milk Depot after pasteurisation ... ..	Nil	? in 1 cc	...
9b	Taken from private house in Hilltown (boiled immediately after purchase) ... ..	40,000	? in 1 cc	..
10b	Taken from private house in Powrie Place (not boiled) ...	5,690,000	001 cc	50 cc
11b	Purchased from house in James Street (boiled immediately after purchase) ...	Under 10,000	1 cc	...
12b	Taken from house in Elizabeth Street (not boiled) ...	1,820,000	001 cc	50 cc
13b	Supplied to Infant Hospital	Under 10,000	1 cc	...
14b	Taken from Day Nursery ...	90,000	1 cc	...
15b	Do.	70,000	? in 1 cc	...
16b	Taken from Nursing Mothers' Restaurant ... ..	6,010,000	01 cc	? in 50 cc

The samples were not examined for tubercle bacilli.

To remove the possibility of milk becoming contaminated by handling in the railway stations or in the open streets, the Town Council have under consideration the following additions to their regulations under The Dairies, Cowsheds, and Milkshops Order of 1885 :—

“No milk brought by rail or road into the city, or produced in the city, intended for wholesale sale, shall be transferred from one vessel to another except in premises approved by the Local Authority.

No milk intended for retail sale shall be transferred from one vessel to another except in premises approved by the Local Authority, declaring that this prohibition shall not apply to milk which is being transferred from a vessel of a retailer by means of a measure to a vessel of the purchaser or consumer.”

CONTAGIOUS DISEASES (ANIMALS) ACTS.—Mr Ferrier's Report will be found on page 115.

## Housing.

Reference should be made to page 144, where the Chief Sanitary Inspector discusses very fully and very ably the subject of housing, and describes the work done in this connection during the year.

There is no need to dwell on the urgent necessity for more houses in Dundee. Overcrowding is prevalent in a large number of working-class dwellings, but to a greater degree it exists in the dwellings of the lower-paid workers—that is to say, in the slum areas—and more houses are required to relieve this state of affairs both in the middle working-class houses and also in the lower working-class houses or slums. Further, leaving the question of overcrowding at the moment, there are a tremendous number of occupied houses which are really unfit for habitation, and should be closed permanently or until they are made fit. Such houses are practically all confined to the slum areas. The general state of affairs is therefore that the housing conditions in the middle working-class areas are bad owing to a certain amount of overcrowding, but the housing conditions in the slum areas are very much worse, not only by reason of overcrowding, but also by reason of the existence of a large number of houses which are really uninhabitable owing to insanitary conditions, congestion, dilapidation, dampness, lack of ventilation, and sunlight, &c. We might say, therefore, that for our present purpose, we have two housing problems in our city (1) affecting the middle-class housing areas and (2) affecting the lower working-class housing areas.

No doubt the same problems exist in every area, but I venture to think that as regards problem 2 Dundee is probably as bad, if not worse, than any other area. In our city we have a tremendous number of persons employed in the staple industries—jute, &c. Probably one-quarter of the occupied men and two-thirds of the occupied women, representing over 20 per cent. of the total population, are thus employed. The wages in this industry are comparatively low, and the work is irregular, so that the proportion of the lower working classes is very high, and it follows that the proportion of lower working-class houses is also very high.

This state of affairs is reflected in the figures which are used to indicate the health conditions of a community, namely, vital statistics. Infantile mortality is very high in Dundee—on the average, it is probably higher than any other city in Scotland—and examination of the infantile death-rate in the various Wards shows that the high rate for this city is due to the fact that the death-rate is very marked in those areas which consist mostly of lower working-class dwellings. Only by adopting measures to lower the infantile death-rate in certain areas can we hope to reduce the high rate for the city. This can be done to some extent by improving the housing conditions in these areas; and, further, we cannot hope to get an adequate return for the financial outlays on the educational campaign carried on in connection with our Child Welfare Scheme as long as the present state of affairs continues. Similar remarks can be made with regard to our Tuberculosis Scheme—the fact that the majority of cases of this disease cannot possibly be treated in their own homes owing to prevailing conditions makes it essential for the Local Authority to spend each year a large sum of money in providing institutional accommodation for these cases.

The new housing schemes in Dundee have gone a long way to improve the housing conditions in the city, and especially the overcrowding, but they have only dealt to some extent with what I have already called problem 1, and have not touched in the very slightest problem 2. We all hoped that there would be a step upwards as regards size and type of house for the different classes of the Dundee population, so that the occupants of the miserable dwellings included under problem 2 would ultimately benefit. That has not come about as we all realise, and as I have satisfied myself by investigating the house history of a certain number of the families occupying the new Corporation houses. I find that not a single family living in the slum areas has benefited by the new housing schemes. Thus, I have notes of 25 families taken at random occupying houses in one of our new housing schemes. Of that number 17 were in lodgings, or were newly married before becoming tenants in their new houses; the remaining 8 were previously tenants in houses in other (not slum) areas of the town. The new tenants

of these 8 houses were previously in lodgings, or newly married in 4 cases, the other 4 having been house-holders. The houses vacated by these 4 were taken by newly-married couples or by persons from areas outside Dundee. It seems, then, that not a single occupier of a low-class working dwelling benefited by any of the new houses, and from more recent investigations I have satisfied myself that the same remarks can be applied to the other new housing schemes.

A scrutiny of the applications for the new houses shows that evidently the lower-paid workers do not desire one of the new dwellings, as very few made any attempt to secure them. I visited a large number of households in the slum areas and discussed the matter with the people. I found that the reason why they have not tried to secure one of these houses is not because they do not want them, but because they cannot pay the rent demanded. An examination of the income of the majority of these families appears to me to undoubtedly support this attitude, and I am satisfied that unless houses of a lower rental are provided these people cannot remove from their present surroundings.

While, then, problem 1 has been dealt with to some extent, problem 2, by far the more important, has not been touched, even indirectly, and as the Local Authority have received intimation that only 200 more houses can be erected under the State-aided housing scheme, I am of opinion that the people involved in this problem should receive special consideration in this last allocation, not indirectly, but directly. By this means we may expect the best return in the form of improved health and improved working capacity, apart altogether from the increased comfort and happiness of the people who are the industrial mainstay of Dundee. Our object, therefore, is to directly relieve the overcrowding in our worst slums, and also to provide alternative accommodation for occupants of those houses which require to be swept away or reconstructed.

I quite agree with the Scottish Board of Health regarding the minimum permissible accommodation in new dwellings. It is advisable to avoid erecting new houses of small size, and I would very much like to see this principle adhered to in Dundee. At the same

time, consideration must be taken of the fact that new houses at lower rents must be secured. I quite realise that any marked reduction in the rents opens up a big question, particularly in connection with the rents of the presently occupied new houses and of those now under construction, and as an alternative it appears to me that a cheaper house must be provided in the first place by modifying the minimum requirements in regard to size to some very small extent, and also by considering the question of tenement houses, which, I understand, can be erected at a cost certainly lower than that of the so-called flatted houses. I am convinced from my knowledge of the social conditions of the lower-paid workers in Dundee that a certain number of new houses with limited accommodation is required and preferred by a large number of people. In visiting and talking with the occupants of many of our slum dwellings, I find that they are not anxious for a big house—the desire seems to be to live in a better locality. The objections to a bigger house are the bigger rent, the cost of furnishing, and also the time taken to keep it clean. Many of these people are at present occupying two-roomed houses, one of the rooms being unfurnished and unused.

The question of tenements as opposed to flatted houses requires careful consideration, and in my opinion a very strong argument can be used in favour of a certain number of tenement houses for Dundee. The fact that there are a tremendous number of women employed in industry makes it essential that the houses should be as near as possible to their places of employment. The workers have only an hour to go home, prepare and consume a meal which often consists of tea and some tinned food. If the place of employment is too far from the home, the workers cannot possibly go home in the middle of the day. Again, in Dundee there are a large number of married women workers, many of whom have children. They have to arrange for the day care of their children, and on their way to work have to take them to a day nursery or other place, and call for them on their way home at night. Further, certain of these women workers have a strong objection to long walks in the dark, and during the winter months they must go to and return from their work after daylight. If a tramway car is available, the cost of this

transport adds considerably to the rent of the house. Lastly, the cost of building in determining the rent to be demanded is of supreme importance.

Were such houses erected, careful consideration would, of course, have to be given to the type of house and kind of tenement. Again, we would have to consider the number of persons permitted to occupy them. As there are in Dundee at present a number of lower-class working dwellings occupied by families consisting of one, two, and three persons representing single working women, two working women living together, newly-married couples, &c., such families could be accommodated in these houses. Our object should be to let the provision of this last allocation coincide with a campaign against overcrowding and insanitary houses, the new houses providing for the overflow in the one case and providing alternative accommodation in the other.

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transport and consequently for the cost of the house  
to be built, the cost of building is estimated at \$100,000  
to be expended in all expenses connected with the same.

There are many other things which should be  
done to make the house more comfortable and to make  
it more attractive. Again, the cost of building  
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## *Tuberculosis.*

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### *Dr. Hunter's Report.*

Tuberculosis.

Dr. Hunter's Report.

But for one important change the work of this Department has been carried out on similar lines as in previous years, and results attained have been entirely satisfactory. The most cordial relations have existed between this Department and other Authorities concerned with the treatment of tuberculosis, such as the Education Authority, War Pensions Committee, and the Ministry of Pensions, with much mutual advantage.

On 1st January, 1921, the Local Authority assumed full responsibility for the treatment of all insured cases in the area. Formerly this responsibility lay with the National Health Insurance Commissioners, who had made arrangements with the Local Authority for treatment of the insured persons in the existing institutions belonging to the Local Authority. The change was completely effected without any inconvenience, and did not entail any great alteration in the administration of the scheme. Only in regard to the treatment of domiciliary cases was it found necessary to modify our scheme, and the system adopted has proved satisfactory to all concerned. This change was found necessary, as the payment of drugs and medical appliances now falls to be borne by the Local Authority.

I take this opportunity of recording my appreciation of the work done by the staffs in the various institutions. They have been most loyal in their services, keen and interested in their work, and have helped greatly in the very important work of this branch of the Public Health Department.

In the year 1921 :—

474 cases of tuberculosis were notified, 375 cases of pulmonary tuberculosis, and 99 cases of non-pulmonary tuberculosis. Of these :—

- 203 were discovered at the Dispensary.
- 164 were notified by private practitioners.
- 5 were notified by School Medical Officers.
- 9 were from the Eastern Hospital.
- 19 Notifications came from the Royal Infirmary.
- 16 Notifications came from the Convalescent Home, Barnhill.
- 4 Notifications came from Medical Officers outside the city.
- 54 cases came under the notice of the Department through the Registrar after death had taken place.

The ages and sex of these were as follows :—

		Males.	Females.	Total.
Under 1 year	...	9	5	14
1 to 5 years	...	21	8	29
5 to 15 years	...	39	64	103
15 to 25 years	...	49	70	119
25 to 45 years	...	81	58	139
45 to 65 years	...	39	21	60
65 and upwards	...	5	5	10
		<hr/> 243	<hr/> 231	<hr/> 474

The following are the particulars as regards housing :—

No. of rooms.	No. of cases.	Total No. of Inmates.	No. of Inmates per room.
1	80	244	3.05
2	267	1,332	2.71
3	69	408	1.97
4 and upwards	28	181	1.60

9 cases lived in public institutions.

6 cases lived in lodging-houses.

3 cases were notified from the Poorhouse with no other address.

4 cases could not be found at the address given.

8 cases were visited and found home conditions satisfactory.

367 houses have been disinfected on removal of patients and at time of death, as compared with 335 in 1920.

#### TUBERCULOSIS DISPENSARY.

During the year 616 new cases were enrolled, as compared with 803 in 1920. Of these, 203 were found to be suffering from distinct phthisis (103 males and 100 females)—114 were found not to have the disease. In 292 cases the signs were somewhat indefinite, but these cases were regarded as in the pre-tubercular stage; 7 cases were found to be suffering from other forms of tuberculosis.

There were 114 contacts examined, 16 of whom were found to be suffering from pulmonary tuberculosis, 69 were suspicious and are being kept under observation; the remaining 29 were found to be negative.

Of the 203 cases of definite phthisis 74 were previously notified, and 129 were notified from the Dispensary for the first time :—

The ages and sex of these cases were as follows :—

	Males.	Females.	Total.
1 to 5 years ...	5	1	6
5 to 15 years ...	18	30	48
15 to 25 years ...	24	31	55
25 to 45 years ...	40	34	74
45 to 65 years ...	16	4	20
65 and upwards ...	—	—	—
	<hr/> 103	<hr/> 100	<hr/> 203

The attendances at the Dispensary were as follows :—

	Insured.	Non-Insured.	Total.
January ...	1,129	397	1,526
February ...	1,273	417	1,690
March ...	1,227	582	1,809
April ...	1,128	377	1,505
May ...	1,100	296	1,396
June ...	1,056	276	1,332
July ...	895	157	1,052
August ...	1,114	290	1,404
September ...	1,228	334	1,562
October ...	1,003	534	1,537
November ...	1,217	464	1,681
December ...	1,338	348	1,686
Total ...	<hr/> 13,708	<hr/> 4,472	<hr/> 18,180

as compared with 13,911 in 1919 and 21,514 in 1920.

The occupations of those notified as suffering from pulmonary tuberculosis were as follows :—

Ball-tier ...	1	Housekeepers ...	3
Blacksmith ...	1	Housewives ...	31
Brushmakers ...	2	Hawkers ...	3
Boxmakers ...	2	Insurance Collector ...	1
Boilermaker ...	1	Jute Batchers ...	2
Bricklayer ...	1	Jute Preparers ...	40
Clerk ...	1	Jute Stamper ...	1
Clerkesses ...	4	Jute Stower ...	1
Calender Workers ...	6	Jeweller ...	1
Commissioner ...	1	Journalist ...	1
Chocolate Workers ...	2	Labourers ...	11
Draper ...	1	Lavatory Attendant ...	1
Draughtsman ...	1	Laundry Worker ...	1
Domestic Servants ...	4	Librarian ...	1
Electrician ...	1	Leather Beader ...	1
Engineers ...	2	Machinists ...	2
Grocers ...	2	Mason ...	1
Fruit Merchant ...	1	Message Boy ...	1
Hairdresser ...	1	Mechanic ...	1

Nurses	...	...	2	Spirit Dealer	...	...	1
Oiler	...	...	1	Shoemaker	...	...	1
Painter	...	...	1	Sister of Charity	...	...	1
Pattern-maker	...	...	1	Spinners	...	...	21
Platers	...	...	3	Stable-boy	...	...	1
Post-card Cutter	...	...	1	Stone Dresser	...	...	1
Postman	...	...	1	Student	...	...	1
Preserve Worker	...	...	1	Syrup Maker	...	...	1
Railway Guard	...	...	1	Tea Agent	...	...	1
Reelers	...	...	2	Tenter	...	...	1
Riveter	...	...	1	Teacher	...	...	1
Rover	...	...	1	Tinsmith	...	...	1
Salesmen	...	...	3	Tram-driver	...	...	1
Seamen	...	...	3	Traveller	...	...	1
School-boys	...	...	19	Twisters	...	...	2
School-girls	...	...	35	Tailor	...	...	1
Shifters	...	...	6	Vanman	...	...	1
Shop Assistants	...	...	3	Warders	...	...	2
Signalman	...	...	1	Watchman	...	...	1
Soldiers	...	...	73	Weavers	...	...	8

In 16 cases there was no occupation, and 12 patients were children under 4 years.

The occupations of those notified as suffering from non-pulmonary tuberculosis were as follows:—

Charwoman	...	...	1	Sewing-maid	...	...	1
Housewives	...	...	4	School-boys	...	...	18
Jute Preparers	...	...	2	School-girls	...	...	27
Jute Batcher	...	...	1	Shifters	...	...	2
Labourer	...	...	1	Shipwright	...	...	1
Machineman	...	...	1	Soldier	...	...	1
Mechanic	...	...	1	Spinners	...	...	4
Message-boy	...	...	1	Tenter	...	...	1
Mill Overseer	...	...	1	Typist	...	...	1
Oiler	...	...	1	Ward-maid	...	...	1
Riveter	...	...	1	Weavers	...	...	2

In 8 cases there was no occupation, and 16 patients were children under 4 years.

During the year the nurses paid 6,268 visits to the houses of notified cases of tuberculosis. Of these, 464 were new cases and 5,804 were revisits.

#### LABORATORY WORK.

During the year 463 specimens of sputum were examined, with the following results:—

	Positive.	Negative.
90 from General Practitioners	18	72
373 from Tuberculosis Dispensary	41	332

The numbers attending the Dispensary show a marked decrease, mainly amongst the insured cases. A variety of reasons contribute to this. The number of cases arising from war service has greatly diminished as one would expect, and this diminution will steadily increase from now onwards. During the war domiciliary treatment was practically in abeyance, and now, with the return to normal conditions of medical service, it is again being taken advantage of. These cases, who formerly attended the Dispensary, now attend their own doctors. But perhaps the greatest and most important cause, in my opinion, is the unemployment prevailing in the city. Rest is such an important factor in the course and treatment of tuberculosis that the unemployment and the short periods of work with long intervals of rest enable those so afflicted to carry on for much longer periods or indefinitely. Further, the Unemployment benefit is of greater value than the National Health Insurance benefit, and naturally is preferred when the patient feels able to hang on.

The number of contacts examined during the year shows no increase. This is a very important part of our work, but it is almost impossible to impress on the apparently healthy members of a family of contacts the need for such a procedure.

#### KING'S CROSS HOSPITAL.

During the year there were 148 cases admitted to this Institution. Of these, 66 were males and 82 females. 63 patients died (32 males and 31 females) and 91 were discharged, many of these greatly improved. On 1st January, 1922, there were 54 cases remaining in Hospital.

The ages of the fatal cases were :—

Age.	Males.	Females.
Under 1 year ...	—	—
1 to 5 years ...	—	—
5 to 15 years ...	1	2
15 to 25 years ...	10	11
25 to 45 years ...	10	11
45 to 65 years ...	10	7
65 and upwards ...	1	0

King's Cross Hospital shows, too, a reduction for the year, and for this I think the reasons given for the smaller number of Dispensary attendances hold good. This Institution is for the more advanced cases, who hold on for longer periods and only apply for treatment when absolutely forced to, and thus we have had cases of much more serious type admitted, more advanced and more acute, as these patients carried on longer before giving in, and the lack of proper nourishment consequent on unemployment reduced their resisting powers.

The questions of accommodation for the non-pulmonary cases is pressing. The number of cases is steadily increasing, and although a few are treated at Sidlaw Sanatorium, this Institution is mainly for early cases. The call is for the more advanced case, and as they require treatment for exceedingly long periods it is a very serious problem. In trying to meet this need, the beds for the pulmonary cases are encroached on. As the accommodation at present is just sufficient to provide for the pulmonary cases, the difficulties are materially added to to meet the needs of the non-pulmonary cases.

Again I would strongly urge the necessity for isolation wards. It would be a great boon to all concerned if they were provided.

#### ASHLUDIE SANATORIUM.

During the year there were 118 cases admitted to this Institution. Of these, 58 were males and 60 were females. 101 patients were discharged (54 males and 47 females). Average stay in Sanatorium, 116 days.

The following shows the result of treatment of those cases :—

		Very much Improved.	Improved.	Slight Improvement.	No Change.
Males	...	21	12	1	16
Females	...	14	13	2	15

4 males and 2 females were sent out for surgical treatment, and 1 female died before discharge.

Of these, 79 are still alive, and 22 have died since discharge.

The work carried out at Ashludie Sanatorium during the past year has given complete satisfaction. Our figures are less on account of the conditions now existing, but there has been a more settled spirit amongst the patients, and they have entered into the treatment with greater zeal and gone through the prescribed course with greater content, the greatest essentials for success. I would again point out how much more could be done to relieve the monotony of the sanatorium life by varying the type of work. At present there are the grounds and gardens, and these are only available in fine weather and certain seasons. In winter and bad days these cannot be used. If workshops were provided interesting work could be given at all times and seasons, and add greatly to the interest of the life of the patients during their sojourn there.

#### SIDLAW SANATORIUM.

During the year there were altogether 30 cases from the city under treatment in this Institution. Of these, 12 were males and 18 were females. There were 20 patients discharged (8 males and 12 females). Average stay in Sanatorium, 60 days.

The following table shows the result of treatment in these cases :—

Very much Improved.	Improved.	No Change.	No Arrested.	No Improvement.
1	9	2	6	2

On the agreement between the Local Authority and the Directors of Dundee Royal Infirmary being arrived at, the number of beds at the disposal of the Local Authority in this Institution has been increased from 7 to 15, the new conditions operating from 1st November, 1921.

I found these beds of the greatest value. The accommodation here is reserved for children of both sexes between the ages of five and twelve years suffering from all forms of tuberculosis who have been recommended

for institutional treatment, which has been approved of and sanctioned by me on behalf of the Local Authority, who are responsible for the maintenance of these cases. Thus a number of beds were released in other institutions, helping to meet the demand for accommodation of adult cases of both pulmonary and non-pulmonary types of tuberculosis.

I visited this Institution on several occasions, and was satisfied that the care of these cases was good, the treatment adequate, and the results obtained very satisfactory.

During the year 99 cases of non-pulmonary tuberculosis were notified. The age and sex were as follows :—

	Males.	Females.	Total.
Under 1 year ...	4	3	7
1 to 5 years ...	9	6	15
5 to 15 years ...	20	26	46
15 to 25 years ...	7	9	16
25 to 45 years ...	3	5	8
45 to 65 years ...	2	3	5
65 and upwards ...	1	1	2
	—	—	—
	46	53	99

The seats of the disease were as follows :—

Under 1 year—Meningitis, 3; Abdomen, 3; Glands, 1	Total	7
1 to 5 years—Meningitis, 4; Abdomen, 7; Joints, 1; Glands, 2; other forms, 1.	Total	15
5 to 15 years—Meningitis, 6; Abdomen, 8; Spine, 3; Joints, 8; Glands, 19; other forms, 2.	Total	46
15 to 25 years—Meningitis, 1; Abdomen, 5; Joints, 4; Glands, 5; other forms, 1.	Total	16
25 to 45 years—Abdomen, 1; Spine, 2; Joints, 3; Glands, 1; other forms, 1.	Total	8
45 to 65 years—Abdomen, 1; Spine, 1; Joints, 2; Glands, 1.	Total	5
65 & upwards—Joints, 1 other forms, 1.	Total	2
	Total ...	99

J. H. HUNTER, M.B., Ch.B., D.P.H.,  
Chief Tuberculosis Officer.

*Venereal Diseases Scheme.*

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REPORT

OF

*Dr. A. C. Profeit.*

# General Diseases

## REPORT

Dr. A. C. Profitt

## DUNDEE VENEREAL DISEASES SCHEME.

Report of Dr A. C. Profeit, Special Medical Officer under  
the Scheme, for the Year 1921.

During the year 1,654 new cases presented themselves for examination or treatment.

Of these 995 were males and 659 were females.

The attendances recorded were 21,419 for males and 14,039 for females. 4,012 doses of Neo-kharsivan were given to males and 2,210 to females.

As the accommodation provided is utterly inadequate for dealing with numbers such as these, good work cannot be done. I would strongly recommend the Town Council to proceed with their new building at an early date.

A. C. PROFEIT, M.D., D.P.H.

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REPORT OF THE A. C. BOWEN SPECIAL MEDICAL CLINIC  
ON THE SUBJECT OF THE YEAR 1911

During the year 1911 our work consisted mainly  
in the examination of patients.

The first case was a male and was a female.

The second case was a male and was a female.  
and the third case was a male and a female.  
and the fourth case was a male and a female.

As the number of cases increased it was found  
that the patients were coming from all parts of  
the country. I would like to mention that  
the first case was a male and the second case  
was a female.

A. C. BOWEN, M.D.

*Bacteriological Laboratory.*

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REPORT

OF

*Dr. William J. Tulloch.*

Bacteriological Laboratory.

REPORT

ON

DR. WILLIAM A. J. JACOBI.

REPORT OF WORK CARRIED OUT IN THE  
BACTERIOLOGICAL DEPARTMENT, UNIVERSITY  
OF ST ANDREWS, ON BEHALF OF THE DUNDEE  
PUBLIC HEALTH AUTHORITY,

From the 1st January, 1921, to the 31st December, 1921.

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The Report is presented in the same form as in previous years, but before proceeding to the Report itself I desire to call attention to the fact that during this year the department of bacteriology has been removed to commodious premises, and the equipment supplied by the University leaves little to be desired. This has made possible greater efficiency and smoother working of the department, so that work of public importance which could not be undertaken hitherto can now be carried on with ease.

The Report is divided into the following sections and sub-sections.

1. Control of Venereal Disease—

- (a) Control of Syphilis.
- (b) Control of Gonorrhœa.
- (c) Note on Educational Facilities of Laboratory.

2. Control of Communicable Diseases.

- (a) Diphtheria.
- (b) Enteric Fever.
- (c) Tuberculosis.
- (d) Dysentery.

3. Special Investigations—

- (a) Examination of fæces of patients who suffered from typhoid during the Cobden Street outbreak, 1919-20.
- (b) Examination of fæces from patients who suffered from dysentery during the Shiga bacillary outbreak of the previous year.
- (c) Examination of two cases of dysentery.
- (d) Investigation of milk to determine the degree of contamination.
- (e) Examination of two cases of suspected anthrax.
- (f) Investigation of cases of infantile diarrhœa at the Dundee Infant Hospital.
- (g) Investigation of cases of influenza at King's Cross Hospital.

## 1. Control of Venereal Diseases.

### (a) Control of Syphilis.

During 1921, 208 microscopical examinations were made for the presence of *Treponema Pallidum* in suspected syphilitic sores. Of these, 201 were sent from the V.D. Clinic and only 7 from private practitioners. While it is satisfactory that the number of direct examinations for the causal organism of the disease has increased during the year under consideration, nevertheless one must still note that few cases were sent by private practitioners. One feels that, notwithstanding the fact that this point has been called attention to before, a considerable number of cases in private practice remain undiagnosed for a period longer than is really necessary.

It is worthy of note that recent work by Levaditi in Paris indicates that the less obvious type of primary sore is that which is most liable to be followed by serious disturbances of the central nervous system, and, indeed, there is ground for believing that the causal micro-organism is divisible into two groups—a Neurotropic Group and a Dermotropic Group. The primary lesion in the former case is slight, and in the latter is severe, and the secondary lesions in the case of the former are atypical and may easily be missed. There is, therefore, an exceptionally cogent argument for the examination of all penile sores with a view to early and adequate treatment.

The ratio of direct microscopical examinations to indirect blood examinations is much the same as in 1919 and 1920, at least so far as the Clinic is concerned. For 1919 the ratio was 1 to 12; for 1920 it was 1 to 11, and for the present year it is about 1 to 10. The ratio is still too low, and can only be improved by some scheme whereby patients may be induced to present themselves for treatment as soon as possible. Again, I have to deplore the fact that the examination of primary sores in the female have been few, and while it will always be difficult to improve in this direction, I am certain that some improvement might be made. A point of some interest is that of the 208 cases examined microscopically 5 were cases of Syphilis Insontium, and in all but one of these the sore was situated on the lip.

During 1921, 4,084 Wassermann tests were carried out, this being an increase of more than 1,000 over the number for 1920, and, again, the increase is to be attributed to greater use being made of the laboratory by private practitioners and by institutions other than the treatment centre. In 1920, 401 tests were made on behalf of private practitioners; in 1921 this number increased to 575; while from institutions other than the treatment centre 670 specimens were submitted for examination in 1920, and in 1921 they amounted to 1,405.

During part of the period under consideration a considerable number of these tests have been done in triplicate, using three different methods of conducting the examination in order, in the first place, that the experimental error of any one of these methods might be adequately assessed; and in the second place, to elaborate if possible a quantitative method of conducting serological tests for the control of treatment of syphilis, for, owing to the complexity of the Wassermann reaction, it cannot be regarded as a wholly satisfactory method of determining the progress made by treatment. This work is still proceeding, and the result of the investigation will be communicated to the Medical Officer of Health as soon as an adequate statistic is available.

#### (b) Control of Gonorrhœa.

During 1921, 662 specimens were examined for the diagnosis of gonorrhœa. Of these, 505 were from the Clinic, 69 from private practitioners, and 88 from institutions other than the Clinic. So far as the control of gonorrhœa is concerned, the work of the laboratory in 1921 has been mainly concerned with research on the causal organism of the disease. A series of 100 consecutive strains of the gonococcus have been submitted to complete cultural and serological examination, and the result of this investigation has been to show that between 70% and 80% of cases of gonorrhœa are due to one serological type of the micro-organism. Several different serological groups are represented in the remaining group of between 20% and 30%. This observation makes possible the treatment of the disease upon a large scale with appropriate sensitised vaccine, and we are now in a position to prepare this should it be deemed necessary. This work has also cleared the ground for the elaboration of a serological method of diagnosing chronic gonorrhœa in the female, and the

second stage of the investigation made with a view to determining the value of such a test is at present going on, and it is hoped that during the current year not only will a method be elaborated, but the precise value of that method may be assessed.

(c) Educational Value of the Laboratory.

Another year's work has shown that the educational facilities offered by the laboratory to the profession in this area have not been made use of to the extent to which they might have been. Of course, it is recognised that a busy practitioner, unless he be especially interested in venereal disease, can but ill spare the time necessary for instruction in laboratory methods used in the control of venereal disease.

2. Examinations for the Control of Other Communicable Diseases.

(a) Control of Diphtheria.

During 1921 there has been no serious or widespread outbreak of diphtheria in Dundee, and the number of throat swabs examined was 470 during the period under consideration—429 were examined during 1920. The ratio of negative examinations to positive examinations remains much the same as in the previous year.

(b) Control of Enteric Fever.

A number of cases of enteric fever occurred in Dundee during 1921, but again the number is small, only 52 specimens of blood having been submitted for examination by the Widal method. Many of these proved negative. During the period under consideration 22 specimens of fæces were submitted for examination, this being a considerable reduction on the previous year, when such investigations numbered 118, but the 1920 figures were much increased owing to many examinations of fæces being made in early 1920 from cases that were infected during the Cobden Street outbreak. In this connection it is worthy of note that some of the positive results obtained in the investigation of fæces showed that the Para-typhoid-B bacillus remained responsible for the causation of a few isolated cases of enteric fever in this district.

(c) Control of Tuberculosis.

The number of specimens examined from cases in Dundee during 1921 was 280, being an increase of 153

over the previous year. Attention was called in the Report of 1920 to the importance of noting secondary infections in pulmonary tuberculosis, and during the past year work of this kind has been prosecuted by Dr Alexander, of King's Cross Hospital, who has treated the secondary infection in a number of cases by immunological methods. It has been our pleasure to assist Dr Alexander in this investigation, and the results which he has obtained are distinctly encouraging. For this purpose, too, a few vaccines have been prepared on behalf of patients in Ashludie Sanatorium.

### 3. Special Investigations.

- (a) Investigation of Fæces from Patients Infected with Typhoid during the Cobden Street Outbreak of November-December, 1919.

During 1921 re-examination was made of the fæces from 47 of those people who were found to harbour typhoid bacilli for some time during their convalescence from typhoid acquired during the epidemic of November-December, 1919. In none of these 47 cases was the typhoid bacillus isolated. It is worthy of note that although over two years have now elapsed since that epidemic not one case of typhoid has occurred in Dundee which could in any way be connected with it or attributed to a gem-carrier arising therefrom.

- (b) Examination of Fæces from Cases Infected during the Shiga Bacillary Dysentery Outbreak of September, 1920.

During 1921 the fæces from those patients who survived the outbreak of bacillary dysentery of 1920 were again submitted to bacteriological scrutiny during 1921. The examinations were negative, indicating that neither of the survivors had become a carrier.

- (c) Examination of Fæces for Dysentery Bacilli and *Entamoeba Histolytica*.

During 1921 only two specimens of fæces were submitted for examination for dysentery. Neither of these proved to contain dysentery bacilli or *entamoeba*.

- (d) During 1921, 16 specimens of milk were submitted for examination to determine the degree of contamination. These specimens showed a great range

of quality, and varied from frankly unsatisfactory specimens to specimens that would qualify as Grade A milk as defined by the American Public Health Authorities. It is satisfactory to note that among these specimens a number were submitted from the supply to King's Cross Hospital, and these were from the bacteriological point of view not merely good, but excellent.

(e) Examination of Two Cases of Suspected Anthrax.

Two cases of suspected anthrax occurred during the year under consideration; one of these proved to be positive, and early diagnosis allowed of administration of Sclavo's anti-anthrax serum at once. The case made an uninterrupted recovery. The other case of suspected anthrax proved to be negative, no anthrax bacilli being demonstrated.

(f) Investigation of Cases of Infantile Diarrhoea at Dundee Infant Hospital.

Fortunately, during 1921 there was no serious outbreak of infantile diarrhoea at this Institution, and only five specimens of fæces from suspected cases of this nature were submitted for examination. These did not show heavy infection either with *B. Welchii* or the *Proteus* Bacilli, which were found so frequently and in such large numbers in cases of a similar nature occurring at the same Institution during 1920.

(g) Investigation of Cases of Influenza at King's Cross Hospital.

At the request of the Medical Research Council, an examination was made of those cases of influenza admitted to King's Cross Hospital at the end of 1921 and the beginning of 1922. A report dealing with this work has already been forwarded to the Secretary of the Medical Research Council. Owing to the duration of the epidemic having been short, I was only able to investigate a limited number of cases, viz., 32. In 23 of these *B. Influenzæ* was recovered, and in many instances it was the only organism present in the secretions of the upper respiratory tract. While this finding does not necessarily mean that *B. Influenzæ* is responsible for the causation of that disease which we term "Influenza," nevertheless it does suggest that it is an important factor in the malady, if not as the causal organism, at least as a very frequent secondarily infecting micro-organism.

## *Child Welfare Scheme.*

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*Dr. Margaret Scott Dickson's Report;*

*also Reports by*

*Dr. Margaret Fairlie and*

*Dr. H. Gordon Campbell.*

# Child Welfare Scheme

The Honorable Lord Mayor of London

Dr. Margaret Evans and

Dr. H. E. Evans

## CHILD WELFARE SCHEME.

The general work of the Department has been carried out on the same lines as in 1920, no new clinics having been established.

In January, 1921, owing to the abnormal industrial conditions in Dundee, arrangements were made for co-operation between the Maternal and Child Welfare Department and the Special Relief Committees formed in the town to assist persons in temporary distress owing to unemployment. These Committees referred to the Department all cases in which the welfare of children under 5 years, or of nursing or expectant mothers was concerned. At first these cases were seen personally by the medical staff, but the numbers increased so rapidly this became impossible, and on 4th April, 1921, a special almoner (Miss May M'Gregor) was appointed to deal with them. Miss M'Gregor attends at all the Centres in Dundee on two occasions each week at a time other than that at which the regular clinic is held. At the first attendance she takes down all particulars on a special form, and these forms are given to the Medical Officer, who considers each case and states in writing the form and amount of help to be given in accordance with a scale, determined by a small Sub-Committee of the Public Health Committee. On the second attendance the almoner issues the necessary tickets. An interval not less than one clear day is provided between these two attendances in order that the Medical Officer may institute inquiries in any case where the particulars given are vague or doubtful, all such doubtful cases being considered by the Sub-Committee mentioned.

The Municipal Relief Committees ceased to operate in July, but the Child Welfare Relief Scheme has continued on the same lines all the year. In the case of Broughty Ferry, applications are made to the health visitor at the Weighing Centre each week, and the tickets, when granted, are distributed by her in the course of her visiting.

The attendances at the Clinics do not show the marked increase in numbers as in the previous year.

This can be accounted for in two ways. First, the accommodation at all the Clinics is already taxed to the uttermost, and it is quite impossible to deal with larger numbers unless more sessions could be arranged, which could not be done unless an increased medical and nursing staff was available. Second, since the Relief Scheme was started an increasing number of the more careless mothers have ceased attending the Clinics, and apply instead to the almoner for material assistance. This result was anticipated by all the staff; and it is much to be regretted, as it hinders the work which is the objective of the Maternal and Child Welfare Department, as it increases the difficulty of supervision of the very mothers who are most in need of guidance and education.

Home visiting to all notified cases of ophthalmia neonatorum has been continued as before, as also the ordinary home visiting of newly-born babies, cases of measles, whooping-cough, &c. The staff now consists of 1 Superintendent Health Visitor, who acts as Assistant Inspector of Midwives, 9 ordinary health visitors, 1 almoner, and 1 clerkess.

Three health visitors resigned during the year—one on account of ill-health, one for private family reasons, and one to take up an appointment in the army.

## REPORT OF CASES ADMITTED TO THE CLINICS.

## ATTENDANCES.

CLINIC.	Babies.		Children 1 to 5 Years.			Mothers.				Total.
	V.1.	V.2.	V.1.	V.2.	V.3.*	V.1.		V.2.		
						A.N.	P.N.	A.N.	P.N.	
Victoria Road -	417	3433	59	125	979	4	13	1	9	5040
Lochee - -	165	1592	28	97	854	3	11	5	4	2759
Caldrum Street -	121	1284	19	133	450	1	4	1	5	2018
Princes Street -	169	1431	33	96	465	...	12	1	15	2222
Blackness Road	273	2524	40	77	1155	2	7	1	3	4082
Broughty Ferry Weighing Cen.	36	583	5	10	254	...	...	...	...	888
Dental Clinic -	2	2	13	12	...	11	22	14	85	161
Special Clinic for Mothers - -	...	...	...	...	...	110	93	104	152	459
	1183	10849	197	550	4157	131	162	127	273	17,629
Relief Cases—1st Visits 1,319.						Revisits, 6,981				8300
						Total				25929

V3\* Visits of children between 1 and 5 years of age who have been admitted as babies and are still attending.

## CASES ADMITTED TO HOSPITAL FROM THE CLINIC.

Hospital.	Babies.	Children 1-5 Years.	Total.
Infant Hospital - - - -	48	18	66
Dundee Royal Infirmary - -	...	6	6
King's Cross Hospital - - -	...	2	2
St. Leonard's Convalescent Home	...	5	5
Comerton Home - - - - -	...	2	2

	Babies.	Children 1-5 Years.	Total
Died -	90	53	143
Left Town	12	16	28

Statistics as to weight of babies on admission to the 5 principal centres with reference to feeding :—

	Av. (1)	- (2)	+ (3)	Not Weighed.	TOTAL.
Entirely Breast-fed	25 3·612%	173 25%	482 69·653%	12 1·734%	692 99·999%
Partly breast-fed	2 3·030%	28 42·424%	34 51·515%	2 3·030%	66 99·999%
Breast-fed for 1-4 months	4 2·631%	83 54·605%	59 38·815%	6 3·947%	152 99·998%
Fresh Cow's milk	4 4·902%	58 56·862%	36 35·294%	3 2·941%	102 99·999%
Dried milk or artificial food	9 6·766%	70 52·631%	53 39·849%	1 0·751%	133 99·997%
	45 3·930%	412 35·982%	664 57·991%	24 2·096%	1145 99·999%

(1) Av. = Average weight for age. (2) - = Under average weight for age.  
(3) + = Over average weight for age.

Statistics as to weight of babies on admission with reference to :—

A. Sex B. Age, Sex and Employment of Mothers in Industrial Occupations.

(A). SEX.

	Average weight.	Un. average weight	Over average weight	Not weighed	Total.
Male	24 4·074%	183 31·069%	371 62·987%	11 1·867%	589 99·997%
Female	21 3·776%	229 41·187%	293 52·697%	13 2·337%	556 99·997%
	45 3·930%	412 35·982%	664 57·991%	24 2·096%	1145 99·999%

Statistics as to weight of babies on admission with reference to employment of mothers in industrial occupations, arranged with reference to sex and age on admission :—

## (a) MALES.

Age.	Average Weight.	Un. aver- age weight	Over aver- age weight	Not weighed.	TOTAL.	
Un. 1 mth.* (w)	5	14	50	1	70	128
	7.142%	20%	71.428%	1.428%	99.998%	
† (o)	3	10	45	0	58	
	5.172%	17.241%	77.586%	—	99.999%	
1-3 months (w)	5	36	93	6	140	271
	3.571%	25.714%	66.428%	4.285%	99.998%	
(o)	3	49	79	0	131	
	2.290%	37.404%	60.305%	—	99.999%	
3-6 months (w)	2	19	38	2	61	128
	3.278%	31.147%	62.295%	3.278%	99.998%	
(o)	1	28	37	1	67	
	1.492%	41.791%	55.223%	1.492%	99.998%	
6-12 months (w)	3	15	17	0	35	62
	8.571%	42.857%	48.571%	—	99.999%	
(o)	2	12	12	1	27	
	7.407%	44.444%	44.444%	3.703%	99.998%	
All ages (w)	15	84	198	9	306	589
	4.901%	27.451%	64.705%	2.941%	99.998%	
(o)	9	99	173	2	283	
	3.180%	34.982%	61.130%	.707%	99.999%	
TOTAL.	24	183	371	11	589	
	4.074%	31.069%	62.987%	1.867%	99.997%	

## (b) FEMALES.

Age.	Average Weight.	Un. aver- age weight	Over aver- age weight	Not weighed	TOTAL.	
Un. 1 mth. (w)	4	29	52	2	87	131
	4.597%	33.333%	59.770%	2.298%	99.998%	
(o)	2	11	30	1	44	
	4.545%	25%	68.181%	2.272%	99.998%	
1-3 months (w)	7	41	68	3	119	232
	5.882%	34.453%	57.142%	2.521%	99.998%	
(o)	5	40	65	3	113	
	4.424%	35.398%	57.522%	2.654%	99.998%	
3-6 Months (w)	0	29	32	1	62	125
	—	46.774%	51.612%	1.612%	99.998%	
(o)	3	35	25	0	63	
	4.761%	55.555%	39.682%	—	99.998%	
6-12 months (w)	0	23	9	3	35	68
	—	65.714%	25.714%	8.571%	99.999%	
(o)	0	21	12	0	33	
	—	63.636%	36.363%	—	99.999%	
All ages (w)	11	122	161	9	303	556
	3.630%	40.264%	53.135%	2.970%	99.999%	
(o)	10	107	132	4	253	
	3.952%	42.292%	52.173%	1.580%	99.997%	
TOTAL.	21	229	293	13	556	
	3.776%	41.187%	52.697%	2.337%	99.997%	

\* (w) = Working, i.e., habitually engaged in industrial work continued for at least part of the period of pregnancy.

† (o) = Not habitually engaged in industrial work, and not working during pregnancy.

These tables are specially interesting when compared with the similar tables for 1920, if considered in conjunction with the industrial conditions prevailing in 1921. In 1920 the percentage of well-nourished babies was markedly higher in the cases in which the mother had **not** worked during pregnancy, while in 1921 exactly the reverse has been found to be the case.

The inference is, that, in most of the cases, owing to the general unemployment, the fathers' work has been irregular; and the consequent straitened financial circumstances of the family has told most heavily on the expectant mother. Where she has been able to obtain employment herself, the added income available has lessened the difficulty of providing sufficient food for the family; and the child of the working mother has in consequence been better nourished than the child of the mother who was unable to obtain work.

Health of Babies on Admission:—

Not examined	...	...	3	—	0.3%
No disease or defect	...	146		—	12.7%
One disease or defect	...	314	(314 diseases)	—	27.4%
Two diseases or defects	...	327	(654 "	)	28.6%
Three diseases or defects	...	209	(627 "	)	18.3%
Four diseases or defects	...	94	(376 "	)	8.2%
Five diseases or defects	...	38	(190 "	)	3.3%
Six diseases or defects	...	11	( 66 "	)	0.9%
Seven diseases or defects	...	2	( 14 "	)	0.2%
Eight diseases or defects	...	1	( 8 "	)	0.1%
<hr/>					
1,145 (2,249 diseases)—100%					

Statistics showing relation of feeding to special diseases of nutrition:—

	Not Exam.	No Disease.	Rickets.	Marasmus.	Anæmia.	Digestive Diseases.	Other Diseases	Total.
Wholly breast-fed	2 0.3%	102 14.7%	1 0.1%	8 1.2%	5 0.7%	328 47.4%	246 35.6%	692 100%
Partly breast-fed	0 ...	8 12.1%	0 ...	0 ...	0 ...	35 53%	23 34.9%	66 100%
Breast-fed for 1-4 mths.	1 .7%	17 11.2%	1 .7%	6 3.9%	1 .7%	87 57.2%	39 25.6%	152 100%
Fresh Cow's Milk	0 ...	9 8.8%	0 ...	9 8.8%	0 ...	61 59.8%	23 22.6%	102 100%
Dried Milk or Artificial Food	0 ...	10 7.5%	1 .8%	4 3.0%	0 ...	77 57.9%	41 30.8%	133 100%
Totals	3 .3%	146 12.8%	3 .3%	27 2.3%	6 .5%	588 51.3%	372 32.5%	1145 100%

## Table of diseases observed on admission :—

Diseases of the Digestive System	...	...	939
Diseases of the Respiratory System	...	...	290
Diseases of Nutrition—			
Anæmia	...	...	6
Marasmus	...	...	27
Rickets	...	...	3
Cong. Syphilis	...	...	36
Debility after Pneumonia	...	...	1
			73
Diseases of the Skin	...	...	314
Diseases of the Eye	...	...	59
Diseases of the Ear, Nose, and Throat	...	...	10
Surgical Diseases	...	...	28
Nervous Diseases	...	...	2
Infectious Diseases	...	...	9
Congenital Defects	...	...	483
Various	...	...	42
			2,249

## CHILDREN 1-5 YEARS.

189 children between the ages of 1 and 5 years were admitted to the five principal centres, 89 being males and 90 females.

## MALES.

Of the 89 males admitted :—

3 (3.4%)	were suffering from no disease or defect	
25 (28.1%)	„ „ one „	(25 diseases)
37 (41.6%)	„ „ two diseases or defects	(74 „ )
15 (16.8%)	„ „ three „	(45 „ )
7 (7.9%)	„ „ four „	(28 „ )
2 (2.2%)	„ „ five „	(10 „ )
89 (100%)		(182 „ )

## FEMALES.

Of the 90 females admitted :—

1 (1.1%)	was suffering from no disease or defect	
40 (44.5%)	were „ one „	(40 diseases)
34 (37.8%)	„ two diseases or defects	(68 „ )
11 (12.2%)	„ three „	(33 „ )
4 (4.4%)	„ four „	(16 „ )
90 (100%)		(157 „ )

## CHILDREN 1-5 YEARS.

## Classification of diseases observed on admission :—

				Males (89).	Females (90).	Total (189).
Diseases of Digestive System	...			13	22	35
Diseases of Respiratory System	...			27	26	53
Diseases of Nutrition—						
Rickets	...	...	...	29	28	57
Anæmia	86	...	...	2	2	4
Debility		...	...	8	9	17
Marasmus		...	...	3	5	8
Diseases of Nervous System	...			3	0	3
Diseases of Skin	...	...	...	22	25	47
Diseases of Eye	...	...	...	7	11	18
Diseases of Ear, Nose, and Throat—						
Adenoids	...	23	...	10	4	14
Enlarged Tonsils	...		...	2	2	4
General	...		...	1	4	5
Infectious Diseases—						
Whooping-Cough	...	6	...	1	1	2
Measles	...		...	1	0	1
T.B. Peritonitis	...		...	0	2	2
T.B. Dis. of Ankle Bone	...		...	0	1	1
Congenital Defects	...	...	...	32	3	35
Surgical Diseases	...	...	...	14	5	19
Intestinal Parasites	...	...	...	2	0	2
Various	...	...	...	5	7	12
Totals				182	157	339

## CONSULTATIONS FOR MOTHERS.

57 mothers attended the five principal centres, of which 10 were ante-natal cases and 47 were post-natal cases.

## Of the 10 ante-natal cases—

1 (10%)	was suffering from one disease	(1 disease)
5 (50%)	were „ „	two diseases (10 diseases)
4 (40%)	„ „ „	three „ (12 „ )
10 (100%)		(23 diseases)

## Of the 47 post-natal cases—

22 (47%)	were suffering from one disease	(22 diseases)
18 (38%)	„ „ „	two diseases (36 „ )
6 (13%)	„ „ „	three „ (18 „ )
1 (2%)	was „ „	four „ ( 4 „ )
47 (100%)		(80 diseases)

## CLASSIFICATION OF DISEASES OBSERVED ON ADMISSION.

						Ante-Natal Cases.	
Diseases of Pregnancy	...	...	...	...	...	4	
Gynecological Diseases	...	...	...	...	...	0	
Venereal Diseases—							
Gonorrhœa	...	...	...	...	...	0	
Syphilis I.	...	...	...	...	...	0	
„ II.	...	...	...	...	...	1	
Diseases of Genito-Urinary System	...	...	...	...	...	1	
„ Digestive System	...	...	...	...	...	10	
„ Respiratory System	...	...	...	...	...	1	
Various ...	...	...	...	...	...	6	
						—	
						23	
						—	

						Post-Natal Cases.	
Gynecological Diseases	...	...	...	...	...	2	
Venereal Diseases—							
Gonorrhœa	...	...	...	...	...	0	
Syphilis I.	...	...	...	...	...	0	
„ II.	...	...	...	...	...	1	
Diseases of Genito-Urinary System	...	...	...	...	...	3	
„ Digestive System	...	...	...	...	...	22	
„ Respiratory System	...	...	...	...	...	3	
„ Nervous System	...	...	...	...	...	2	
„ Skin	...	...	...	...	...	1	
Surgical Diseases	...	...	...	...	...	8	
Debility	...	...	...	...	...	19	
Anæmia	...	...	...	...	...	1	
Various	...	...	...	...	...	18	
						—	
						80	
						—	

## ATTENDANCES AT DAY NURSERIES.

Day Nursery.	New Cases Admitted.			Total Attendance.			Average Daily Attendance.			No. of Days Open.
	Babies Under 2.	Toddlers 2-5 years.	Total.	Babies Under 2.	Toddlers 2-5 years.	Total.	Babies Under 2.	Toddlers 2-5 years.	Total.	
St George's	29	13	42	2317	1705	4022	8	6	14	288
Hillbank	22	25	47	1400	1965	3365	5	7.5	13	263
Isles' Lane	31	13	44	1634	578	2212	7	2	9	236
Lilybank	19	12	31	1531	531	2061	6	2	8	270
	101	63	164	6882	4778	11660	26	18	44	Average 264 Days

## PROVISION OF FREE FOOD FOR NECESSITOUS CASES.

Food Supplied.	Sold at Cost Price.	GIVEN FREE.			
		CLINIC.		RELIEF COMMITTEE.	
		No. of Cases.	Amount Given.	No. of Cases.	Amount Given.
Glaxo - - - -	4071 lbs.	76	1452½ lbs.	46	515 lbs.
Allen & Hanbury's -		1	5 „	...	...
Bengers' - - -		4	9 „	...	...
Horlick's Malted Milk	0	0	0	1	19 lbs.
Chymol - - - -	53 tins	24	156 tins	...	...
Virol - - - - -	450 „	17	109 „	...	...
Dairy Milk - - -	...	292	54,543 pts.	936	130,308½ pts.
Assisted Milk - -	Part of cost paid by Dept.	32	9,412 „	11	711 „

## DINNERS.

	Paid.	Free.			No. of Cases receiving Free Dinners.			Av. Daily Attend.	No. of days open.
		Clinic	R. C.	Total.	Clinic	R. C.	Total.		
Blackcroft -	3673	1831	3276	8780	28	56	84	30	297
Lochee - -	3086	2526	714	6326	29	18	47	21	297
Private Rests	...	4975	12561	17536	67	281	348	58	303
	6759	9332	16551	32642	124	355	479	109	Av. = 299

## SCHOOL FOR MOTHERS.

Members of the Dundee Voluntary Health Workers' Association again conducted a Sewing Class for Mothers in connection with each Clinic. Owing to the financial straits of many of the mothers arising out of unemployment the attendances at some of these classes were very irregular, as many of the mothers who might otherwise have attended were quite unable to pay even the small price charged for material to make new garments. For this reason the classes at Blackness Road and at Broughty Ferry were discontinued after March. As in 1920, the mothers attending the Princes Street Class showed great enthusiasm, and gave an excellent display of the work done at the close of the first session, at which prizes were given for the best garment made and embroidered entirely by the mother herself at the class.

By the kind permission of Miss Batting, this class was held in Grey Lodge Hostel, as the accommodation at the Clinic was too limited for the numbers attending;

and the classes were continued all summer in the garden of the Hostel, to which the mothers brought their household sewing and mending to do under the supervision of the workers, who looked after the babies and children while the mothers worked.

SESSION : JANUARY-MARCH, 1921

Clinic.	Number of Classes held.	Duration of each Class.	Total Number on Roll.	Average Attendance.	Approximate Number of garments made.	Special Teaching of Mothers and General Remarks.
Victoria Road -	13	1½ hrs.	28	14	43	Cutting out, sewing, machining, re-making
Lochee -	13	2 hrs.	12	10	50	Do.
Caldrum Street -	13	1½ hrs.	7	4	13	Do., with knitting.
Princes Street -	13	2 hrs.	59	32	200	Do., with knitting, darning, mending, embroidery.
Blackness Road -	...	...	...	...	...	No Report received as attendances were very irregular owing to distress due to unemployment.
Broughty Ferry -	5	2 hrs.	19	3	4	Attendances too irregular to undertake organised teaching, so class was discontinued

SESSION : OCTOBER-DECEMBER, 1921.

Victoria Road -	12	1½ hrs.	22	13	69	As above
Lochee -	14	2 hrs.	10	8	...	Owing to unemployment most of work done was re-making.
Caldrum Street -	11	1½ hrs.	20	5	19	As above, a large number of mothers did not return after the opening day as they thought the classes were Demonstrations only, and did not expect to buy material or work themselves.
Princes Street -	13	2 hrs.	62	28	200	As above, attendance irregular owing to unemployment.
Blackness Road -	...	...	.	..	...	Class discontinued owing to unemployment.
Broughty Ferry -	...	...	...	...	...	Do.

SOCIAL WORK.

In addition to conducting the Sewing Classes, the members of the Dundee Voluntary Health Workers' Association have again rendered valuable assistance to the work of the Department by helping at the Clinics, making garments for the babies and children, and visiting the Day Nurseries.

Special praise must be given to those who helped at the Clinics for the unfailing regularity of their attendance and the faithfulness with which they fulfilled the duties allotted to them, which were often rendered difficult and fatiguing by the large numbers attending.

341 sewed and 598 knitted garments were made during 1921, and of these 373 were sold to the mothers at the Clinics at cost price, 24 were sold at half cost price, 20 were sold at a quarter cost price, and 320 were given free in necessitous cases. 320 garments were made for the Day Nurseries.

The members of the Association and their friends again kindly provided a Christmas Tea and Entertainment for the Dundee mothers and another for the Broughty Ferry mothers, as well as a Christmas Tree and presents of garments and toys for the children attending the Day Nurseries.

Prizes of garments were also again given to the mothers with the most regular attendance at the Clinics.

Several students from the Dundee School of Social Study have also assisted at the Clinics throughout the year, such work forming part of their practical course of training.

#### NOTIFICATION OF BIRTHS ACT.

Particulars of notification of births received by the Maternity and Child Welfare Department, corrected by comparison with the number of births given to the Department by the Registrars:—

Notified in 1921 ... ..	4,396	
Unnotified in 1921 ... ..	374	
	<hr/>	4,770
Notified but not Registered till 1922 ...	143	
Still-births (notified but not registered)	216	
Landward (notified but not registered)	14	
	<hr/>	373
		<hr/>
		4,397
Born in other Towns (registered in Dundee) ... ..	30	
Notified in 1920, but Registered in 1921	118	
	<hr/>	148
		<hr/>
Total Number received from Registrars	4,545	<hr/>

## NOTIFICATIONS.

By whom Notified.	Notified.	Un-notified.	Total.	Total Cases Attended.
Doctors ... ..	610	343	953	1,419
Midwives ... ..	2,120	6	2,126	2,129
Maternity Hospital	1,186	14	1,200	1,206
Handywomen ... ..	5	11	16	16
Parents ... ..	311	—	311	—
Other Sources ... ..	164	—	164	—
Total	4,396	374	4,770	4,770

## OPHTHALMIA NEONATORUM.

193 cases of ophthalmia neonatorum were notified during 1921 :—

	Doctors.	Mid-wives.	Maternity Hospital.		Handy Women.	Dr. and Midwife.	C.W. Dept.	Eye Inst.	Total.
			In Pat.	Out-Pat.					
By whom notified - -	13	26	21	113	0	9	6	5	193
By whom attended - -	16	37	24	116	0	0	...	..	193
Total No of Births attended in 1921	1419	2129	1206		16	...	...	...	4770

## TREATMENT AND RESULT OF TREATMENT.

Admitted to Hospital.		Type of Case.		Complete Recovery	Injury to Eye.	Died during Treatment.	Initial Visits.	Re-visits.
King's Cross Hospital.	Eastern Hospital.	Mild.	Severe					
4	3	166	27	189	...	4	193	1235

There were 3 cases of purulent conjunctivitis in older children notified during the year. 1 case was notified by a doctor and 2 cases by the Eye Institution. One case was admitted to King's Cross Hospital for treatment.

## DEATHS OF WOMEN FROM DISEASES AND ACCIDENTS CONNECTED WITH PREGNANCY AND CHILDBIRTH.

There were 16 deaths of women under this heading, as follows :—

- 10 Puerperal Sepsis.
- 1 Abortion.
- 1 Eclampsia.
- 1 Pulmonary Tuberculosis.
- 1 Toxæmia.
- 1 Pulmonary Embolism.
- 1 Myocardial Degeneration.

17 cases of puerperal sepsis came under the notice of the Maternity and Child Welfare Department, of which 10 died and 7 recovered.

#### PUERPERAL CASES.

Attendant at Birth.	Total No. of births attended in 1921.	Total No. of cases of puerperal sepsis.	Notified.	Un-notified.	Multipara.	Primipara.	Admitted to Hospital.	Died.	Recovered.
Maternity Hospital—									
In-patient (a) - - -	1206	2	1	1	2	..	0	2	0
Out-patient (b) - - -		1	1	0	1	...	1	1	0
Doctors (c) - - - -	1419	4	3	1	2	2	3	3	1
Midwives (d) - - - -	2129	9	8	1	6	3	7	4	5
Doctor and Midwife (e) - -	...	1	1	0	0	1	0	0	1
Handy-women - - - -	16	0	0	0	0	0	0	0	0
Total - - - -	4770	17	14	3	11	6	11	10	7

(a) 2 cases of instrumental delivery. (b) 1 case complicated by broncho-pneumonia. (c) 1 case of instrumental delivery before admission, and 1 case of premature macerated foetus. (d) 2 deaths complicated by septic pneumonia. (e) 1 case of localised sepsis round perineum.

#### HOME CONDITIONS IN DEATHS FROM PUERPERAL SEPSIS.

Of the 10 cases—

2 were delivered in the Maternity Hospital. Home conditions—1 good, 1 bad.

8 were delivered at home, and admitted later to Maternity Hospital. Home conditions—4 good, 4 bad.

#### HOME CONDITIONS OF THOSE WHO RECOVERED FROM PUERPERAL SEPSIS.

Of the 7 cases, all of which were delivered at home—

3 cases were admitted to Hospital. Home conditions—3 good.

4 cases nursed at home. Home conditions—4 good.

#### INFANT DEATH STATISTICS.

151 deaths occurred in children over 1 year and under 5 years.

509 deaths occurred in infants under 1 year, distributed as follows:—

1st week.	2nd week.	3rd week.	4th week.	1-3 mths.	3-6 mths.	6-9 mths.	9-12 mths.	Total.
131	38	26	26	94	68	63	63	509

Of these 209 were breast fed.

38 were mixed fed (partly breast).

151 were artificially fed.

In 72 cases feeding was not commenced due to prematurity.

11 cases no particulars were available.

28 cases were not visited.

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509

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Regarding feeding, the ages at which these infants died were as follows:—

	1st Month	2nd Month	3rd Month	4th Month	5th Month	6th Month	7th Month	8th Month	9-12 Months	Total	Prem.	N.V.	N.P.
Breast ...	91	33	16	10	7	9	11	7	25	209	72	28	11
Mixed ...	4	5	6	4	3	4	1	2	9	38	...	...	...
Artificial ...	28	23	22	14	9	8	11	10	26	151	...	...	...
	123	61	44	28	19	21	23	19	60	398	72	28	11

#### HOUSING.

In the case of 470 of the deaths in which particulars were obtained—

151 occurred in houses of one room in which were 470 occupants.

265 occurred in houses of two rooms in which were 1,281 occupants.

32 occurred in houses of three rooms in which were 180 occupants.

14 occurred in houses of four rooms in which were 70 occupants.

8 occurred in lodging-houses.

#### FAMILY HISTORY.

The family history showed that in these families 755 children were still alive, that 722 had died, and of these no fewer than 613 had died in the first year of life.

In the 470 cases in which particulars were obtained, 184 mothers were engaged in work outside their own homes, and 286 were not thus employed.

In 24 cases the mother left work 1 week before confinement.

In 16 cases the mother left work 2 weeks before confinement.

In 3 cases the mother left work 3 weeks before confinement.

In 4 cases the mother left work 4 weeks before confinement.

65 children who died were illegitimate (12.77%).

62 children who died were twin-births (12.18%).

118 deaths were due to prematurity (23.18%).

## A SPECIAL INQUIRY INTO DEATHS FROM DIARRHOEA.

69 deaths occurred from diarrhoea during 1921.  
Of these—

- 26 were breast fed.
- 5 were mixed fed (partly breast).
- 36 were artificially fed.
- 1 was not visited.
- 1 where no particulars were available.

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	1st Month	2nd Month	3rd Month	4th Month	5th Month	6th Month	7th Month	8th Month	9-12 Months	Total	N.V.	N.P.
Breast ... ..	3	7	4	1	4	1	1	1	2	26	1	1
Mixed ... ..	0	0	0	0	1	2	1	0	1	5	...	...
Artificial ... ..	1	6	5	7	3	5	2	3	4	36	...	...
	6	13	9	8	8	8	4	4	7	67	1	1

The family history showed that in these families 123 children were still alive, 122 had died, and of these no fewer than 108 had died in the first year of life.

29 mothers had worked during pregnancy, and 38 were not engaged in outside employment.

6 mothers left work during the last four weeks of pregnancy, as follows :—

- 3 left work two weeks before confinement.
- 1 left work three weeks before confinement.
- 2 left work four weeks before confinement.

## HOUSING.

Of the 69 deaths from diarrhoea in which particulars were obtained—

24 occurred in houses of one room in which were 81 occupants.  
37 occurred in houses of two rooms in which were 205 occupants.

3 occurred in houses of three rooms in which were 19 occupants.

2 occurred in houses of four rooms in which were 14 occupants.

1 occurred in lodgings.

1 case was not visited.

1 case where no particulars were available.

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69

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## HEALTH VISITORS' WORK.

	Initial Visits.	Re-Visits.	Total.
Newly born ... ..	4,210	16,042	20,252
Measles ... ..	454	72	526
Whooping-Cough ... ..	427	211	638
Chickenpox ... ..	5	1	6
Ophthalmia Neonatorum ...	193	1,235	1,428
Broncho-Pneumonia ...	8	18	26
Puerperal Fever ... ..	17	0	17
Total	5,314	17,579	22,893

Of the 4,210 homes of the newly-born infants visited for the first time the home conditions were as follows :—

258 were very good.  
2,007 were good.  
1,743 were medium.  
202 were bad.

### Report on the Ante-Natal Clinic by Dr Margaret Fairlie.

The Report of the second year of the Ante-Natal Clinic shows a considerable increase in the numbers of women attending. At first post-natal cases up to one year were examined, but now owing to the greater number of ante-natal patients taking advantage of the Clinic it has been decided to limit the number of the former.

It is satisfactory to find that many of the certified midwives are sending their cases if they are in any doubt about them, and if there are any special instructions for the patient the midwife is at the same time notified.

#### Total Number of Visits—

New Cases	...	...	...	203
Revisits	...	...	...	256
				— 459

#### New Cases—

Ante-Natal	...	...	...	110
Post-Natal	...	...	...	93
				— 203

#### Revisits—

Ante-Natal	...	...	...	104
Post-Natal	...	...	...	152
				— 256

## ANALYSIS OF CASES—

## ANTE-NATAL.

Advice (no disease) ... ..	16
Conditions due to Pregnancy—	
Ante-Partum Hæmorrhage ...	2
Excessive Vomiting ... ..	14
Oedema ... ..	2
Prolapse, &c. ... ..	3
Conditions aggravated by Pregnancy—	
Varix ... ..	15
Hæmorrhoids ... ..	4
Conditions complicating Pregnancy—	
Retroversion of Gravid Uterus ...	5
Excessive Discharge ... ..	2
Contracted Pelvis ... ..	1
Cystitis and Dysuria ... ..	7
Constipation ... ..	17
Myalgia, &c. ... ..	6
Cardiac ... ..	2
Dental Caries ... ..	3
Anæmia ... ..	5
Respiratory ... ..	2
Various ... ..	2
Venereal Diseases—	
Syphilis ... ..	1
Gonorrhœa ... ..	1
	—
Total	110
	==

## POST-NATAL.

Advice (no disease) ... ..	5
Retroversion ... ..	7
Prolapse ... ..	6
Ruptured Perineum ... ..	3
Subinvolution ... ..	10
Cervical Erosion and Discharge ...	7
Menorrhagia, Metrorrhagia ... ..	4
Debility during Lactation ... ..	20
Menstruation during Lactation ...	1
Constipation ... ..	13
Cracked Nipples ... ..	1
Hæmorrhoids ... ..	2
Anæmia ... ..	4
Repeated Miscarriage (Wassermann Negative) ... ..	2
Urethral Caruncle ... ..	1
Skin Diseases ... ..	2
Various ... ..	3
Venereal Diseases—	
Syphilis ... ..	2
	—
Total	93
	==

### Dental Clinic.

I beg to submit my Annual Report for the year 1921. On the whole, considering the short time that the Clinic has been in operation, the attendances have been fairly satisfactory; but I cannot help feeling that the mothers attending the general Clinic do not yet realise the importance of dental treatment, and accordingly fail to take advantage of the benefits the Dental Clinic provides.

If it could only be brought home to the expectant mother how vitally essential it is both for herself and her child to have a healthy mouth and teeth, I feel convinced that many more patients would attend.

Unfortunately many of the patients' teeth have been allowed to reach such a stage that conservative treatment is no longer possible, extraction of all the remaining teeth in many cases being the only possible treatment. As at present there is no scheme available whereby artificial dentures can be provided in such cases, the patients are often satisfied to remain untreated, contenting themselves by going on masticating with the decayed and too often septic teeth which they possess.

I strongly recommend that some scheme should be formulated whereby mothers, whose teeth it is found necessary to extract, should be at any rate assisted to obtain dentures.

I would like to thank Dr Scott Dickson and Dr Margaret Fairlie for their sustained interest, and Nurse Jamieson for the valuable and courteous assistance she gives to the patients and to the welfare of the Clinic generally.

The following are the details of the treatment at the Clinic :—

Permanent Extractions.	Temporary Extractions.	Fillings.	Scaling.	Dressing.	Examination.	Advice.	Dentures.	General Anaesthetics.
209	28	4	5	10	6	23	35	2

H. GORDON CAMPBELL, L.R.C.P and S.E., L.D.S.



# REPORT

OF

*Mr Ferrier, Veterinary Inspector.*

# REPORT

OF

MR. PERCIVAL NEWBERRY, Inspector.

## DAIRIES.

While veterinary inspection has done much to improve the conditions under which our milk supply is produced, still it leaves much to be desired. The greater part of the milk consumed in Dundee is produced from cows outwith the Burgh, and over these we have no control. The dairyman who takes the necessary precautions to supply pure milk increases his expenses, and has to compete with the dairyman who knows or cares little or nothing about preventing contamination of the milk. The public are the chief sufferers, and also the chief offenders, owing to their indifference and their desire for cheapness.

During the year 1913 the Board of Agriculture and Fisheries issued a new Order called the Tuberculosis Order of 1913, which gave the Local Authority power to cause any cow suffering from tuberculosis, accompanied by emaciation, to be valued and afterwards slaughtered. Compensation was paid to the owner by the Local Authority for any cow so dealt with. Half of the compensation paid by the Local Authority was refunded by the Treasury. This Order has a good effect on the health of the dairy cows. A cow must first show signs of emaciation, although it might be in such a condition as to be capable of infecting other cattle coming in contact or living in the same byre. I maintain that such a cow is a source of danger to the human subject as well as to other cattle, and therefore ought to have been included in the Order and slaughtered. This would undoubtedly increase the amount of compensation payable, for at least a year or two at the first, but ultimately there would be a saving, as such cows capable of spreading the disease would not then exist. I even doubt that the amount of compensation would be much increased, because the salvage of such an animal slaughtered when in such condition, and before reaching an advanced stage of the disease, would be much greater, and taking that into consideration, the actual loss to the Local Authority would be small, and the benefit the public would derive would be good value for the money expended.

It is the generally accepted belief that a cow does not yield tuberculosis milk unless her udder has been affected by the disease, but it has lately been proved otherwise, which increases the danger to infants, &c., that are being fed on cows' milk, and that the above fact only goes to strengthen the plea which has been so often advanced of the urgent necessity for more drastic action dealing with infected milk, which is now long overdue.

During the year I examined 5,621 cows, which necessitated 291 visits to dairies, and on the whole found the health of the cows to be very satisfactory.

#### CATTLE MARKET.

The Cattle Market is visited by me every market day (Tuesday), and all the cattle, sheep, and pigs exposed for sale are inspected for the purpose of preventing animals showing symptoms of disease, and which are ultimately intended for human food being sold. The Superintendent of the Market and I seize all suspicious animals exposed for sale in the fat stock market, under powers conferred by Section 43 of the Public Health (Scotland) Act, 1897, which renders the owners of animals so seized liable to prosecution. The owners of such animals are given the option of sending them to the slaughter-house to be killed. There the carcasses undergo a minute inspection, and are dealt with on their merits. In the event of the owner of such failing to comply with our request, the animal can be seized and the owner prosecuted under the Act above mentioned.

There has been only one case during the past fourteen years in which the owner of a diseased animal exposed in the market has attempted to defy or question the authority of the Inspectors, for which he was prosecuted and fined £20, and expenses of the prosecution.

#### SLAUGHTER-HOUSES AND MEAT MARKET.

The following table shows the number of animals slaughtered at the Public Slaughter-Houses, and found to be unsound, and the weight of each class seized and condemned as being unfit for human food.

Diseased or Unsound Carcases.			Weight (in lbs.)			Condemned.
Cattle	...	..	332	Beef	...	77,380
Calves	...	...	3	Veal	...	463
Sheep	...	...	30	Mutton	...	1,295
Pigs	...	...	28	Pork	...	2,292

The following table shows the number of carcases, dressed or undressed, brought in during the year and found to be diseased or unsound, and the weight of each class seized and condemned as being unfit for human food:—

Diseased or Unsound Carcases.			Weight (in lbs.)			Condemned.
Cattle	...	...	301	Beef	...	67,478
Calves	...	...	29	Veal	...	1,815
Sheep	...	...	184	Mutton	...	8,058
Pigs	...	...	24	Pork	...	2,280

In addition, the following organs were seized and condemned at the Public Slaughter-Houses:—

Cattle Organs.	Sheep Organs.	Pigs Organs.
Cows Udders - 67	Livers - - 34	Udders - - 12
Livers - - 288	Plucks - - 65	Plucks - - 29
Lungs - - 99	Kidneys - - 43	Kidneys - - 4
Hearts - - 23		
Kidneys - - 50		
Heads - - 52		
Tongues - - 77		
Skirts - - 55		
	AND	
	Frozen Beef - -	6,137 lbs.
	Frozen Mutton - -	1,150 „

#### ANTHRAX.

During the year there were 3 cases of anthrax. Two of the carcases were sent in to the slaughter-house to be dressed and the other was killed at Arbroath Slaughter-House and sent to Dead Meat Market here to be sold. Blood smears and swabs of each case was sent to the Ministry of Agriculture and Fisheries, and in each case they confirmed the diagnosis.

## SWINE FEVER.

During the year 3 visits were made to pigs reported to have died suddenly, one of which was reported to the Board of Agriculture as being suspected of being infected with swine fever, and dealt with by them.

Two visits were made to 33 pigs reported by Inspectors of the Ministry of Agriculture and Fisheries to have been in contact with infected pigs. After careful examination they were found all to be healthy and remained so.

## PARASITIC MANGE.

97 visits were made to horses affected by parasitic mange, and others reported to be suspected of being affected.

In each case of parasitic mange a weekly report has to be sent to the Ministry of Agriculture and Fisheries and also to the Local Authority, which necessitated sending 97 reports to each during the year. There were six fresh outbreaks during the year. In each case a Restriction Schedule is served on the owner to prohibit him from working an animal on the street while it is infected, which necessitated six schedules being served on owners of infected horses, and in each case a copy of same has to be sent to the Local Authority and also to the police in connection with each case.

VETERINARY ATTENDANCE ON HORSES BELONGING TO  
THE CORPORATION.

Ten horses were examined for soundness before being purchased by the Horse and Provender Committee for the Cleansing Department. The attendance during the illness of horses belonging to the different Departments necessitated 180 visits during the year. The whole stud are in a very satisfactory state of health and in excellent condition.

*King's Cross Hospital.*

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REPORT

BY

*Dr. Walter Alexander,*

*Resident Medical Officer.*

# King's Cross Hospital.

## REPORT

Dr. Walter Alexander,

Medical Officer.

During the year 1921 there were admitted to the Hospital 636 cases of ordinary infectious diseases, and 147 of tuberculosis.

The daily average number of such patients was 57.84 in the case of common infectious diseases, and 57.62 in the case of tuberculosis.

The highest number in Hospital on any day was 158 in March, and the lowest 74 in July and August. The case mortality of the common infectious diseases, exclusive of tuberculosis, was 6.6 per cent.

#### RETURN OF PATIENTS FOR THE YEAR 1921.

DISEASE.			In Hospital 1st Jan., 1921.	Admitted during the year.	Discharged during the year.	Died.	Remaining in Hospital on 31st Dec., 1921.
Scarlet Fever	...	...	37	294	269	11	51
Diphtheria	...	...	36	255	258	16	13
Typhoid Fever	...	...	2	12	11	1	2
Measles	...	...	5	28	28	5	0
German Measles	...	...	0	9	9	0	0
Ophthalmia Neonatorum	...	...	1	5	3	2	0
Phthisis	...	...	65	147	90	63	59
Whooping Cough	...	...	0	16	12	4	0
Mumps	...	...	0	1	1	0	0
Chickenpox	...	...	0	1	1	0	0
Encephalitis Lethargica	...	...	0	2	1	1	0
Erysipelas	...	...	0	1	1	0	0
Broncho-Pneumonia	...	...	1	1	1	0	0
Diph.-Scarlet	...	...	0	6	5	1	0
Measles-Diph.	...	...	0	1	1	0	0
Measles-Whooping Cough	...	...	0	2	1	1	0
Verminous	...	...	0	1	1	0	0
Dysentery	...	...	0	1	1	0	0
Total	...	...	147	783	694	105	125

#### SCARLET FEVER.

There were 294 cases of scarlet fever admitted to the Hospital, an increase of 42 on the previous year. 11 cases proved fatal, giving a case mortality of 3.7%.

The sex and ages of the cases were as follows:—

Ages.			Cases.	Deaths.
Under 1 year ...	{ M	...	1	1
	{ F	...	0	0
1-2 years ...	{ M	...	6	0
	{ F	...	9	0
2-5 years ...	{ M	...	26	2
	{ F	...	36	3
5-15 years ...	{ M	...	84	2
	{ F	...	95	0
15-25 years ...	{ M	...	11	0
	{ F	...	12	0
25-45 years ...	{ M	...	3	0
	{ F	...	9	2
Over 45 years ...	{ M	...	1	0
	{ F	...	1	1
Total ...			294	11

Practically all the deaths from scarlet fever occurred in the septic type of the disease.

1 child, aged  $4\frac{1}{2}$ , died from meningitis, following middle ear suppuration.

2 cases died from septic broncho-pneumonia.

1 case, aged 6, died within 12 hours, and the swab from the throat showed the presence of diphtheria.

9 cases of scarlet fever admitted were found to be suffering at the same time from diphtheria.

The following is a list of the principal complications of scarlet fever:—

Simple Adenitis	...	20
Suppurated Adenitis	...	2
Arthritis	...	12
Otitis Media	...	14
Rhinitis	...	20
Bronchitis	...	1
Endocarditis	...	6
Total	...	75

#### DIPHTHERIA.

During the year 255 cases were admitted to Hospital as diphtheria. There were 16 fatal cases.

The following table shows the sex and ages of the cases treated, and of those which were fatal :—

Ages.			Cases.	Deaths.
Under 1 year ...	{ M	...	7	3
	{ F	...	8	1
1-2 years ...	{ M	...	12	2
	{ F	...	12	0
2-5 years ...	{ M	...	27	3
	{ F	...	30	3
5-15 years ...	{ M	...	37	2
	{ F	...	61	0
15-25 years ...	{ M	...	16	0
	{ F	...	25	0
25-45 years ...	{ M	...	3	0
	{ F	...	16	1
Over 45 years ...	{ M	...	0	0
	{ F	...	1	1
Total ...			255	16

Of the 255 cases admitted, 14 were found not to be suffering from diphtheria. The cases were as follows :—

Follicular Tonsillitis	...	7
Peritonsillar Abscess	...	4
Stomatitis	...	1
Syphilis	...	2

The following shows the incidence of the various types of the disease :—

Faucial	...	182 cases.
Laryngeal	...	25 „
Nasal	...	20 „

The death-rate, therefore, from diphtheria was 6.5%.

5 cases admitted, although not actually suffering from the disease, were found to be “carriers.”

Tracheotomy had to be performed for obstruction in 6 cases, and of these 2 died.

1 case developed measles in the ward. 1 adult developed appendicitis during convalescence, and was transferred to the Royal Infirmary for operation. 1 child, aged 8, developed chorea. 1 case was suffering from whooping cough on admission.

The chief complications of diphtheria were :—

Paralysis	...	...	...	10
Adentitis	...	...	...	4
Acute Rheumatism	...	...	...	1
Cardiac Irregularity	...	...	...	6
Broncho-Pneumonia	...	...	...	2
				—
				23

#### TYPHOID FEVER.

During the year 12 cases were admitted as typhoid. In 6 of these, the diagnosis proved to be incorrect. These were :—

Appendicitis	...	...	...	1
Broncho-Pneumonia	...	...	...	1
Malnutrition	...	...	...	1
Tuberculous Peritonitis	...	...	...	1
Enteritis (other than Typhoid)	...	...	...	2
				—
				6

1 case died from hypostatic pneumonia.

1 case was complicated by cystitis.

The sex and ages were as follows :—

Ages.			Cases	Deaths.
Under 1 year ...	{ M	...	0	0
	{ F	...	0	0
2-5 years ...	{ M	...	1	0
	{ F	...	1	0
5-15 years ...	{ M	...	0	0
	{ F	...	2	0
15-25 years ...	{ M	...	1	0
	{ F	...	2	0
25-45 years ...	{ M	...	0	0
	{ F	...	3	0
Over 45 years ...	{ M	...	1	0
	{ F	...	1	1
			—	—
Total ...			12	1

#### MEASLES.

28 cases were admitted to Hospital during the year. 23 were discharged cured, and 5 died.

## Causes of death :—

Broncho-Pneumonia	...	4 cases.
Tuberculous Meningitis		1 case.

Of the 28 cases admitted as measles, 4 were found to be suffering from German measles.

## OPHTHALMIA NEONATORUM.

5 cases were admitted to Hospital. 3 were discharged relieved, and 2 died.

## Causes of death :—

Gastro-Enteritis	...	1 case.
Congenital Debility	...	1 „

## ERYSIPELAS.

1 case was admitted and discharged cured.

## CHICKENPOX.

1 case was admitted and discharged cured.

## DYSENTERY.

1 case was admitted as dysentery but was found to be suffering from mucous colitis.

## WHOOPIING COUGH.

16 cases were admitted. 12 were discharged cured and 4 died.

## Causes of death :—

Marasmus	...	...	1 case.
Broncho-Pneumonia	...		3 cases.

## ENCEPHALITIS LETHARGICA.

2 cases were admitted as such during the year, but in both cases the diagnosis was wrong. One proved to be a case of cerebral hæmorrhage, which ended fatally, and the other a case of meningitis which recovered.

## DIPHThERIA-SCARLET FEVER.

6 cases were admitted to Hospital suffering from both diphtheria and scarlet fever. One case ended fatally.

## MEASLES-DIPHThERIA.

1 case was admitted and discharged relieved.

## TUBERCULOSIS.

During the year 147 cases were admitted to Hospital. Of these 66 were males and 81 females.

90 cases were discharged and 63 died.

The percentage death-rate was therefore:—

Males	...	...	45.4%
Females	...	...	41.9%

The ages among the fatal cases were as follows:—

Ages.			Deaths.
5-15 years ...	{ M	...	1
	{ F	...	3
15-25 years ...	{ M	...	7
	{ F	...	12
25-45 years ...	{ M	...	10
	{ F	...	14
45-65 years ...	{ M	...	7
	{ F	...	8
Over 65 years ...	{ M	...	1
	{ F	...	0
			—
			63

# REPORT

OF

*Mr Mitchell, Chief Sanitary Inspector.*

# REPORT

Mr. Mitchell, Chief Sanitary Inspector.

SANITARY DEPARTMENT,  
WEST BELL STREET,  
DUNDEE, 8th June, 1922.

*To the Scottish Board of Health and  
the Lord Provost, Magistrates, and Councillors—  
the Local Authority of the City of Dundee.*

GENTLEMEN,

I have the honour to submit the Annual Report showing the work of the Sanitary Department during the year 1921. The Report has been prepared in accordance with the requirements of the Board as contained in their circular dated 30th December, 1921, namely :—

“ The Board also call upon every Sanitary Inspector of a Burgh to prepare annually a Report for the year ending 31st December. The Report shall contain—

- (a) A general account of the sanitary state of the Burgh as regards Water Supply, Drainage, Scavenging, Nuisances, &c., together with any suggestions for its improvement. In populous and closely-built centres where closets on the conservancy system remain, the Report should show the number converted to the Water carriage system during recent years, as well as the number of privies, earth closets, and privy middens remaining at the end of the year 1921.

- (b) An account of his General Inspections, and of any special inspections or enquiries, including the supervision of Slaughter-houses and other offensive trades, and the sanitary condition of schools and of factories and workshops.
- (c) An account of the condition of the common lodging-houses.
- (d) An account of the condition of the dairies, cow-sheds, and milkshops.
- (e) An account of the condition of the Burial Grounds.
- (f) An account of his proceedings under the Burgh Police Act.
- (g) A Report on the work done by the Local Authority under the Sale of Food and Drugs Acts, and under the Sale of Food Order, 1921, and the Milk (Scotland) Order, 1921, with observations on any special questions which have received or require attention.
- (h) An account of any proceedings under the Rag Flock Act, 1911.
- (i) A Statement in such form, as the Scottish Board of Health may from time to time direct, of his proceedings during the year."

### **Death-Rate: Density of Population and Acreage.**

The death-rate per 1,000 as calculated and corrected by the Medical Officer of Health for 1921 was 15.8, the same as last year.

The population, as given by the Registrar-General from the Census Returns of 1921, is 168,217.

The acreage of the city, excluding foreshores, is 6,548. This works out at 25.69 persons to an acre.

### Staff.

The number and composition of the Staff is the same as mentioned in my Report of last year, viz. :—

- 1 Chief Sanitary Inspector.
- 1 Superintendent.
- 1 Plumber Inspector.
- 1 Housing Inspector.
- 2 Food Inspectors.
- 4 District Inspectors.
- 6 District Officers.
- 2 Junior District Officers.
- 1 Mason Inspector.
- 1 Clerk.

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Total 20

Again I would place on record my hearty appreciation of the thoroughness which characterises the work—often under trying conditions—and the loyalty and support given me of all the Staff in the carrying through of the multifarious duties which fall to be undertaken in virtue of my appointments.

With the Medical Officer of Health my relation continues eminently satisfactory, and Dr Burgess is ever ready to confer with me on work which involves particular care or judgment, or where we have mutual control.

### Public Sewerage of the City.

Has been well maintained throughout the year, and no special complaints of a serious nature of offensive odours, &c., emanating therefrom have reached this Department.

The sewers are wholly under the charge of the City Engineer and his staff. During the year £1,989 was spent upon their maintenance and cleansing. New sewers and gullies were provided at a cost of £23,916. The total length of the sewers is 127 miles, and my remarks of last year apply to their present state and condition.

The sewage from Craigie Home Farm was found to be finding access into a pond in connection with a public works. After several analyses of the water taken from Craigie Burn had been made, proving the existence of a serious nuisance, the sewage from the farm was diverted into the public sewer in Craigie Avenue.

## Water Supply.

Mr Baxter, the Water Works Manager and Engineer, reports :—

“As is well known, our chief source of water supply is Lintrathen Loch, situated approximately 23 miles N.N.W. from the city.

Lintrathen water is upland surface water, and although from the chemical and general standpoints it is a water of the highest class, bacteriologically it has the faults that are inseparable in all waters of this class. The large storage capacity at Lintrathen, amounting as it does to 2,141,400,000 gallons, or more than 150 days' supply at the maximum rate of consumpt, helps greatly in itself to improve the state of water as received from the gathering round by sedimentation, equalisation, &c., and especially so in times of heavy flood. Bacteriological defects common to upland waters can only be entirely removed by careful filtration. Lintrathen water is not filtered, but measures have been taken by the Department to remove or greatly minimise risks of pollution over the whole drainage area. To this end 3,000 acres of the Lintrathen watershed contiguous to the Loch have recently been purchased. This land is being laid down in grass and gradually afforested. In addition to buying this ground, sewage tanks have been erected on a few of the outlying farms, and the drainage of others diverted from streams and tributaries, and risks of pollution practically eliminated. Occasionally after periods of drought, particularly in spring and early summer, an aquatic weed belonging to the algae species develops in Lintrathen Loch. This weed imparts a peculiar taste and odour to the water. It is particularly noticeable when the water is heated. It has not, however, made its appearance for a number of years.

No recent analysis of Lintrathen water has been made, but the City Analyst in his last report, as recorded in the Minutes of the Water Committee, stated :—

“The bacteriological examination was fairly satisfactory, the presence of intestinal organisms being found in 5 c.c. of the water in 24 hours. The Indol reaction was very faint. The gelatine plate cultivations at 20 degrees centigrade were higher than usual, but the agar cultivations at 37.7 degrees centigrade were low.”

Water is conveyed to Dundee from Lintrathen by two 27-inch cast-iron mains which were capable of delivering, when new, at the rate of over 8,000,000 gallons each per day. Lintrathen water is a very soft water, and the pipes through long use have become coated with iron tubercles, which has greatly increased friction, reduced the sectional area, and diminished the carrying capacity, so much so that before one of them was recently scraped over a portion of its length the total quantity obtainable from both mains was only about  $11\frac{1}{2}$  million gallons per day. By scraping one section of the oldest pipe fully  $1\frac{1}{4}$  million gallons extra were obtained.

The subsidiary sources of supply are Monikie and Crombie, where the storage capacities are 796,000,000 and 158,700,000 gallons respectively. Monikie and Crombie waters are both carefully filtered through sand filters, gravity type, before delivery to the consumer. A recent bacteriological examination was made of both these waters, when the City Analyst reported both waters as being practically sterile, there being no trace of intestinal organisms in 50 cubic centimeters.

The Commissioners have lately purchased the whole of the Crombie drainage area, amounting to 2,000 acres, the greater part of which has been laid down in grass, and also large areas afforested.

The total average daily consumpt for the whole water area during the past year was at the rate of 10,840,000 gallons per day, of which 10,000,000 gallons came from Lintrathen, 460,000 gallons from Monikie, and 380,000 gallons from Crombie. The population of the area supplied is approximately 210,000, which gives an average consumpt per head of the population of 51.6 gallons. The consumpt is high, because there was a general relaxation of waste-preventing inspection during the war, and the system has not yet recovered; but when we take into account that a quantity equivalent to 20 gallons per head is sold for trade purposes and for general public health purposes, watering streets, baths, and other public purposes, the consumpt of about 50 gallons per head does not indicate any serious waste. After all, the consumpt per head depends largely upon the habits of the people.

Keeping in view the fact that the Lintrathen mains, owing to their corroded state, are barely able to meet the demands of the city unless one of them is partly scraped now and again, and that Dundee must before long make the utmost use of the old Monikie filtered supply, the Water Department has set itself in earnest to cope with the waste, and special measures are being taken to trace leakage."

The watershed areas are well looked after by Mr Baxter, the Water Works Manager and Engineer, who has an efficient staff of men appointed for the purpose of keeping up a constant inspection.

Complaints are frequently received at the Department regarding insufficient supplies of water for domestic purposes, and these are being steadily dealt with, although the procedure under Section 75 of the Dundee Corporation Order Confirmation Act, 1907, is somewhat tedious. After a complaint has been lodged, written notice of same is sent to the Water Engineer, whose staff examine the pipes and fittings and report any defect and recommend what improvements or alterations are necessary. This report is forwarded to the Town Clerk, who submits it to the Public Health Committee, who in turn give authority to the Sanitary Inspector to serve notice on the proprietor or agent.

This procedure naturally causes considerable delay, and often gives rise to the opinion that the complaints lodged are being neglected.

During the year 13 such notices were served under this Section, and all without exception have been, or are in course of being complied with.

18 different properties had their water supplies augmented by the introduction of larger service pipes.

No samples of water were taken by this Department during the year.

### **Scavenging and General Nuisances.**

The scavenging proper is under the charge of a separate Inspector, who is responsible for the efficient

carrying out of such work as street sweeping, flushing, removal of refuse from ashpits, manure from dairies, stables, &c. (where desired by the occupiers), and the general work of the cleansing of the city, so far as the Town Council is responsible. He also undertakes the sweeping of open private courts, footways, areas, &c., as well as the limewashing of walls of closes, courts, areas, &c., which may be regarded as semi-public, in the more congested parts.

The work has been carried through in a satisfactory manner, and with few exceptions no complaints have reached the Department under this head.

The Cleansing Superintendent and his staff co-operate, and all irregularities remediable under the Acts governing this Department discovered by the scavengers in the course of their property to property duties are reported to me, when steps are immediately taken to have the nuisances abated.

On several occasions complaints were again made to me by residents in the Fairmuir district regarding the city manure traffic at the station there, and which was referred to in my Report of last year. It was generally found that the cause of the complaints was the manure after being loaded in the waggons remaining over, say a week-end, at the sidings. The matter was again brought to the notice of the railway authorities and the Inspector of Cleansing, and I trust from the arrangements now made there will be no cause for future complaints. As an additional precaution against nuisance the destructor at Fairmuir Station was demolished.

Inspections for the detection and removal of petty nuisances such as choked water-closets, choked drains, soil and waste pipes, traps, or cesspools, accumulations of filth and rubbish, garbage, &c., paving of back courts, footways, areas; washing and sweeping of common stairs and passages, keeping of live stock, &c., &c., naturally loom largely in the work of the Department, and occupy a considerable amount of the day by day work of the Inspectors. These are duties which must be continually kept up, and it is partly from work of this nature that, taking the city as a whole, its sanitary condition can be regarded as satisfactory.

For nuisances of this class it was not found necessary to invoke the aid of Court procedure, as when the facts were brought to the notice of the parties responsible steps were taken for abatement.

Throughout the year 55,422 inspections of this description were made, in the course of which 11,027 nuisances were discovered and removed.

In this class of work the members of the City Police Force are of valuable service in the speedy detection and removal of nuisances, as they have special instructions from the Chief Constable to bring all irregularities within the scope of the Public Health, &c., Acts under my notice.

There is always a certain class of our population—and I expect the same applies to other large cities—to whom all the advice or instruction seem to be of no avail. The misuse and abuse of water-closets mostly used in common still form a source of bitter complaint from the owners or factors of property, and naturally these latter persons look to this Department for protection through the powers laid upon us by the Public Health Act. It is impossible that the officers of this Department can keep a perpetual outlook for the prevention of this vexing and recurring class of nuisance, and the difficulty with Court procedure is the fixing of the blame on the actually responsible party or parties, and thus in the case of the abuse of water-closets used by more than one tenant often the innocent are made to suffer along with the guilty. It would be a great improvement in property protection if the owners of large tenemental properties were to appoint a local factor resident in the buildings who would have personal knowledge of the different tenants, and thus be in a position to spot the offenders or undesirables. Were such direct representation adopted I am sure nuisances and abuse with its incidental expense of this nature would be greatly reduced and the saving of expenditure of upkeep equalise the small cost.

## **Whitewashing and Painting of Common Stairs and Passages.**

Under Clause 354 of the General Police and Improvement (Scotland) Act of 1862, which is incorporated with our own local Act of 1882, there were 890 notices served in the beginning of August upon the owners and factors of properties requiring them to whitewash or oil paint the common passages and staircases. The terms of these notices in a large number of cases were properly carried out, but by November there still remained a number which were deemed to have been unnecessarily delayed, and for the purpose of causing those delinquents to expedite the cleansing 147 "Final Notices" were served. In the event of failure to comply with the terms of these latter notices Court prosecution can be immediately adopted. Only in two cases, however, was the work considered to have been delayed without undue cause.

In these two cases the factors of the properties on whom the notices had been served were reported to the Procurator-Fiscal to answer for their neglect.

In one case the necessary work was immediately carried out upon the service of the summons, and the proceedings were withdrawn. In the other instance—which embraced a large block of tenemental property situated in a congested district—the factor appeared before the Court, where after repeated hearings the Magistrate arranged that the requirements of the Department be given effect to within a prescribed date. The necessary whitewashing and painting have now been done.

3,798 whitewash brushes were given out on loan to the occupiers of dwelling-houses for the cleaning of some 7,400 rooms. Whiting and ochre were also given out to deserving cases recommended by the Inspectors.

## **Stables.**

Number 380, and have received 848 visits during the year, and where necessary instructions were given for limewashing.

### **Piggeries.**

These places wherein pigs are kept numbered 137 at the beginning of the year, as compared with 157 at the end of 1921. They received 794 inspections, and are in a satisfactory state so far as limewashing and cleanliness are concerned.

(Should the Inspectors in the course of their visits under the above two heads discover disease amongst the animals, the information is conveyed to the Veterinary Inspector of the Corporation for his attention.)

### **Complaints.**

2,777 complaints (as against 2,427 last year) regarding nuisances were made at the office, all of which immediately received the attention of the Department. After careful enquiry, however, 125 of these complaints were found to be without cause, and called for no further action, and many others were frivolous—usually the outcome of a stairhead quarrel.

A section of the community consider, or at all events foster the impression, that the Sanitary Department and its staff exist—or ought to exist—for the regulation of the weekly routine duty of stair-washing and lavatory-cleaning. Should an occupier in a tenement make default in this work or refuse to take the weekly turn, or a new tenant fail to fall into line with the existing arrangement, then the concrete stand-by to solve the problem and again put matters into a smooth-running groove seems to be application to this Department. Work of this nature occupies a considerable amount of the time of the officers, and whilst we endeavour to arrive at an amicable settlement of each local problem without resort to legal pressure, yet I desire it to be distinctly understood that more drastic methods—especially where puerile quarrelling or disagreements are concerned—will be resorted to in the future.

### **Statutory Notices.**

16,423 intimations or notices, either written or verbal, were given to or served upon the owners or

agents of property or authors of nuisances in the carrying out of the provisions of the Public Health (Scotland) Act, our local or other Acts, all calling for the abatement of nuisances discovered by the Inspectors in the course of their duties. Under Section 20 of the Public Health Act one statutory notice as ordered by the Public Health Committee as the Local Authority, after the particulars had been laid before them, authorising the following up thereof by Court procedure, should such be deemed necessary through delay, neglect, or refusal to carry out the requirements thereof, was served. All these intimations or notices, however, received or are now in course of receiving attention, with the exception of what may be herein mentioned under different heads throughout this Report.

I would, however, here take the liberty of drawing attention to a very serious difficulty which we have to encounter under our present legislation in the course of nuisance removal, and when the time comes for the revisal of the provisions of the Public Health Act it would be well if the framers of a new or amended Act would consider the method of procedure or routine which has to be gone through by officials and Local Authorities ere nuisance removal can be compulsorily effected. More summarily or direct action is wanted in an enactment so that a nuisance can be dealt with and its removal made imperative within a reasonable time, suitable for each individual case, without the present roundabout methods necessitating exhaustive procedure and much delay, as in our current Act.

For instance, a nuisance—mayhap petty or serious—will be discovered in the course of our daily inspections, yet the legal machinery at our disposal is such as to allow it, according to the circumstances, to remain a menace to the health of a community for a considerable period.

Anyway, say, a choked lavatory in, or drainage of, a tenement can, if allowed to exist for any length of time, assume alarming dimensions and become very serious dangers to the health of the citizens—not only in the immediate vicinity—for should an outbreak of infectious disease accrue therefrom, then a whole community must suffer both from a health and financial point of view.

We urgently require—and this does not apply to Dundee alone, but to the whole of Scotland—an enactment of procedure whereby the Sanitary Inspector can bring to bear direct compulsory action in nuisance removal without having to travel through the present-day circuitous route with its consequent unnecessary and, perhaps, disastrous delay. In this connection I know I am voicing the opinion of Sanitary Inspectors who have experienced the irritating delays of red-tape methods which environ our present Public Health Act—an Act, however, which has throughout its constitution many advantageous and redeeming provisions.

### **Letters and Special Reports.**

1,575 letters and special reports regarding insanitary properties or other nuisances and general correspondence have been despatched from and received at the office.

### **Infectious Diseases and Disinfection.**

Visits of enquiry numbered 1,877, whilst 783 patients were removed to King's Cross Hospital. No contacts for infectious disease were removed to the Reception House in Fleuchar Street. Under Sections 50 and 53 of the Public Health (Scotland) Act, 3,850 notices were served upon householders directing their attention to the terms of these Sections relative to the prevention of the spread of infectious disease. 3,624 intimations were sent to the Education Authorities, school teachers, &c., preventing the attendance of school children. Houses or premises disinfected numbered 1,346, whilst 1,103 sets of clothing, bedding, &c., were disinfected or, where special authority was given by the owner, destroyed. Amongst the premises disinfected were 25 houses for vermin, 7 houses for cancer, 10 rooms in public or semi-public buildings, &c., and 1 ship.

127 bales of jute for export to the Argentine, &c., were disinfected, and certificates to allow of exportation granted therefor.

The Municipal Dispensary was disinfected on 16 different occasions.

Fuller details and statistics under this head are given in the Report of the Medical Officer of Health.

### **Ashbins and Ashpits.**

396 ashbins (as against 306 last year) were placed at properties in substitution of ashpits abolished, or to take the place of broken or dilapidated bins, or where previously there was no such accommodation.

Every opportunity is taken advantage of to have these bins provided in place of broken-down or unsuitable ashpits, as they are much more conducive to the cleanliness of the environment of the property generally.

Special attention has been given to see that each cistern or stone-built ashpit is provided with efficient drainage and proper appliances to enable the scavengers applying thorough flushing with water.

In the summer time or during hot weather chloride of lime is sprinkled in these receptacles by the scavengers after emptying, which renders the air in their immediate vicinity less objectionable.

### **Drainage and Structural Improvements.**

Improvements have been carried out at 126 properties, at which the following sanitary fittings and material have been used :—

- 151 Water-closets.
- 42 Sinks.
- 13 Baths.
- 43 Wash basins.
- 34 Washtubs.

With all the necessary soil, waste, and vent pipes, traps, fittings, &c.

### **WATER-CLOSETS.**

Regarding the 151 water-closets, 45 of these replaced insanitary appliances in dwelling-houses, 5 were new fittings introduced into houses, 3 into shops, and 17 represent conveniences renewed on stairs and other positions. 42 were new conveniences provided on stairs and plats, 13 into offices, 5 in courts, 12 in work-places, and 9 in place of privies.

22 of the water-closets referred to were introduced into the properties in Larch Street and Urquhart Street, popularly known as the "High Land," to replace a trough convenience in the court at the rear, whilst 17 are in course of erection at the Walton Street section.

It is pleasing to learn that since their introduction these appliances, and the apartments in which they are, have been carefully and cleanly used, more so in fact than those of some properties with a higher reputation. Unfortunately in this instance Court procedure had to be adopted to enforce the provision of these modern conveniences.

At another tenemental property the factors refused to comply with the notice served at the instigation of the Local Authority to provide sufficient water-closet accommodation, and the matter had to be referred to the Magistrates in the Court, who ordered the work to be done. Here five fully-equipped water-closets were afterwards erected.

The pan apparatus as we generally find it is a foul, insanitary appliance, giving off noxious odours, no matter how much tenants try to clean them, as the foul interior parts cannot be reached, and the water flush, usually inadequate, never gets into contact with the dirtied surface. They are also enclosed in woodwork, which increases the difficulties of obtaining thorough cleanliness.

These conveniences, as opportunity occurs, are gradually being replaced by more modern sanitary fittings.

### **Cast-Iron Drainage.**

At 12 properties cast-iron drainage systems have been laid down in place of the original fireclay installations.

These required 1,011 feet of cast-iron piping and 35 traps of the same material.

There is no doubt cast-iron drainage systems give the most satisfaction, as they can be depended upon to remain air and water-tight for an indefinite period,

whereas no such guarantee can be given regarding fire-clay. The initial cost of cast-iron is, however, against its general adoption. Local regulations require such material to be used for all drains under buildings no matter of what description.

### **Drainage Tests.**

The tests by smoke, water, or air, were applied to the drainage systems of 30 properties. Of these 12 proved defects to exist—all of which were rectified.

The foregoing structural works and improvements were under the supervision of the Plumber and Mason Inspectors, who made 2,769 visits for this purpose.

### **Back Courts, Areas, Footways, &c.**

Section 21 of the Burgh Police (Scotland) Act, 1903, which was adopted by the Town Council of Dundee, is a valuable asset to this Department in the maintaining of these in the least objectionable condition. Through its provisions we call upon the owners or agents of property to pave or repave or repair back courts, &c., so that they can be thoroughly cleansed by water flush, the paving being laid with a gradient of 1" in 48" to surface traps or cesspools to carry off the rain or flush water.

In the paving anew or upkeep 6,228 square feet of pavement flags, concrete, or other impervious material were laid down at private properties.

### **Privies, Earth Closets, or Privy Middens.**

In my Report of last year I gave a detailed statement of these remaining within the city boundaries as at the end of 1920. In this list was shown 96 separate buildings served by accommodation of the above description. There were 166 separate households housing 352 males and 368 females in these properties.

During the year nine water-closets were erected at seven of the properties to take the place of six privies and two privy middens.

The larger majority of the subjects having such conveniences are situated on the outskirts of the city, and lately brought within the boundaries through recent extensions, and although many of them possess facilities for drainage into sewers or cesspools, yet they are so situated, practically in the country, that little or no nuisance can accrue from their use, and the occupiers of the cottar houses do not complain of the accommodation in existence for them.

Where deemed expedient, and the work practicable of carrying out without an unreasonable expenditure, notices have been served to have the accommodation converted into the water carriage system. Each individual case is considered on its merits or requirements, and in course of time I hope to have modern appliances provided and the elimination of these antiquated conveniences accomplished.

In the city proper common privies are now a thing of the past, and it is well for the general health of the community that this is so, for they were the gathering and propagating ground for myriads of flies during the summer season, who in turn doubtless were the carrying medium for the outbreaks and spread of infectious diseases of former years.

### **Housing.**

In January, 1922, I presented the Annual Report on Housing for the year 1921 to the Housing and Town Planning Committee, and which here follows in full.

It contains all the information available at the moment, and embodies a summary of how the housing question stands in the city.

There are, however, other phases which may come under this head, although the Housing and Town Planning, &c., Acts do not take cognisance of them.

Within recent years, say since 1915, much has been said and written of

## OVERCROWDING

and the evils—moral and physical—which follow in its wake, but the sanitarian has to be guided by the legal definition of the word as given in our bye-laws for houses or parts of houses let in lodgings or occupied by members of more than one family, and for houses of one or two apartments taken on lease by any person, and let or rented to several occupiers for limited periods as furnished apartments, as also for all boarding-houses for seamen and emigrants made under Section 72 of the Public Health (Scotland) Act, 1897, as under:—

1. "The number of persons occupying any room of such house shall not exceed the proportion of one person for every 400 cubic feet of space contained in such room. Two children under 10 years of age may be counted as one person.
2. Persons of different sexes above the age of 10 years shall not occupy the same sleeping apartment, except in the case of husband and wife."

In our bye-laws for common lodging-houses made under the same Act the same cubic space is demanded, with the further proviso—

- "The keeper of a common lodging-house shall not permit males and females above 10 years of age to occupy the same sleeping apartment."

It will thus be seen that occupying houses to the extent of anything under 400 cubic feet per adult and 200 per juvenile only constitute overcrowding within the meaning of the law.

It was in former years a recognised section of the work of this Department, and which was only dropped towards the end of 1916 when the exigencies of the war became manifest, for two of the staff to commence operations one night each week at 12 o'clock on districts selected as suitable for the work (where overcrowding was recognised to be always in evidence) or from where complaints of such had been received.

These Inspectors made house-to-house visitations, and where there were suspicions of overcrowding the accommodation was measured up. In flagrant cases of overcrowding the occupiers of the houses were re-

ported to the Procurator-Fiscal, who brought them before the Magistrates, when small fines were usually imposed. This work went on until between 3 and 4 in the morning, and it was no uncommon occurrence to discover several of the occupants concealed beneath the beds or hidden away in cupboards. Yet in those days Dundee was considered an overhoused city.

As I stated, this work was discontinued in 1916, because—

1. Several of the inspecting staff had been called to the colours, and the Department had become understaffed, and the more important work had to be coped with; and
2. Dundee, so far as housing was concerned, had undergone a revolutionary change; it had become an underhoused city, and it was futile to endeavour to suppress overcrowding when there was no alternate accommodation to offer.

The word "overcrowding" has, however, been so prevalent of late, used in so many different and wide senses, that I desired to find out to what extent the "legal overcrowding" of the past days compared with that of to-day.

For this purpose I, towards the end of 1921, revived on several occasions this nightly house inspection duty, covering the districts where in former years we were wont to find houses overcrowded or occupied by members of more than one family. In all 296 of these nightly visits were made; 18 cases of overcrowding were discovered, and in 13 instances there was no adequate sex separation.

But all these are things of yesterday as well as of to-day, for back statistics tell us that in the gone-by decades overcrowding of the kind I mention was as prevalent then as now.

This is a condition of housing that is ever with us; a certain section of our community consider it a necessary adjunct to its existence; the injurious effects of overcrowding are outwith their knowledge; education in this direction seems to be of no avail, and one even imagines the nature is blind to the depraving effects and immorality following sex intermingling.

Thus the rising generation is nurtured, from the time understanding comes its way, under unhygienic and immoral conditions; rise with the ambition of following in the footsteps of the forefathers. So the propagation goes on from one generation to another.

No far-fetched myth is this, but only too stern a reality, evidence of which meets in the face the man or woman possessed of sufficient courage and knowledge to search within our gates, and a blur on our social life which overhousing conditions will never obliterate, and is by no means solely pertinent to our community.

Undernoted are a few excerpts from the official reports showing what the officers encounter in the visits, and bear out what I have here written.

In a one-roomed attic with two beds at 74 D --- Street there are 10 persons in occupation, viz. :—

Father—a shipyard labourer.  
 Mother.  
 Son, aged 16 years—millworker.  
 Son, aged 14 years—scholar.  
 Son, aged 12 years—scholar.  
 Daughter, aged 7 years—scholar.  
 Son, aged 5 years—scholar.  
 Daughter, aged 2 years.  
 Son, aged 8 months.  
 A grandchild, aged 3 years.

The capacity of the room is approximately 1,041 cubic feet, and to remedy matters a house of 3,000 cubic feet is required, with separate rooms for sex separation.

A married woman of No. 11 H—— Street resident in a two-roomed house called at the Sanitary Department asking assistance to obtain a larger house. The family was returned as follows :—

Husband.  
 Wife.  
 One son aged 18 years.  
 Three daughters over 10 years of age.  
 Three daughters under 10 years of age.  
 Three sons under 10 years of age.

making 12 persons in occupation. One of the girls is under treatment for tuberculosis.

At 32 W—— Lane a house of two rooms, capacity 2,208 cubic feet, is occupied by the undernoted members of the same family :—

Father, aged 39 years—unemployed.  
 Mother, aged 36 years.  
 Son, aged 17 years—rivet heater (unemployed).  
 Son, aged 16 years—millworker.  
 Daughter, aged 14 years—exemption from Fairmuir Cripple School.  
 Son, aged 13 years—scholar.  
 Son, aged 11 years—scholar.  
 Son, aged 9 years—scholar.  
 Daughter, aged 7 years—scholar.  
 Daughter, aged 5 years—scholar.  
 Son, aged 4 years—scholar.  
 Son, aged 3 years—in delicate health.  
 Daughter, aged 1½ years.

This shows a total of 13 persons in the house—7 adults and 6 juveniles.

The undernoted members of the same family occupy a single-roomed house at 11 L—— Street :—

Father—labourer.  
 Mother.  
 Daughter, aged 16 years—unemployed.  
 Daughter, aged 10 years—scholar.  
 Daughter, aged 8 years—scholar.  
 Daughter, aged 6 years—scholar.  
 Son, aged 4 years—scholar.

The cubic capacity of the room is 1,350 cubic feet.

A single attic room at 16 B—— Street occupied by husband and wife with four of a family (one being over 10 years of age), and father and brother of the wife, only has a capacity of 1,093 cubic feet.

There are two women and four men occupying a single room at 16 B—— Street of 990 cubic feet. The two women and one man sleep in a bed and the others on the floor.

At 16 B—— Street a house of two rooms, ticketed “four persons,” contains one man with four of a family (three being over 10 years of age) and three members of another family (one being over 10 years of age)—5 adults and 3 juveniles.

A B—— Square tenant who was evicted is now partly occupying a two-roomed house at 80 C—— Street, the state of affairs now being worse than before.

But the word "overcrowding" is heard in a sense other than the legal meaning, and if it is accepted in the slippery fashion employed by the man in the street, then we find it exists in so far as houses being occupied by two or more separate families—and this is of frequent occurrence at the present time—but here the sanitarian is powerless, for it rarely, if ever, comes under the legal 400 cubic feet of air space.

Not in them all, but in many instances we find a daughter has got married throughout the war or shortly after its termination, and the young couple discover house-hunting is a "will o' the wisp," and have perforce to remain in residence with the parents. Other cases are young couples having to be content with furnished lodgings, families outgrowing the accommodation, or outside parties taking up residence in the city—all waiting for the houses that are, unfortunately, yet on paper.

It seems to me—and to many others who have studied this serious and vexing problem—that until the time comes along when private enterprise can take the field as in pre-war days the house shortage proposition will remain unsolved.

On the other hand, we do occasionally come across a streak of brightness in an otherwise shadowy cloud, and I here wish to record my appreciation of the excellent work being carried out through an experiment on the part of a little band of workers under the auspices of the Salvation Army, who could not have chosen a better "oasis" for the scene of their operations.

The management of a dozen separate dwelling-houses in the Overgate has been taken over by the Slum Sisters. Prior to occupation the houses were thoroughly cleansed, painted, papered, furnished, and put into a very comfortable living condition. Suitable tenants, whom the Sisters desire to raise to a higher status and environment of living, were selected and installed. The rents are paid in the first instance to the Sisters (who are responsible for this financial side), and they in turn hand it over to the property owners or factors.

One can barely imagine the vast improvement which has been worked here within an incredibly short time, and the tenants take a keen interest in the keeping of the houses; there has been no going back; the Sisters are in daily contact, and continually encourage the carrying on of the good work. Commandant Fryatt and Ensign Smith deserve the highest praise for their unselfish labours here. Indirectly the whole community benefits by the transforming or raising up of those fallen members of humanity into the ranks of respectable citizenship.

The more finical may think this is the thin end of the wedge of "farmed-out houses," but so far as I am concerned—and I should think social workers will view it in the same way—we could do with many such innovations in our midst.

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## ANNUAL REPORT

ON

HOUSING OF THE WORKING CLASSES—

INSANITARY BUILDINGS, &c.

For the Year ending 31st December, 1921.

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Although the situation is easier than at any time during the last five years, I cannot say that the City of Dundee is in the position of having sufficient housing accommodation for its population. During the year there were few houses coming within the meaning of the word "habitable" that have remained empty for any length of time, and at the moment of writing some 11 are standing empty, and of that number only one can be classified as a house for the working classes.

The undernoted rentals will indicate the size of the subjects :—

Rental not exceeding £16	...	...	1
Rental not exceeding £26	...	...	nil.
Rental not exceeding £60	...	...	3
Rental not exceeding £100	...	...	4
Rental exceeding £100	...	...	3

In pre-war days Dundee was looked upon as being an overhoused city, i.e., houses stood empty and the population had ample housing choice, well evidenced from the number of "flittings" or removals which took place at each removal term. To-day our citizens have absolutely no choice—the removals are conspicuous by their absence. The majority which do take place are through mutual arrangements—newspaper advertising, &c.—for exchange of houses. Thus many of the population have to reside in districts far remote from their work, and incidentally incur heavy expenses in car or train fares to and from business.

In addition to the normal overcrowding—that which is always with us no matter what the house supply position is—there is also a vast amount of overcrowding scattered all over the city.

We have still many cases of two or even more families resident in the one household, where separate housing accommodation is urgently required and desired.

Again, overcrowding by members of the one family is very much in evidence. In these cases the family have outgrown the accommodation of five to ten years ago, yet the householder finds it impossible to obtain suitable larger accommodation for his increasing family.

Another very serious evil of overcrowding is growing strongly in our midst—the want of ample housing accommodation for the efficient separation of the sexes.

In our Bye-Laws for Common Lodging-Houses we have sufficient provision for the enforcing of sex separation, yet in ordinary house habitation we are powerless, and the longer this continues the greater is the evil against civilisation and decency.

The problem can only be solved by the provision of additional houses.

These causes alone, were it nothing else, call to those in authority to listen to the appeal for the provision of further houses. There is a crying demand for a class of house more suitable for the poorer type of artisan in the city.

In normal times we would look to the increase of population as a sufficient cause for this house shortage, but in this case we do not obtain figures that would lead us to a full solution of, or key to, the problem.

We will be guided by official figures, and take the Census data for the year 1911, where the population is returned as 165,004, and in the same returns for 1921 the total population is given as 168,217, an increase of 3,213, but for the latter year we have to take into consideration the fact that the population of Broughty Ferry and that of the area embracing the Den of the Mains (some 12,500 persons) brought within the city boundaries in 1913 are included, so that we must undoubtedly assume that the population of the city as constituted prior to that annexation is smaller to-day than it was ten years ago, and it is within that old area the greatest hardships of house shortage are being experienced.

The unfortunate fatalities of the war will to a certain degree account for the decrease of population, whilst many of the householders have within these years left the city—emigrated abroad or gone to other cities and countries.

This then brings us to the fact that population statistics fail us, and we search another phase of the problem, viz., that there must be a vast increase in the number of actual separate households now than of ten years ago, and for further information we must consult the marriage barometer.

The advent of the Great War brought in its trail what came to be looked upon as "war marriages," i.e., young men ere going on active service or whilst home on leave entering the ranks of matrimony. In these earlier years of the war houses were obtainable, and it was not perhaps until about the end of 1916 that the scarcity was borne forcibly upon us, and the wife of the marriage had perforce to remain in residence with the parents. When hostilities ceased in 1918 and the husbands returned the demand for houses became insistent and the situation acute.

In looking into the statistics relative thereto we will, for comparison, first take the five years from 1912

to 1916 inclusive, where we find the marriages entered into were as under :—

1912	...	...	1241
1913	...	...	1308
1914	...	...	1462
1915	...	...	1694
1916	...	...	1286
A total of			<hr/> 6991

Then for the following five years—1917 to 1921 inclusive—the figures are :—

1917	...	...	1281
1918	...	...	1357
1919	...	...	1970
1920	...	...	2094
1921	...	...	1793
A total of			<hr/> 8495

showing an increase over the former table of 1504 marriages.

The large increase in the figures for the last three years should be noted, which, doubtless, are accounted for by the young men being relieved from military duties.

It may, however, be contended that as many of these marriages were what is termed “irregular” before the Sheriff, the contracting parties did not of necessity belong to or remain within the city for housing, but on the other hand many couples belonging to and resident within the city were married in other districts, and are thus not included in the above figures; yet I consider the one would just about equalise the other. Anyhow, a very fair figure would be not less than 1,000 extra married couples within the city during the last five years as against the five years previous.

Therefore this abnormal increase—much of which would not have been in evidence in normal times—accounts for the main conditions we are experiencing in housing to-day, and this vast addition to the marriage-rate claims, through the ordinary laws of nature and necessity, extra separate housing accommodation to cope therewith.

Now we will scrutinise what has been done in the shape of providing additional houses to meet this increased demand, either by private enterprise or through the agency of the Housing Committee of the Dundee Town Council, and for comparisons sake I will select the same years as are dealt with in the marriage statistics.

During the five years from 1912 to 1916 there were only 23 new tenemental houses erected, and that through the instrumentality of private enterprise. Practically speaking, during the latter half of 1915 and the whole of 1916 private enterprise had ceased to operate in the realms of building property. In the first place, materials were soaring up in cost and the supply limited; while secondly, labour was both scarce and costly.

In 1919 the Housing, Town Planning, &c. (Scotland) Act, 1919, came into operation, and under part 3 of the principal Act it became the duty of the Local Authority to prepare housing schemes.

In co-operation with the Scottish Board of Health, Dundee has since then provided 422 houses of two, three, and four rooms, as well as 76 huts, and all are now occupied.

Private enterprise has provided 52 houses of two, three, or more rooms each and one hut of three rooms.

Then in addition to these figures, 158 shops have been converted into dwelling-houses, giving a total of 732 dwelling-houses provided during the last ten years.

But we have to take into consideration the number of houses that have been closed as unfit for human habitation or demolished. The carrying through of the Central Improvement Scheme, inaugurated in 1913, naturally cleared away many dwellings in the central area—the wiping out of the Greenmarket section alone meant the taking away of some 100 dwelling-houses.

From 1912 to 1916 there were 456 houses closed either voluntarily, by order, or demolished, and from 1917 to 1921 there were 221, giving a total of 677, which deducted from the number provided gives a net increase in housing accommodation in ten years of 55 separate dwellings.

Further, we must take full cognisance that many of the houses provided—such as huts, converted shops, &c.—can only be looked upon as temporary homes, the occupants of which are only hanging on waiting for permanent abodes.

Analysing these figures given above, allowing for the cases of overcrowding, separate families resident in the one household, and the necessity for sex separation, I think I am well within the figure in stating that there still stands the necessity for an additional 1,500 houses ere the shortage within the city can be looked upon as overcome; and as private enterprise at the present time is dormant—and no immediate prospects of its revival—it seems to me that we can only look to the continuance of the policy of the Housing and Town Planning Committee to take us out of the difficulty.

No “representations” of insanitary dwellings were made to the Housing and Town Planning Committee to be dealt with by them during the year. This does not, however, by any means indicate that there are no insanitary buildings within the city, for there are many houses occupied that should have been closed as unfit for human habitation.

Any one who has only a meagre knowledge of the housing problem of to-day will recognise the clamant demand for new houses when they survey the rookeries, ancient courts, closes, &c., in our midst which are only fostering disease and a harbourage for filth and vermin, and at the moment, to say the least, only tolerated as dwelling-houses because there is no alternative accommodation for the occupiers. Many of these so-called houses ought to have been demolished and wiped out of our ken long ere now.

No figures are available showing exactly the number of houses at present occupied which would fall within the category of “houses unfit for human habitation.”

One case of occupying a dwelling-house in respect of which a Closing Order was in force was continued over from last year (after the occupier was fined £2) to allow of the premises being vacated or reconstructed.

During the year the accused, who was the occupier, died, and the property was sold. The new proprietor reconstructed the whole building, provided a new dwelling-house, business premises, &c.

During the year six cases were reported to the Housing Committee in terms of Section 6 (Sub-Section 1) of the Housing (Additional Powers) Act, 1919, in respect of which permission in writing is required from the Local Authority for demolition or diversion to other uses of houses reasonably fit for human habitation after the 3rd December, 1919. These cases have been disposed of as follows :—

- (a) One 3-roomed house on ground flat to be wholly let as part of business premises.—Granted.
- (b) One 11-roomed house—8 of the rooms to be used as a temporary school.—Granted.
- (c) One 8-roomed house—5 of the rooms to be used as business premises.—Granted.
- (d) One 3-roomed house to be absorbed into a workshop.—Refused.
- (e) Two 1-roomed houses in a back land to be used as business premises.—Decision delayed.
- (f) One 7-roomed house to be used as business premises.—Decision delayed.

Since the applications were made (d), (e), and (f) have been again relet and occupied as dwelling-houses.

The above Section ceased to have effect as from 23rd December, 1921.

The current housing policy was agreed upon in January, 1916, and at the end of 1920, 231 houses, which amongst others were left to the Sanitary Inspector to deal with under Class 1, were still unsatisfactory.

During the present year 114 houses at 39 properties have been improved.

Under Section 17 of the Housing, Town Planning, &c., Act, 1909, 1,263 visits were made to insanitary buildings, or to properties where alterations and improvements were in progress following upon action taken by this Department.

The following is a synopsis of how the various Housing Schemes under the charge of the Housing and Town Planning Committee stand as at 31st December, 1921 :—

SCHEME.	Area in Acres.	OCCUPIED HOUSES.		In course of Erec- tion or approved of to go on.	
		R O O M S.		R O O M S.	
		2	3 or more	2	3 or more.
Logie ...	20.243	88	162	—	—
Hospital Park ...	10.33	52	96	—	4
Stirling Park ...	9.67	—	20	—	80
Taybank ...	15.82	—	—	—	180

N.B.—All the above houses are of the flatted type, and have kitchenettes in addition.

At Craigiebank 4 four-roomed framed houses of the cottage type have been erected, and are now occupied.

The Garden City Scheme inaugurated by the Scottish Veterans' Association on the site at Barnhill, extending to 16.809 acres, has now been completed, and 20 three-roomed houses with up-to-date kitchens, sculleries, and bathrooms were all occupied as from June month by ex-service men.

In July, 1921, the Government called a halt in housing, but as a result of persistent representation made by the Dundee Housing Committee the Board of Health have agreed to sanction the erection of an additional 200 houses.

### INCREASE OF RENTS AND MORTGAGE INTEREST (RESTRICTIONS) ACT, 1920.

When the above Act came into force the onus of seeing its provisions carried through was placed upon the Medical Officer of Health and the Chief Sanitary Inspector, and during the eighteen months of its existence 102 householders have made application to the Sanitary Authority for a Certificate under Section 2, paying the stipulated fee of one shilling as required by Sub-Section 4 of the Act.

Of the applications for 1921 (17), two were from the occupiers of the cottage type of dwelling, two from

the poorer class, and the remainder from the better class of working men's houses.

The general causes of complaints were composed of:—Damp walls, floors, or ceilings; broken plaster work; smoky chimneys; dark and unventilated rooms; flooring out of repair; no inside water supply; broken hinges, window cords, sashes, linings, and sink copes; defective washtubs and boilers; insufficient water-closet accommodation, &c., &c.

Statistical particulars under this head will be found at the end of this Report.

At the end of 1920 a stated case was reported to the Public Health Committee involving a property comprising some 150 houses of one and two rooms, which were, in the opinion of the Medical Officer of Health and Sanitary Inspector, "not in all respects reasonably fit for human habitation, or are otherwise not in a reasonable state of repair," and early in the year the Town Clerk was instructed to take the necessary action as "the Sanitary Authority" under Section 2 (Sub-Section 2) of the Act. The circumstances were reported to the Procurator-Fiscal of the Sheriff Court, and later the Sheriff granted injunction against the increase of rents. The work required by this Department was carried out, and thereafter an application was made by the owners of the property craving the Court to withdraw the injunction so that the increases of rent might be applied. The application was granted.

One application, after granting of a Certificate No. 1 by the Sanitary Authority, was made to the Court by a tenant asking for an Order to suspend the increase of rent, which was granted.

One tenant who had refused to pay the rent increase was summoned to the Court by the landlord, when the Certificate No. 1 of the Sanitary Authority was produced. In this case the landlord's petition was dismissed.

Other three tenants after obtaining a Certificate from the Sanitary Authority had their rent increases withdrawn—brought back to the 1914 rate.

## SUMMARY IN REGARD TO HOUSING CONDITIONS AND ALTERATIONS DURING 1921.

### I. Particulars of Houses Improved :—

	1 Room.	2 Rooms.	3 Rooms.	4 and over Rooms
(a) At properties "represented"	—	—	—	—
(b) At instance of Sanitary Inspector after "representation" had been made ...	32	28	—	—
(c) At properties that had been voluntarily closed for a period ...	3	—	—	—
(d) At instance of Sanitary Inspector, but not "represented" to Committee ...	6	27	6	5
(e) After Plans had been submitted to and approved of by the Works Committee	—	1	1	5

### II. Shops and other Premises converted into dwelling-houses (3) during 1921 :—

	1 Room.	2 Rooms.	3 Rooms.
(a) 1 Shop ...	1	—	—
(b) 1 Store ...	—	1	—
(c) 1 Office ...	—	—	1

### III. New Houses built and occupied during the year 1921 :—

#### (a) BY PRIVATE ENTERPRISE.

	2 Rooms.	3 Rooms.	4 and over Rooms.
Ward 1 ...	—	—	1†
" 2 ...	—	1	—
" 3 ...	—	1‡	—
" 4 ...	—	—	2
" 7 ...	—	5†‡	1
" 8 ...	—	—	1‡
" 9 ...	—	—	3‡
" 10 ...	—	—	6*‡
" 11 ...	—	20†	1

Total, 42 houses.

#### (b) UNDER THE HOUSING SCHEMES.

	2 Rooms.	3 Rooms.	4 and over Rooms.
Ward 1 ...	—	—	4†
" 7 ...	52†	116†	—
" 8 ...	44†	16†	—

Total, 232 houses.

Giving a grand total of 274 new houses erected throughout the year.

\*‡4 Government Subsidy. ‡Government Subsidy.

†With Kitchenettes.

IV. Particulars of Dwelling-Houses Closed (29) for human habitation during the year 1921, in whole or in part :—

	1 Room.	2 Rooms.	3 Rooms.	4 and over Rooms.
(a) Voluntarily—houses generally in very bad repair, very damp, and not reasonably fit for human habitation ... ..	10	5	—	1
(b) Voluntarily—afterwards demolished: city improvements ... ..	—	1	—	—
(c) Converted into business premises, offices, or workshops	4	—	1	1
(d) Reconverted into shops ...	6	—	—	—
Total	20	6	1	2

V. Dwelling-Houses Demolished (24) during the year 1921 (no demolition order):—

	1 Room.	2 Rooms.
(a) Dwelling-houses that had been closed by order ...	9	1
(b) Dwelling-houses that had been closed voluntarily ...	2	12
Total	11	13

VI. Net Results for 1921 :—

The net result for the year is that there are 253 more houses available for human habitation than at 31st December, 1920, i.e., houses of—

1 Room.	2 Rooms.	3 Rooms.	4 and over Rooms.
16 fewer.	91 more.	159 more.	19 more.

N.B.—At present there are no houses of less than 3 rooms in course of erection.

VII. The Official Return to be submitted to the Scottish Board of Health for the year ended 31st December, 1921, is as follows :—

(a) HOUSING, TOWN PLANNING, &c., ACT, 1909.

1. Number of dwelling-houses inspected under and for the purposes of Section 17 ... ..	11
2. Number of dwelling-houses which on inspection were considered to be in a state so dangerous or injurious to health as to be unfit for human habitation ... ..	4

- |    |   |      |
|----|---|------|
| 3. | Number of representations made to the Local Authority with a view to the making of Closing Orders   | Nil. |
| 4. | Number of Closing Orders made ... ..  | Nil. |
| 5. | Number of dwelling-houses the defects in which were remedied without the making of Closing Orders (see below for proceedings taken under Section 25 of the Housing, Town Planning, &c. (Scotland) Act, 1919) ... .. | Nil. |
| 6. | Number of dwelling-houses which after the making of Closing Orders were put into a fit state for human habitation ... ..  | Nil. |

(b) HOUSING, TOWN PLANNING, &c. (SCOTLAND) ACT, 1919.

- |    |  |      |
|----|--|------|
| 1. | Number of dwelling-houses in respect of which notices were served under Section 25 (1) ... ..                  | Nil. |
| 2. | Number of dwelling-houses rendered fit for human habitation under Section 25 (1) ... ..                        | Nil. |
| 3. | Number of dwelling-houses in respect of which Closing Orders became operative under Section 25 (1)             | Nil. |
| 4. | Number of dwelling-houses rendered fit for human habitation by the Local Authority under Section 25 (2) ... .. | Nil. |

- 5.\* Number of cases where notices were served under Section 40 (1) to provide dwelling-houses with water supply:—

(a) Cases where requirement complied with by owners.

(b) Cases where works carried out by Local Authority after failure of owners to do so.

(c) Cases still pending.

- 6.\* Number of cases where intimations were given under Section 41 (2) as to insufficient water-closet accommodation:—

(a) Cases where requirement complied with by owners.

(b) Cases where works carried out by Local Authority after failure of owners to do so.

(c) Cases still pending.

\*These provisions do not apply in Burghs.

- |   |     |      |
|---|-----|------|
| Number of houses of (a) one apartment and   | (a) | Nil. |
| (b) two apartments for the erection of which the consent of the Local Authority has been given in terms of Section 44 (1) | (b) | Nil. |

## (c) HOUSING (ADDITIONAL POWERS) ACT, 1919.

1. Number of dwelling-houses in respect of which permission was given by the Local Authority under Section 6 (1) for demolition or diversion to other uses—One, and parts of two, permitted to be occupied as business premises and as a temporary school.

General character of the defects found to exist:—

Inadequate lighting and ventilation; low ceilings; houses not provided with sinks and inside water supply; insufficient water-closet accommodation; steep, worn, or dangerous stairs; damp walls and floors; insufficient ashpit or ashbin accommodation; and open spaces around the buildings restricted.

N.B.—The foregoing dwelling-houses have been dealt with in terms of Section 138 of "The Dundee Police and Improvement Consolidation Act, 1882," and not under the provisions of "The Housing (Scotland) Acts, 1890 to 1919."

VIII. The total number of dwelling-houses in course of erection (282)—all stages—at 31st December, 1921, is as follows:—

WARD.			3 Rooms.	4 and over Rooms.
1	...	...	180*	—
3	...	...	—	1†
7	...	...	84*	8†
8	...	...	—	2†
8	...	...	—	1
9	...	...	—	1
10	...	...	1*†	1†
11	...	...	—	3†
			265	17

\*With Kitchenettes, &c. †For Government Subsidy.

INCREASE OF RENT AND MORTGAGE INTEREST  
(RESTRICTIONS) ACT, 1920.

WARD.	No. of Applications Received.		CERTIFICATE.					
			No. 1 Granted.		No. 2 Granted.		No. 3 Refused.	
	1920.	1921.	Houses not in all respects fit for human habitation.		Houses not in a reasonable state of repair.		Houses held to be in a reasonable state of repair; or Tenant not found at given address.	
			1920.	1921.	1920.	1921.	1920.	1921.
1	...	5	1	—	—	4	1	—
2	...	10	—	6	—	1	—	3
3	...	10	1	4	1	6	—	—
4	...	3	1	—	—	3	—	1
5	...	14	3	6	—	8	2	—
6	...	6	4	2	1	3	2	1
7	...	8	1	2	—	6	1	—
8	...	6	2	3	1	3	1	—
9	...	15	1	10	—	4	1	—
10	...	3	—	1	—	2	—	—
11	...	5	3	2	1	3	2	—
Total	85	17	36	4	43	10	6	3

### **Tents and Vans.**

Although not so numerous as last year, this coming and going section of the community has been off and on in evidence, the largest gathering being nine vans with a population of 30 males and females, chiefly located in the vacant ground in Wilkie's Lane, where there is ample facilities and accommodation for them. As a rule they give little cause for our official interference, their travelling-sleeping accommodation being kept in a very satisfactory state; in fact, many of them take a special pride in this way.

57 visits were made in their supervision.

### **Housing of Seasonal Workers.**

The new Bye-Laws prepared and adopted by the Town Council under the Housing, Town Planning, &c., (Scotland), Act of 1919 (Section 45), became operative in June, 1921.

These Bye-Laws now definitely govern the working conditions and accommodation for potato workers, harvesters, fruit pickers, &c., employed on farms or fruit farms.

A copy of these Bye-Laws, along with a letter calling attention to the necessity for provision of:—Suitable sleeping quarters, the adequate separation of the sexes, clean bedding, preparation of food, &c., abundance of water for culinary and domestic purposes, drying of wet body clothing, &c., and efficient sanitary accommodation, was sent to all the farmers (18) within the city area. The employers of labour of this nature have co-operated with the Department and given effect to these recommendations and Bye-Laws, and this class of work is now carried out under conditions which leave little cause for cavilling at or desire for further improvement.

### **Schools.**

The schools within the city are under the charge of the Education Authority's own officials, who see to their structural condition and cleansing. They are all fully equipped with water-closets, lavatories, drinking fountains, &c., and are in the same satisfactory state as when mentioned in my Report of last year. They call for no special comment from me.

### Factories and Workshops.

The duties laid upon Local Authorities by the Factory and Workshop Acts have been carried out in a thoroughly methodical manner, 1,162 inspections having been made for this purpose.

They were maintained in a satisfactory condition, and whenever cleansing or whitewashing of premises was necessary this was duly given effect to on the matter being brought to the notice of the occupiers. In one case only was it compulsory to serve a statutory notice under this head, verbal intimation in every other instance being complied with. Domestic workshops and the premises of "home-workers" or "work places" as defined by the Act were also kept under supervision to see that this class of worker performed the duties under the best hygienic or sanitary conditions, taking into account the circumstances of each individual case.

From H.M. Inspector of Factories 13 intimations or notices were received regarding nuisances, &c., discovered by him in the course of his inspections, and related to the following:—

Dirty Workshops.

8

Insufficient means of escape in case of fire. (Sec. 14).

1

These dirty workshops were immediately taken in hand by my Department, and the desired work carried out. In the instance under Section 14, sufficient means of escape in case of fire for the persons employed therein as could reasonably be required in the circumstances of the case was provided.

Four intimations were received under the Sanitary Accommodation Order (Section 9). Three referred to insufficient means of ventilation or want of intervening ventilating space. In these cases proper means of ventilation were effected.

In the other case "No Sanitary Accommodation" was reported. No difficulty was experienced in securing one water-closet for the use of the workers employed in the workshop.

The following Workshops, &c., are upon the Register at 31st December, 1921:—

## TRADE OR BUSINESS.

	Workshops	Domestic Workshops	Homework	Workplaces
Basket Makers, Feather Dressers, and Bedding Manufacturers ... ..	2	0	0	0
Blacksmiths, Cartwrights, and Carriage Builders ... ..	25	0	0	0
Blacking and Chemical Manufacturers ...	2	0	0	0
Boot Repairers ... ..	110	8	1	0
Brush Makers ... ..	1	0	0	0
Cabinetmakers, Joiners, and French Polishers	61	0	0	0
Cycle and Motor Mechanics, Enamellers and vulcanisers ... ..	27	1	0	2
Dental Mechanics ... ..	31	3	0	0
Dress, Mantle, and Corset Makers ... ..	62	43	0	0
Engineers ... ..	7	0	0	0
Electro-Platers, Wire Workers, Blind Makers, and Bellhangers ... ..	3	0	0	0
Florists ... ..	1	0	0	8
Furriers ... ..	3	1	0	0
Glaziers ... ..	4	0	0	0
Granite and Marble Cutters and Masons ...	0	0	0	31
Hairdressers and Wigmakers ... ..	0	0	0	86
Hosiers and Knitters ... ..	5	6	0	0
Hotels and Restaurateurs ... ..	0	0	0	40
Laundries ... ..	2	7	0	0
Milliners ... ..	46	0	0	0
Painters ... ..	0	0	0	47
Photographers ... ..	19	1	0	0
Piano and Gramophone Repairers ... ..	8	0	0	0
Picture Framers, Carvers, and Gilders ...	6	0	0	0
Plasterers ... ..	0	0	0	17
Plumbers and Tinsmiths ... ..	56	0	0	0
Saddlers and Leather Cutters ... ..	12	0	0	0
Sewing Machine and Wringer Repairers ...	2	0	0	0
Slaters ... ..	0	0	0	23
Shirt and Pyjama Makers ... ..	1	0	0	0
Stamp Cutters, Engravers, and Ticket Writers	4	0	0	0
Sugar Boilers ... ..	14	0	0	0
Tailors ... ..	79	10	1	0
Umbrella Makers and Repairers ... ..	5	0	0	0
Underclothing, Baby Linen, and Blouse Makers ... ..	58	2	2	0
Upholsterers and Carpet Sewers ... ..	15	0	0	0
Waste, Rag, and Metal Merchants ... ..	0	0	0	19
Watch and Jewellery Repairers and Opticians	43	4	0	0
Weighing Machine and Scale Makers ...	4	0	0	0
Miscellaneous, i.e., Gut Manufacturer, Mica Makers, Clay Pipe Makers, Paper Bag Makers, Bottlers, Potted Meat Manufacturers, Oil Refiners, Manufacturing Chemists, &c. ... ..	31	0	0	7
Totals ...	749	86	4	280

## Bakehouses.

(a) Workshop Bakehouses.—At the beginning of the year we had 44 of this class on our list as being occupied and 12 unoccupied.

During the year several important changes were effected in the conducting of the premises so used. A higher standard of cleanliness and repair was sought in several cases, and with satisfactory results. Sixteen letters were sent out warning occupiers that their premises were not deemed suitable in all respects for the production of such a staple article of diet as bread. Eleven sugar boilers have been transferred to the workshop register proper. 307 visits were made to the bakehouses, and they have all been oil-painted or white-washed twice during the year in compliance with the Act, and following the completion of the requirements set they are presently in a clean and satisfactory state. In eight instances motive power has been introduced during the twelve months, and the premises are now reckoned amongst the factory bakehouses. Since the war a number of new bakehouses have been opened, and owing to the great scarcity of suitable premises with built ovens these have taken the form of hiring a shop, the front room of which is set apart for retail trade and the back shop used as a workshop with a portable oven or hotplate fitted, 10 of such places being in use.

At 31st December there were 38 retail or workshop bakehouses on the register, of which number 7 were “certified” as underground—all in use. Of the 12 referred to as unoccupied 5 have been let for other purposes, and the other 7 in view of bad repair and structural defects are recommended not to be again let for this purpose.

(b) Underground Bakehouses.—At 1st January 13 factories and 9 workshops were certified as suitable in terms of Section 101 of the Factory and Workshop Act of 1901, and during the year two certificates were withdrawn, leaving on the register at the end of the year 13 factories and 7 workshops, occupied and used in conformity with the Statute.

Court proceedings had to be resorted to in one case where an occupier, on application made for a certificate of suitability and refused by the District Council, persisted in carrying on the trade of a retail baker in underground premises quite unsuitable and without the same being certified as required by the Act. The accused appeared before the presiding Judge in the Sheriff Court, and by reason of his having left the premises the case was withdrawn.

(c) Factory Bakehouses.—In terms of the Scottish Board of Health (Factories and Workshops Transfer of Powers) Order, 1921, the duties laid under Sections 97 to 100 in regard to factory bakehouses have now to be fully undertaken and exercised by the Local Authority and their appointed officers.

In consequence of this instruction, made towards the end of the year, our inspectorial duties will include from now onwards the supervision of factory bakehouses to the number of 55 or thereby.

### **Common Lodging-Houses.**

Some twenty years ago there were ten common lodging-houses within the city, with sleeping accommodation for 678 persons. To-day there is only one house which legally comes within the definition, viz. :—  
18 Peter Street, with accommodation for 21½ male lodgers.

As I explained in my last Report, this revolutionary change has been brought about through the nightly charge per bed (sixpence) as allowed by law having—through increased costs—been exceeded.

I understand this is a subject which is presently engaging the attention of the Scottish Board of Health with the view of raising this fixed sum so that these houses can again take their place upon the proper register and come under the more drastic regulations—especially as to the separation of sexes—applicable thereto. Under this head 76 visits were made by day and 4 by night. Everything was found satisfactory.

Meantime the houses which have gone outwith the charge bounds have been transferred on to the register for

### Houses Let in Lodgings.

The premises, &c., receive stringent inspection and supervision under the bye-laws applicable thereto, only, as I have previously explained, we do not have explicit powers of sex separation.

On this register at the beginning of the year there were 145 houses; 7 were added and 8 removed, leaving 144 on the register at the end of the year.

In the course of the year's inspections (1,258) no contraventions of a special nature were encountered—they have all been kept in a cleanly state. Overcrowding is dealt with under the head of "Housing."

### Seamen's Boarding-House

with 63 beds for seagoing men or selected boarders, and

### Salvation Army Home and Metropole for Women,

where there is sleeping accommodation for some 180 persons, have both been kept in an exceptional condition—clean and comfortable. At the latter place the accommodation is often overtaxed, as no applicant is ever turned away. It is of great service to the class of people who require its hospitality, and a valuable asset to the social work of the city.

### Dairies, Cowsheds, and Milkshops.

The persons licensed to purvey milk within the burgh on the Register are as under:—

On Register on 1st January, 1921	...	...	331
Registered during the year	...	...	57
Removed from Register during the year	...	...	44

Thus showing 344 persons presently on Register, made up as follows:—

Dairymen and Cowkeepers	...	...	69
Purveyors of Milk—Shops	...	...	217
Purveyors of Milk—Vans	...	...	41
Persons resident outwith the City, but Registered to purvey milk within it	...	...	17

The work under this head occasioned 2,304 visits of inspection, milkshops receiving 1,390 and dairy premises 914—a rigid system of inspection having been kept up.

In the various byres there are housed 1,041 cows.

One outstanding essential of a milk supply is cleanliness—

1. Of the animals producing the milk. Therefore strict grooming is an absolute necessity. The bedding for this purpose ought to be of the cleanest. Our bye-law thereanent is as follows:—"Shall not use as bedding for the cows or other animals in any cowshed, and shall not keep or store therein any material which has been previously used as bedding for horses or other animals, nor any wool, jute, tow, or flax refuse, or any material which is likely to cause contamination of the milk."
2. Of the persons engaged in the handling of the milk. The enactment under this head is—"The hands of the milkers shall be properly cleansed before milking is commenced." In some instances overalls for the use of the milkers have been provided, but I would like to see these in more general evidence. In addition to being of great value in the handling of the milk, they give the worker a smarter, cleaner appearance, and without a doubt add to the general tone of the dairy work.
3. Of the premises and their environment. This is a section of the dairying business that cannot be too strongly emphasised. The regulations contain full powers under this head, and taking the various premises throughout the city their general state has, with few exceptions, been satisfactory.

So far as the cleanliness of the milk itself is concerned, we have no official standard, and thus the producers of the milk supply are placed upon their honour in this direction. The earnest obeying of the bye-law which reads "and the milk shall be at once filtered by passing it through a sieve, so as to free it from all foreign matter," will do much that is desirable.

Sixteen samples of sweet milk were taken—

- a. In shops.
- b. From off vans on streets.
- c. In wholesale dairy premises.
- d. In private dwelling-houses.

- e. At Children's Hostel, Broughty Ferry.
- f. Day Nursery, Isles Lane.
- g. Day Nursery, Cotton Road.
- h. Nursing Mothers' Restaurant, Blackscroft.
- i. King's Cross Hospital.

These were submitted for bacteriological examination as to their constituents, cleanliness, &c., and are fully dealt with in the report of the Medical Officer of Health.

Court proceedings had to be instituted in the serious contravention mentioned in my Report of last year. After repeated hearings the accused party was found guilty and dismissed with an admonition, and the requirements of the Department given effect to as under :—

- One new byre with accommodation for 22 cows.
- One new byre with accommodation for 28 cows.

These byres are built in brick with slated roofs, efficiently ventilated; the floors are of cement concrete sloping towards channels and drained to the outside; the dividers of stone, and the walls rendered internally in cement work to a height of six feet.

### **Food Inspection.**

FOODSTUFFS ARRIVING AT THE PORT OF DUNDEE, EITHER DIRECTLY FROM ABROAD OR BY COASTWISE TRAFFIC.

The following two tables show the kind and quantity of foods arriving by waterway at the Port during the year.

The total of 21,058 tons 15 cwts. and 3 qrs., as against 13,867 tons 10 cwts. of last year.

TABLE No. I.

Shows the foodstuffs arriving coastwise at the Port by steamers plying between Dundee and the Ports of London, Hull, Liverpool, Aberdeen, Newcastle, Belfast, Southampton, Leith, &c., during 1921 :—

## FOODSTUFFS—

				Tons	Cwts.	Qrs.
Bacon and Ham ...	...	...	...	46	13	2
Beef (frozen) ...	...	...	...	2	19	3
Butter ...	...	...	...	23	5	3
Biscuits ...	...	...	...	11	8	3
Cereals ...	...	...	...	414	19	0
Cheese ...	...	...	...	303	4	3
Cinnamon ...	...	...	...	0	6	1
Cocoa ...	...	...	...	109	11	2
Cocoa Beans ...	...	...	...	9	0	2
Cocoa Butter ...	...	...	...	10	6	1
Cocanuts ...	...	...	...	23	1	1
Coffee ...	...	...	...	32	3	3
Confectionery ...	...	...	...	149	11	0
Cornflour ...	...	...	...	10	15	3
Cream of Tartar ...	...	...	...	0	10	2
Eggs ...	...	...	...	3	11	3
Eggs (liquid) ...	...	...	...	10	13	2
Fish (dried) ...	...	...	...	3	1	1
Fish (tinned) ...	...	...	...	90	12	3
Flour ...	...	...	...	3,625	13	2
Fruit ...	...	...	...	429	18	0
Fruit (dried) ...	...	...	...	201	17	0
Fruit (pulp) ...	...	...	...	72	18	1
Fruit (tinned) ...	...	...	...	122	17	3
Ginger ...	...	...	...	5	16	1
Glucose ...	...	...	...	238	18	1
Honey ...	...	...	...	1	11	2
Lard ...	...	...	...	24	8	0
Macaroni ...	...	...	...	0	10	3
Margarine ...	...	...	...	202	8	0
Meat (tinned) ...	...	...	...	332	2	1
Milk (dried) ...	...	...	...	0	3	0
Milk (tinned) ...	...	...	...	211	6	2
Nuts ...	...	...	...	65	14	1
Oatmeal ...	...	...	...	28	16	1
Pepper ...	...	...	...	8	17	0
Pickles, Spice, &c. ...	...	...	...	28	15	2
Pork ...	...	...	...	1	16	0
Preserves ...	...	...	...	103	1	1
Rice ...	...	...	...	216	7	0
Sago Flour ...	...	...	...	0	5	1
Salt ...	...	...	...	5	5	0
Semolina ...	...	...	...	1	13	0
Sugar ...	...	...	...	1,651	12	2
Syrup ...	...	...	...	589	17	1
Tapioca ...	...	...	...	73	19	0
Treacle ...	...	...	...	614	13	1
Vegetables (various) ...	...	...	...	240	2	0
Vegetables (tinned) ...	...	...	...	7	10	0
Vinegar ...	...	...	...	37	3	2

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10,401    14    2

TABLE No. II.

Shows the amount and kinds of food arriving direct from abroad, with shipping port, for the year ending 31st December, 1921 :—

FOODSTUFFS—				Tons	Cwts.	Qrs.
Rotterdam—						
Butter	...	...	...	1	4	2
Cereals	...	...	...	4	10	0
Cheese	...	...	...	104	3	2
Confectionery	...	...	...	0	3	3
Cocoa	...	...	...	5	11	1
Flour	...	...	...	0	12	2
Fruit	...	...	...	67	8	1
Fruit (dried)	...	...	...	3	1	3
Fruit (pulp)	...	...	...	3	12	0
Lard	...	...	...	1	16	0
Margarine	...	...	...	2	12	2
Milk (condensed)	...	...	...	43	19	0
Pork	...	...	...	31	10	0
Preserves	...	...	...	0	10	2
Rice, Ground	...	...	...	28	15	0
Sugar	...	...	...	2,293	10	2
Vegetables	...	...	...	227	15	0
Amsterdam—						
Bacon	...	...	...	1	0	0
Butter	...	...	...	11	4	2
Cheese	...	...	...	43	13	1
Fruit	...	...	...	3	6	0
Milk (condensed)	...	...	...	7	10	3
Pork	...	...	...	0	19	0
Rice	...	...	...	31	0	0
Sugar	...	...	...	551	10	0
Vegetables	...	...	...	11	12	0
Hamburg—						
Cereals	...	...	...	10	0	0
Sugar	...	...	...	1,717	12	3
Newport, U.S.A.—						
Flour	...	...	...	572	0	0
New York—						
Glucose	...	...	...	148	0	0
Flour	...	...	...	4,345	0	2
Flour (for starch)	...	...	...	215	0	0
Lard	...	...	...	24	7	2
Treacle	...	...	...	142	9	0
				10,657	1	1
Total from Home Ports (Table I.)				10,401	14	2

Total weight of Foodstuffs landed  
at the Port of Dundee during 1921 21,058 15 3

No section of the cargoes was detained.

Included in Table II. is flour (215 tons) from New York. It was specially consigned for starch-making, and taken delivery of here for that purpose.

### **Meat Inspection at the Public Slaughter-House.**

The Public Slaughter-Houses at Carolina Port being the only premises available for this purpose, all animals intended for human food must be slaughtered and dressed at this establishment. Thereafter the meat undergoes a rigid examination before being allowed out for sale by retail in the shops, stalls, &c. Further, the meat of animals killed elsewhere and sent dressed into the city has first of all to be taken to our clearing-house, there to be examined by the Meat Inspectors.

Arrangements of this nature are an excellent guard against diseased meat finding its way to the consumers' table.

The proof of the worth of this system is found in the fact that the Food Inspectors of this Department seldom if ever come across diseased meat in our butchers' shops, any meat that may be taken possession of having become unfit for human food through decomposition.

Again the following tables show the enormous amount of meat—infected from the different diseases there mentioned—which unless for this system of inspection would be liable to get into shops and offered for sale to the public.

For forty-five years Mr James A. Baxter was identified with the work at the slaughter-houses, first as Assistant Superintendent and Inspector of Meat, and for the last seventeen years or thereby he had sole charge under this head. Unfortunately he developed a serious malady, from which he succumbed towards the fall of the year. As a Meat Inspector, bringing into play all the latest knowledge that science brought forth, Mr Baxter held few compeers, and was recognised as an authority on this work. During his tenure of office he carried through his duties with great tact and discretion and to the benefit of the community.

Mr John D. Anderson, who was a Food Inspector on the staff of this Department, was appointed to the position, and holds all the qualifications of a Meat Inspector. Since he took over the duties many structural improvements have been given effect to, whilst more exhaustive work is in contemplation—all for the more efficient carrying out of this important phase of food inspection.

Table 2 shows the number of animals slaughtered at the slaughter-houses each month during the year; also the number of their carcasses found to be diseased or unsound, and the weights of each variety of meat seized and condemned. Table 3 deals in a similar manner with country and foreign carcasses sent in.

The number of cases for which the carcasses were wholly or partially condemned for Tuberculosis during the years 1902 to 1921 (exclusive of 1915 to 1918):—

		Bulls	Bullocks	Heifers	Cows	Calves	Pigs	Total
1902	...	6	53	14	110	2	18	203
1903	...	7	60	11	121	3	35	237
1904	...	12	64	10	133	8	21	248
1905	...	6	62	18	138	5	12	241
1906	...	8	69	12	144	2	18	253
1907	...	6	76	22	185	2	28	319
1908	...	12	66	17	204	2	34	335
1909	...	12	70	15	207	5	23	332
1910	...	11	65	28	205	4	29	342
1911	...	14	62	23	204	7	88	398
1912	...	6	64	33	185	1	108	397
1913	...	7	66	23	173	3	62	334
1914	...	5	68	22	160	3	71	329
1919	...	8	61	21	149	—	83	322
1920	...	18	81	25	178	1	41	344
1921	...	7	83	17	200	1	31	339

TABLE 2.—Shews the numbers of the different kinds of Animals Slaughtered at the Public Slaughter-houses each month during 1921, also the numbers of their carcasses found to be Diseased or Unsound, and the weights of each class seized and destroyed.

MONTH.	Animals Slaughtered.					Numbers of their Carcasses Diseased or Unsound.				Weights (in lbs.) condemned from Carcasses of Animals Slaughtered on the Premises.				
	Cattle.	Calves.	Sheep.	Pigs.		Cattle.	Calves.	Sheep.	Pigs.	Beef.	Veal.	Mutton.	Pork.	TOTAL.
1921.														
January -	1,166	4	1,525	198		18	...	1	4	4,574	...	11	564	5,149
February -	1,092	3	1,284	186		23	...	2	2	7,842	...	164	387	8,393
March -	1,377	17	1,903	200		18	2	5	1	4,682	318	131	30	5,161
April -	1,200	7	1,395	142		22	...	3	4	4,720	...	69	103	4,892
May -	1,181	5	1,338	110		37	...	...	1	6,302	...	...	130	6,432
June -	1,154	7	1,370	100		13	...	1	1	2,711	...	32	25	2,768
July -	1,043	4	1,256	50		19	...	1	2	3,394	...	34	44	3,472
August -	1,322	18	1,883	92		37	...	5	1	9,571	...	297	133	10,001
September	1,324	16	2,125	132		41	...	3	2	11,603	...	153	254	12,010
October -	1,305	9	2,065	239		42	...	2	1	8,741	...	39	322	9,102
November	1,338	4	2,614	361		36	...	5	6	8,383	...	305	256	8,944
December	1,483	6	2,711	461		26	1	2	3	4,857	145	60	44	5,106
Totals -	14,985	100	21,469	2,271		332	3	30	28	77,380	463	1,295	2,292	81,430

TABLE 3.—Shews the numbers of the different kinds of Carcases, dressed and undressed, brought to the Slaughter-houses each month during 1921, with the numbers found to be diseased or unsound, and the weight of each class seized and destroyed on that account.

MONTH.	Carcases brought in.					Numbers of them diseased or unsound.				Weight (in lbs.) Seized and Condemned from Carcases sent in.				
	Cattle.	Calves.	Sheep.	Pigs.		Cattle.	Calves.	Sheep.	Pigs.	Beef.	Veal.	Mutton.	Pork.	TOTAL.
1921.														
January -	282	7	373	34		25	1	25	...	7,316	42	991	...	8,349
February -	441	7	428	48		24	1	28	2	6,459	31	1,325	151	7,966
March -	262	15	476	140		27	6	15	3	5,377	433	659	282	6,751
April -	229	15	342	26		35	4	32	...	7,545	231	1,371	...	9,147
May -	277	7	241	27		48	5	14	1	11,476	413	430	49	12,368
June -	261	11	483	29		43	5	5	5	8,102	330	224	716	9,372
July -	153	3	195	19		27	2	3	6	5,871	246	99	471	6,687
August -	193	4	248	20		14	...	5	2	2,239	...	248	147	2,634
September	184	6	316	22		21	3	12	3	2,628	76	743	399	3,846
October -	234	1	356	16		17	1	14	1	4,541	5	633	41	5,220
November	194	3	606	39		17	1	25	1	5,101	8	1,097	24	6,230
December -	219	3	824	26		3	...	6	...	823	...	238	...	1,061
Total	2,929	82	4,888	446		301	29	184	24	67,478	1,815	8,058	2,280	79,631
Table 2.	14,985	100	21,469	2,271		332	3	30	28	77,380	463	1,295	2,292	81,430
Total for Two Tables	17,914	182	26,357	2,717		633	32	214	52	144,858	2,278	9,353	4,572	161,061

TABLE 4.—The totals for the years 1904 to 1920, (excluding 1915 to 1918) were:—

YEAR.	Carcases Examined.				Numbers Diseased or Unsound.				Weight (in lbs.) of Meat Seized and Condemned.				
	Cattle.	Calves.	Sheep.	Pigs.	Cattle.	Calves.	Sheep.	Pigs.	Beef.	Veal.	Mutton.	Pork.	TOTAL.
1904	17,451	801	32,358	6,004	608	67	214	59	175,381	3,295	7,915	5,758	192,349
1905	18,033	801	31,891	5,484	603	49	259	47	176,778	2,471	9,227	5,164	193,640
1906	19,127	891	34,676	4,690	603	51	230	46	177,705	2,318	8,664	5,931	194,618
1907	19,439	904	34,763	5,157	562	56	253	52	145,114	2,554	9,686	3,989	161,343
1908	19,137	684	33,759	5,052	588	45	264	61	159,519	1,936	9,487	6,193	177,135
1909	19,714	780	47,363	3,490	597	53	218	57	158,354	2,579	7,511	6,019	174,463
1910	19,957	664	41,782	3,255	602	38	167	53	160,085	1,942	6,184	5,084	173,295
1911	19,015	561	40,611	4,132	582	33	179	55	154,380	1,851	7,322	6,657	170,210
1912	18,836	574	38,896	4,339	573	39	173	71	150,502	2,194	7,160	7,106	166,962
1913	19,206	515	34,929	2,744	633	45	131	24	155,996	2,115	5,807	2,086	166,004
1914	18,664	427	34,672	3,401	549	38	156	52	134,341	1,811	6,595	3,624	146,371
1919	19,743	268	38,156	4,381	463	45	228	95	135,692	2,328	8,281	1,494	147,795
1920	20,933	250	29,795	2,386	627	51	170	58	174,715	2,955	6,707	5,931	190,308

## **Anthrax and Actinomycosis.**

There were three cases of Anthrax and four cases of Actinomycosis. The carcasses, or parts thereof as the case may be, were dealt with and destroyed in terms of the Order thereanent.

### **Fish Inspection at the Fish Market, Carolina Port.**

The Food Inspectors from the Department examined the fish arriving at the Fish Market in the mornings by trawlers or other fishing boats before being allowed out for sale by retail in shops or from off barrows or carts on the streets—236 visits being thus made.

During the year 9,719,922 lbs. of fish of various kinds were landed, and only on one occasion was it necessary to take possession of fish which had become unfit for human food, as under :—

15 boxes of fresh herrings, weighing 840 lbs., which are included in the appendix dealing with unsound food, a large decrease on the figures for the previous three years.

### **Retail Shops, Stalls, Barrows on Streets, &c.**

This is one of the most important sections of food inspection work which come under the direct control of the Department.

In the appendix to this Report will be found a detailed list of the various foodstuffs found by the Inspectors in the course of their visits (or voluntarily offered for inspection) to be in a state unfit for human food and taken possession of. It will be observed that tinned stuffs bulk largely in these seizures. The cause of the decomposition in this class of food is usually the hermitically sealed tin having become "blown," or, in other words, air having reached the contents. This class of seizure has become very numerous of recent years, whether from bad workmanship on the part of the manufacturers or careless handling in course of transit is not known.

In addition to visiting the shops in search of unsound food, the Inspectors insist that the cleansing of the premises shall be of a high order.

Barrows on the streets for the sale of fruit, fish, &c., are becoming more numerous, and these also require supervision. Then the weekly sales in the Green-market, where foods of almost every description are offered, are assuming big dimensions, and usually densely packed with buyers on the sale days—Tuesdays, Fridays, and Saturdays.

Yet the high quality of the stuffs offered may be gauged from the fact that not in a single instance had foods to be taken possession of at these markets.

Under this head 6,575 visits were made, and 62 separate seizures took place.

### **Butter and Margarine Acts.**

At the beginning of the year there were 33 persons registered as wholesale dealers in Margarine or Margarine Cheese under Section 7 (4) of the Food and Drugs Act, 1899. There were no new registrations.

Three premises are registered for re-working butter under Section 1 (1) (a) of the Butter and Margarine Act, 1907.

All the premises have been inspected and are suitable for the purposes of the trade, being in a clean and satisfactory state.

Two samples of re-worked fresh butter were taken and submitted to the Public Analyst, who reports them to be genuine.

### **Food and Drugs Acts.**

Undernoted I give a statement of the number of samples purchased under these Acts during the last eighteen years :—

		Certified to be		
		Purchased.	Genuine.	Adulterated.
1903	-	144	130	14
1904	-	200	170	30
1905	-	199	170	29
1906	-	201	169	32
1907	-	215	184	31
1908	-	257	234	23
1909	-	304	274	30
1910	-	455	414	41
1911	-	445	415	30
1912	-	435	411	24
1913	-	484	449	35
1914	-	607	566	41
1915	-	615	588	27
1916	-	619	590	29
1917	-	610	578	32
1918	-	629	598	31
1919	-	607	582	25
1920	-	602	578	24

The following is a synopsis of the samples purchased this year :—

I.—Samples taken in the ordinary course, with a view of following up by prosecution, if necessary, should adulteration be discovered.

			Certified to be		
			Purchased.	Genuine.	Adulterated.
Sweet Milk	...	...	290	265	25
Buttermilk	...	...	2	2	0
Margarine	...	...	28	28	0
Coffee	...	...	13	13	0
Ground Rice	...	...	9	9	0
Rice	...	...	14	14	0
White Pepper	...	...	19	19	0
Black Pepper	...	...	1	1	0
Lard	...	...	9	9	0
Cream of Tartar	...	...	14	14	0
Tapioca	...	...	9	9	0
Ground Ginger	...	...	8	8	0
Baking Soda	...	...	5	5	0
Cinnamon	...	...	8	5	3
Pot Barley	...	...	3	3	0
Sago	...	...	1	1	0
Total			433	405	28

II.—The following samples were taken in terms of Section 2 of the Butter and Margarine Act, 1907 :—

	Taken	Genuine	Adulterated
Sweet or Fresh Butter	2	2	0

III.—The undernoted "test" samples were purchased by deputy :—

			Certified to be	
			Purchased.	Genuine.    Adulterated.
Cream	...	...	1	1      0
Sweet Milk	...	...	26	25      1
Condensed Milk	...	...	3	3      0
Goat's Milk (condensed)	...	...	1	1      0
Margarine	...	...	24	24      0
Salted Butter	...	...	10	10      0
Sago	...	...	2	2      0
Oatmeal	...	...	9	9      0
Hot Barley	...	...	12	12      0
Flour	...	...	9	9      0
Ground Ginger	...	...	12	12      0
White Pepper	...	...	23	23      0
Black Pepper	...	...	2	2      0
Rice (ground)	...	...	9	9      0
Rice	...	...	12	11      1
Cream of Tartar	...	...	16	16      0
Coffee	...	...	10	10      0
Tapioca	...	...	9	9      0
Baking Soda	...	...	13	13      0
Cinnamon	...	...	14	10      4
Cod Liver Cod	...	...	2	2      0
Extract of Malt and				
Cod Liver Oil	...	...	3	3      0
Whisky	...	...	4	4      0
Liquid Egg	...	...	1	1      0
Egg Substitute Powder	...	...	1	1      0
Total			228	222      6
Add Table I.			433	405      28
Add Table II.			2	2      0
Total			663	629      34

According to the population of 168,217, this works out to 3.94 samples taken for every 1,000 persons.

The 34 adulterated cases were disposed of as follows :—

The sellers of 24 were warned, and the remainder were dealt with in the Sheriff Court, with the following results :—

1 was fined £1.

8 were fined £2 each.

1 was fined £10, with the option of sixty days in prison.

The last-mentioned case was the third conviction against this person.

The average cost of the prosecutions was 21/- per case.

Seven samples of cinnamon were returned to be adulterated with sand or silicious matter, and the whole rice adulterated with talc facing to the extent of 1 per cent.

316 samples of sweet milk were purchased or taken, as against 284 last year.

The lowest milk fat recorded this year was 2.07 and the highest 8.00, whilst the average was 3.52.

The number of samples with milk fat between 4 and 5 per cent. was 32.

The number of samples with milk fat over 5 per cent. was 5.

During the year the Milk (Scotland) Order, 1921, came into force. By Article 3 it is enacted—

“No colouring matter or water shall be added to milk or cream intended for sale, and no milk or cream to which any colouring matter or water has been added shall knowingly be sold or offered or exposed for sale.”

So far as the addition of water to the milk being a contravention is concerned, the purveyors of milk are well aware.

Steps have been taken to bring the provisions of this Order prominently under the notice of all persons engaged in the milk business and directing special attention to “colouring.” Many of the purveyors of milk are under the impression that “annatto” can be used with impunity as a colouring substance to give the milk a richer appearance.

The attention of the Public Analyst has also been called to this new Order, so that should any foreign colouring matter be discovered in the course of his analysis it will be embodied in his certificates.

One question, however, the advisability of the insertion of the last paragraph of the Article, because the words “shall knowingly be sold or offered or exposed for sale” gives undesirable scope and really takes away the value of the first paragraph.

### Interments.

Under Section 69 of the Public Health (Scotland) Act, 1897, the applications for the interment of the bodies of persons (other than paupers receiving relief at the hands of the Parish Council) whose friends were alleged to be unable to bury them, or unclaimed bodies, numbered 68—just about the normal, although showing a considerable increase over last year, when only 39 applications were made.

Of those this year 28 were adults and 40 juveniles. After careful enquiry 67 were granted, and interred by the Department at a total cost of £190. One interment was otherwise arranged after the application had been made. The sum of £25 3s 1d was refunded by relatives or through Insurance Companies, and this amount has been handed to the Police Treasurer.

### Burial Grounds.

No material change has taken place on these as when referred to in my Report of last year. They have been well and satisfactorily kept.

The following interments were made in each:—

Eastern Necropolis	...	...	...	...	1,492
Western Necropolis	...	...	...	...	1,015
Western Cemetery (Perth Road)	...	...	...	...	189
Barnhill Cemetery	...	...	...	...	161
Parish Church Burying-Ground (Broughty Ferry)	...	...	...	...	22
Constitution Road Burying-Ground	...	...	...	...	3
Total					2,882

### Smoke Nuisance.

Stringent measures under this head have not been adopted. Only in cases of serious and continued nuisances were notes of the smoke coming from the chimney heads of works, &c., taken. In one instance smoke continued to issue for the full period of the observation—60 minutes—and in other cases 58, 55, and 53 minutes in the hour. Notices were served upon the authors of these nuisances calling for immediate abate-

ment, and in most cases a vast improvement resulted. In all there were 14 observations of this nature. Considerable latitude has been given during recent years, as the working conditions were not normal, and it was not desired to harass mill and factory owners, &c., unduly. Coals of the highest quality and efficient labour are now on the market. It is therefore the intention of the Department to have this atmospheric contamination suppressed and the terms of the present Smoke Nuisance Abatement Act put into force. It is generally found that careless firing or inefficient workmen contribute largely to this air pollution.

### Shops Acts.

Much of the work incidental to the efficient carrying through of these Acts, such as street patrolling to see that the closing hours fixed by the Acts or the Closing Orders made thereunder are adhered to, has to be carried out after the regular working departmental hours, and as there are some 3,521 shops of varied trades situated all over the city, the extent of the operations will be readily understood.

The provisions as to meal hours, employment of young persons and children, half-holidays, and exhibition of the necessary notices, &c., have been seen to, as well as the seats for female shop assistants, required in terms of Section 3 of the principal Act.

Two new Closing Orders made under the Shops Act, 1912, came into force during the year on requisition from—

1. Boot and Shoe Retailers; and
2. Butchers.

which provide for the closing of shops of these business at certain hours. The necessary procedure in the verification of signatures to the petitions, &c., were carried through by the Inspectors, and on the Orders becoming operative their conditions were brought prominently under the notice of the shopkeepers affected thereby.

The work placed upon the Department through the Shops (Early Closing) Act, 1920, and the amending Act of 1921, in supervision of places for public refreshment, has added considerably to the duties of the Shops Inspectors. Up to the end of last year these were performed by the police officers under the supervision of the Chief Constable.

Practically each working night a couple of Inspectors have had to patrol the streets until a late hour for the prevention and detection of irregularities. The contraventions—147 in number—have all been the serving of customers after the legal closing hours. This is a class of contravention both difficult to detect and put down, and prior to prosecutions being adopted the offenders were given every opportunity in the shape of repeated warnings. Where these warnings went unheeded or the contraventions of a serious or glaring nature the circumstances were laid before the Procurator-Fiscal in the Sheriff Court. In all 32 such prosecutions were instituted, and fines ranging from 7/6 to 20/- were imposed, except in one case where the accused was found “not guilty.” Unfortunately, the fines imposed do not by any means cover the cost of the prosecution, the deficit having to be met by the ratepayers.

The work under the various Shops Acts and the Closing Orders made thereunder entailed 3,341 visits, and in addition 1,175 hours were spent on street patrol duty.

### **Theatres and Cinemas.**

To these places of amusement 81 visits were made to supervise their means of ventilation, the cleansing of the premises, the provision of sufficient sanitary or lavatory accommodation, &c. Taking them as a whole, they have been maintained in quite a satisfactory state, and have been periodically reported to the Magistrates as being such, so far as coming under the jurisdiction of this Department.

Any small improvement that was considered necessary was promptly carried out on notification being given to the occupiers, but they have given little or no cause for official interference.

### Rag Flock Act.

Six samples were procured in terms of the above Act and submitted to the Public Analyst, who certifies all to be not over the standard of 30 parts of chlorine per 100,000 parts of flock.

The following are the figures as supplied by the Analyst on the samples submitted:—

One sample yielded	...	...	...	10.00
" "	"	...	...	3.60
" "	"	...	...	3.67
" "	"	...	...	10.00
" "	"	...	...	15.00
" "	"	...	...	8.30

### Rats and Mice (Destruction) Act, 1919.

The campaign instituted with activity when the provisions of the above Act became operative at the beginning of 1920 has continued without abatement. The destruction and depredations of these vermin have been prominently brought home to all owners or occupiers of property, as well as to shopkeepers and other traders where materials of a description likely to attract rats or mice are stored, by means of personal advice of the Inspectors; visitation of infested locus; by advertisements and distribution of instructions in handbill form.

The officials of the various Departments in the City's service have also co-operated with me in the extermination work.

All the professional ratcatchers in the burgh have kept in touch; drawn attention to any district where rats were prevalent, and reported the results of their labours.

I am glad to say householders have taken advantage of the instructions previously given regarding the disposal of refuse, food scraps, &c., in such a manner as not to attract the vermin or offer feeding grounds for them.

Vessels arriving at the harbour—and especially those from foreign ports—are boarded, and the Inspector makes minute enquiry as to the presence of rats on board or during the voyage. Special instructions,

which embody the precautions to be adopted in preventing rats escaping from ships on to the harbour lands or precincts, are served upon the master. Advice is also given as to the destruction and extermination of rats on board and the disposal of dead carcasses.

Traps were given out on loan and poison (150 tins) supplied free of charge where it was deemed expedient for the good of the community.

From our own intimate knowledge of the extermination work carried out by private enterprise or through the exertions of the Department, and the other reports which reach me from persons interested in the matter and in a position to know, I am satisfied much good work has been done during the year. If the breeding grounds are reached and this undesirable population harassed and kept perpetually on the move to the open road, the keeping of their number within bounds is only a matter of time.

### **Offensive Trades.**

The following offensive trades are upon the Register :—

62 East Dock Street—Tallow Melter.

Marine Parade—Tanner.

1 Park Street—Tanner.

At Public Slaughter-Houses, East Dock Street—Gut Cleaner.

At Public Slaughter-Houses, East Dock Street—Tripe Cleaner.

At Public Slaughter-Houses, East Dock Street—Hide Factors (2).

At Public Slaughter-Houses, East Dock Street—Slaughterer of Cattle (Corporation).

The tallow melter's business in East Whale Lane was discontinued, and sanction given to establish the same class of business by the firm at 62 East Dock Street. Bye-laws for this trade were prepared and submitted to the Public Health Committee. They were approved and adopted after undergoing the usual procedure. These premises have all been periodically inspected, and the process of each class of work found to be carried out under as satisfactory conditions as could be expected.

## Section 164 of the Burgh Police (Scotland) Act, 1892.

### Provision and Renewal of Rain Water Spouts and Downpipes.

Under the above Section the following work was executed, viz. :—

Number of Properties where the rain water spouts and conductors have been overhauled, renewed, or otherwise repaired.	Lineal feet of new rain water conducting channel rhones or gutter pipes used in the renewing or repairing of the same.	Lineal feet of new rain water conducting or downfall pipes used in the same way at the different properties.
640	13,309	7,622

### General Prosecutions.

The prosecutions for the year were as under :—

Contravention of Public Health Act. Failure to erect Water Closet, &c.	Contravention of Food and Drugs Acts.	Contravention of Shops Acts.
2	10	32
Dairies, Cowsheds, and Milkshops Order.  Premises not in conformity.	Increase of Rent and Mortgage (Restriction) Act.	Failure to Paint and Whitewash Staircases and Passages.
1	1	1
	Total.	
	47	

Detailed particulars of each are given under the various heads.

I am, Gentlemen,

Your obedient Servant,

ROBERT MITCHELL,  
*Chief Sanitary Inspector.*

## APPENDIX.

Statement by Sanitary Inspector of Proceedings under the Public Health  
and other Acts during 1921.

Subordinate Sanitary Inspectors employed	...	...	19
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### I. Nuisances.

Complaints received	...	...	...	...	...	2,777
Intimations served under Section 19	...	...	...	...	...	16,423
Notices served under Section 20	...	...	...	...	...	1
Cases in which legal proceedings were taken	...	...	...	...	...	3
Cases in which legal proceedings were successful	...	...	...	...	...	2

## II. *Workshops.*

Inspections	...	...	...	...	...	1,469
Notices served under Section 2 (3) of Factory and Workshop Act, 1901	...	...	...	...	...	1
Cases in which legal proceedings were taken	...	...	...	...	...	0
Cases in which legal proceedings were successful	...	...	...	...	...	0

### III. *Tents and Vans.*

Inspections	...	...	...	...	...	...	57
-------------	-----	-----	-----	-----	-----	-----	----

IV. *Underground Dwellings.*

Reported to Local Authority	...	...	...	...	0
Notices to Owners (Section 74)	...	...	...	...	0
Cases in which legal proceedings were taken	...	...	...	...	0
Cases in which legal proceedings were successful	...	...	...	...	0

### V. *Common Lodging-Houses.*

On Register at 1st January, 1921	...	...	...	2
Registered during year (not to include renewals)	...	...	...	0
Renewals of Registration	...	...	...	1
Removed from Register	...	...	...	1
On Register at 31st December, 1921	...	...	...	1
Common Lodging-Houses belonging to the Local Authority	...	...	...	0
Inspections between 8 a.m. and 10 p.m.	...	...	...	76
Inspections between 10 p.m. and 8 a.m.	...	...	...	4
Intimations of Irregularities sent to Keepers	...	...	...	0
Cases of Infectious Disease reported to Medical Officer (Section 97)	...	...	...	0
Unregistered Premises dealt with	...	...	...	0
Cases in which legal proceedings were taken (breaches of bye-laws, &c.)	...	...	...	0
Cases in which legal proceedings were successful	...	...	...	0

VI. *Houses Let in Lodgings.*

On Register at 1st January, 1921	...	...	...	145
Registered during year	...	...	...	7
Removed from Register	...	...	...	8
On Register at 31st December, 1921	...	...	...	144
Inspections	...	...	...	1,554
Cases in which legal proceedings were taken	...	...	...	0
Cases in which legal proceedings were successful	...	...	...	0

VII. *Infectious Diseases.*

Visits of Inquiry, &c.	...	...	...	1,877
*Patients removed to Hospital	...	...	...	783
Persons removed to House of Reception	...	...	...	0
Notices served under Section 50 (2)	...	...	...	3,850
Notices served under Section 53 (2)	...	...	...	3,624
Intimations to School Boards, Teachers, &c.	...	...	...	1,346
Houses or Premises disinfected	...	...	...	1,103
Sets of Clothing, Bedding, &c., disinfected or destroyed	...	...	...	0
Cases in which legal proceedings were taken	...	...	...	0
Cases in which legal proceedings were successful	...	...	...	0

VIII. *Burials.*

Burials undertaken in terms of Section 69	...	...	...	67
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IX. *Dairies, Cowsheds, and Milkshops.*

On Register at 1st January, 1921	...	...	...	331
Registered during year	...	...	...	57
Removed from Register	...	...	...	44
On Register at 31st December, 1921	...	...	...	344
Inspections	...	...	...	2,304
Contraventions of Orders or Regulations dealt with	...	...	...	2
Cases in which legal proceedings were taken	...	...	...	1
Cases in which legal proceedings were successful	...	...	...	1

X. *Slaughter-Houses and Offensive Trades.*

Applications under Section 32 for sanction to establish	...	...	...	1
Applications granted	...	...	...	1
Applications under Section 33 for License or Renewal of License	...	...	...	0
Applications granted	...	...	...	0
Public Slaughter-Houses (if any) belonging to Local Authority	...	...	...	1
Private Slaughter-Houses	...	...	...	0
Unlicensed Slaughter-Houses dealt with	...	...	...	0
Inspections of Slaughter-Houses	...	...	...	31
Inspections of other Offensive Businesses	...	...	...	14
‡Number of such other Offensive Businesses at 31st December, 1921	...	...	...	7
Cases in which legal proceedings were taken (breaches of bye-laws, &c.)	...	...	...	0
Cases in which legal proceedings were successful	...	...	...	0

### XI. *Unsound Food.\** (See table appended.)

Inspections under Section 43	...	...	...	...	6,811
Seizures of Unsound Food	...	...	...	...	62
Animals or carcases or articles of food destroyed with owner's consent by or at the instance of the Sanitary Inspector	...	...	...	...	62
Cases in which owners of Unsound Food were prosecuted	...	...	...	...	0
Convictions in connection with above cases	...	...	...	...	0

### XII. *Sale of Food and Drugs Acts.†*

Samples procured for Analysis	...	...	...	...	663
Certified to be genuine	...	...	...	...	629
Certified to be adulterated	...	...	...	...	34
Cases in which legal proceedings were taken	...	...	...	...	10
Cases in which legal proceedings were successful	...	...	...	...	10

### XIII. *Rag Flock Act, 1911.†*

Samples procured for Analysis	...	...	...	...	6
Certified to conform to Board's standard	...	...	...	...	6
Certified not to conform to Board's standard	...	...	...	...	0
Cases in which legal proceedings were taken	...	...	...	...	0
Cases in which legal proceedings were successful	...	...	...	...	0

### XIV. *Bye-Laws.*

Inspections in carrying out Bye-Laws relating to—

(a) Pigstyes	...	...	...	...	794
(b) Public Conveyances (under charge of Police)	...	...	...	...	—
(c) Buildings	...	...	...	...	1,263
(d) Cleansing in Special Scavenging Districts	...	...	...	...	—
(e) Other sanitary matters	...	...	...	...	59,134

† State on the fourth page hereof nature of such offensive businesses and number of each.

\* Only those inspections and seizures in which the Sanitary Inspector has personally taken part should be inserted. The Sanitary Inspector is requested to give on the fly-leaf a statement of the nature and quantities (or weights) of the food seized—distinguishing butcher meat, fish, fruit, &c.

† Only those samples which have been procured by the Sanitary Inspector personally, or by his deputies, should be inserted here, and the Sanitary Inspector is requested to give on the fourth page hereof a statement of the articles analysed:—Milk, butter, pepper, &c.

# Unsound Food. All Seized at the Public Slaughter-Houses.

Carcasses Entirely or Partially Destroyed.

FOR YEAR ENDING 31st DECEMBER, 1921.

DISEASE	CATTLE		SHEEP		SWINE		TOTAL		
	Entire.	Partial.	Entire.	Partial.	Entire.	Partial.	Entire.	Partial.	Weight Lbs.
Tuberculosis ... ..	111	147	—	—	8	8	119	155	69,033
Pneumonia and other Chest Troubles ... ..	5	10	9	5	—	—	14	15	3,154
Fevered Conditions ... ..	34	1	87	—	6	—	127	1	20,270
Septic Conditions ... ..	20	3	1	—	—	—	21	3	8,631
Rheumatism ... ..	—	42	—	3	—	—	—	45	2,480
Fractures and Bruises ... ..	6	124	1	20	1	12	8	156	13,353
Dropsical Conditions ... ..	11	—	20	7	5	—	36	7	4,014
Inflammation of Abdominal Organs ... ..	41	23	3	4	2	—	46	27	20,076
Immaturity ... ..	5	—	—	—	—	—	5	—	200
Asphyxiation ... ..	2	—	—	—	—	—	2	—	1,234
Decomposition ... ..	49	—	47	—	4	—	100	—	14,041
Actinomycosis ... ..	2	2	—	—	—	—	2	2	691
Anthrax ... ..	3	—	—	—	—	—	3	—	1,989
Abscesses, Tumours, and Cysts ... ..	—	16	—	1	—	—	—	17	299
Wasted Conditions ... ..	8	—	6	—	6	—	20	—	1,596
<b>Totals</b> ... ..	<b>297</b>	<b>368</b>	<b>174</b>	<b>40</b>	<b>32</b>	<b>20</b>	<b>503</b>	<b>428</b>	<b>161,061</b>

In addition to the Meat taken possession of at the Public Slaughter-Houses, the following Organs were seized and condemned there, but not allocated to any special diseased conditions:—

CATTLE ORGANS.			SHEEP ORGANS			PIG'S ORGANS.		
Cows' Udders	...	67	Livers	...	34	Udders	...	12
Livers	...	288	Plucks	...	65	Plucks	...	29
Lungs	...	99	Kidneys	...	43	Kidney	...	4
Hearts	...	23						
Kidneys	...	50						
Heads	...	52						
Tongues	...	77						
Skirts...	...	55						

#### OTHER ARTICLES OF FOOD DESTROYED.

ARTICLES.	WHERE SEIZED.	QUANTITIES OR WEIGHTS.					REASONS FOR SEIZURE.
		Tons.	Cwts.	Qrs.	Lbs.	Ozs.	
Poultry	Seized in Shops, Stalls, Barrows on Streets, &c., and Markets and Railway Stations.	0	0	3	14	0	Decomposition.
Tinned Fruit		2	10	0	24	0	
Tinned Mutton		0	1	0	27	0	
Tinned Beef		0	9	1	26	10	
Boiled Beef		0	2	2	16	0	
Tinned Rabbit		0	0	1	5	0	
Liquid Eggs		0	1	0	3	0	
Lunch Tongue		0	0	0	19	0	
Fish		0	7	2	0	0	
Fruit Salad		0	0	0	1	0	
Tinned Fish		0	0	1	2	8	
Tinned Beans		0	0	0	3	0	
Jam		0	0	0	5	1	
Salad		0	0	0	0	8	
Tinned Milk		0	0	0	23	8	
Fruit		2	3	0	2	0	
Tinned Tongue		0	0	0	6	0	
Rabbits		0	2	0	18	0	
Beef		0	0	1	12	0	
Venison		0	3	0	24	0	
Vegetables		0	0	0	8	0	
		6	2	3	16	3	
Eggs		70 Dozens.					

## †Sale of Food and Drugs Acts.

## ARTICLES ANALYSED.

Cream	...	...	...	...	...	1
Sweet Milk	...	...	...	...	...	316
Butter Milk	...	...	...	...	...	2
Condensed Milk	...	...	...	...	...	4
Margarine	...	...	...	...	...	52
Lard	...	...	...	...	...	9
Salted Butter	...	...	...	...	...	10
Fresh Butter	...	...	...	...	...	2
Rice	...	...	...	...	...	26
Ground Rice	...	...	...	...	...	18
Cream of Tartar	...	...	...	...	...	30
Tapioca	...	...	...	...	...	18
Ground Ginger	...	...	...	...	...	20
Black Pepper	...	...	...	...	...	3
White Pepper	...	...	...	...	...	42
Coffee	...	...	...	...	...	23
Flour	...	...	...	...	...	9
Pot Barley	...	...	...	...	...	15
Sago	...	...	...	...	...	3
Oatmeal	...	...	...	...	...	9
Baking Soda	...	...	...	...	...	18
Cinnamon	...	...	...	...	...	22
Cod Liver Oil	...	...	...	...	...	2
Extract of Malt and Cod Liver Oil	...	...	...	...	...	3
Liquid Egg	...	...	...	...	...	1
Egg Substitute Powder	...	...	...	...	...	1
Whisky	...	...	...	...	...	4
Total						663

## †Number of Other Offensive Businesses.

Tallow Melters	...	...	...	1
Tanners	...	...	...	2
Gut Cleaners	...	...	...	1
Tripe Cleaners	...	...	...	1
Hide Factors	...	...	...	2
Total				7



# City of Dubuque

## REGISTER OF THE VARIOUS

