

**[Report 1935] / Medical Officer of Health, Edinburgh City.**

**Contributors**

Edinburgh (Scotland). City Council.

**Publication/Creation**

1935.

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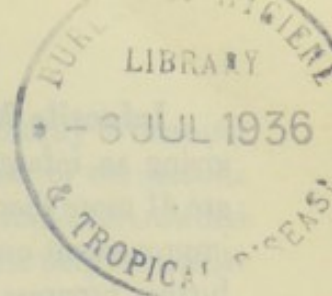
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PUBLIC HEALTH DEPARTMENT,  
JOHNSTON TERRACE,  
EDINBURGH, *June, 1936.*

MY LORD PROVOST, LADIES AND GENTLEMEN,

I have the honour to submit the Annual Report on the Health of the City for the year 1935.

**Population.**—It is estimated that the population for the City is 460,877—208,747 males and 252,130 females. This figure represents an increase of 3,778 on the previous years' estimate.

**Births.**—There were born 7,037 children—3,686 males and 3,351 females. This gives a birth-rate of 15·3 per 1,000. In 1934 the rate was 15·7. Of the total births 6·9 per cent. were illegitimate. The highest birth-rate was in Liberton ward (26·5). This ward embraces the new Niddrie Mains Housing Area. The lowest birth-rate (6·8) was in Morningside ward. The different age distribution in the two wards accounts in great part for the difference in the birth-rate.

**Deaths.**—After adjustment for transfers, the deaths from all causes totalled 6,132—3,024 males and 3,108 females, equal to a death-rate of 13·3 per 1,000 of the population. This is an increase over the preceding year, as there were 5,873 deaths in 1934 and a death-rate of 12·8 per 1,000.

During the past ten years the rates have been as follows :—

1926	.	13·3	1931	.	12·9
1927	.	14·1	1932	.	13·5
1928	.	13·6	1933	.	13·2
1929	.	14·8	1934	.	12·8
1930	.	13·8	1935	.	13·3

George Square ward had the highest general death-rate (16·7); the highest pulmonary tuberculosis death-rate (1·4) and the highest infantile mortality rate (97). Gorgie ward for the sixth successive year returned the lowest general death-rate (8·8).

The continuous fall in the birth-rate over many years has increased the proportion of older people in the population and for this reason death-rates may be expected to rise. During the year 49 per cent. of the deaths were of persons over the age of 65 years.

An outbreak of influenza with complications, in the early months of the year was responsible for 155 deaths.



**Infantile Mortality.**—Four hundred and ninety children died under one year, giving an infantile mortality rate of 70 per 1,000 registered live births. The deaths are 41 more than in the previous year and the rate is 8 more. While this rate is a great improvement on what obtained a comparatively few years ago, there is room for much further progress.

**Housing.**—During the year, further progress was made with the programme of Slum Clearance, and since 1923, the Local Authority has dealt with 5,716 insanitary houses affecting a population of 18,936 persons.

The year 1935 will be a memorable one in Public Health Administration. The passing of the Housing (Scotland) Act, 1935, brought us much nearer to our ideal, namely, that every member of the community be properly housed. In this Act a new standard is laid down for overcrowding, namely, that (a) a one-apartment house can only legally accommodate two persons; (b) two-apartment house—three persons; (c) three-apartment house—five persons; (d) four-apartment house—7½ persons; (e) five rooms or more—ten persons, with an additional two in respect of each room in excess of five. Over and above these standards, a house is deemed to be overcrowded if persons of the opposite sex who are not living together as husband and wife are compelled to sleep in the same room. Rooms with a floor area of less than 50 square feet are not counted for the purposes of the above standard, and rooms less than 110 square feet, but more than 50 square feet are subject to a reduction in the number of units or persons who may legally occupy them. Children under ten are reckoned as one-half of a unit, and children under one year are not taken into account. This new standard is a big advance on the old standard, namely, the standard of 400 cubic feet per person, which has always been regarded as unsuitable in assessing the degree of overcrowding in dwelling houses.

Another part of the 1935 Act deals with the problem of Slum Clearance from a new angle, namely, the treatment of re-development areas, and, although the administration of the provisions may be rather complicated, one feels that it is a step in the right direction. It is not sufficient to clear out insanitary houses or tenements and leave the sites vacant, and, to deal with the problem satisfactorily, Slum Clearance should be closely linked with Town Planning, and in these new provisions, such a method of dealing with insanitary areas is possible.

The Overcrowding Survey required under the 1935 Act has now been completed. All houses of a rental of £45 and under were visited by members of the City Assessor's staff who collected information on cards prepared by this Department. The cards were returned to the Sanitary Department and the information thereon collated and a report prepared. This report shows that altogether, 100,642 houses were surveyed, including 1,034 which were vacant at the time of the Survey, and it was found that 103,083 families were residing therein. Applying the standard defined in the Act, it was found that 19,746 houses or 19·82 per cent. were overcrowded, and that 20,244 families or 19·64 per cent. were living in overcrowded conditions. Reference is made to this Survey in the Sanitary Inspector's Report, which shows that, after making certain deductions, it would appear that somewhere in the region of 7,000 new houses are required to meet the immediate needs of the City in order to obtain the abatement of overcrowding.



The increasing number of new houses built by the Local Authority is causing much extra work to be thrown on the Sanitary Inspectresses, as most of the tenants for these new houses are coming either from condemned dwellings or from overcrowded houses. The supervision of the tenants in the new housing areas is not only beneficial to the tenants, but is very useful to the community. The response to the new environment is greatly increased by careful supervision and study. The increased number of children in these areas necessitates active supervision, and the work has increased to such an extent that each Inspectress has to pay from three to five thousand visits to the new houses, and an addition to the staff may require to be considered in the near future. Experience in Edinburgh and elsewhere suggests that each individual Inspectress can only efficiently supervise 1,000 houses per annum.

**The Tuberculosis Death-Rate**, after remaining almost stationary for a few years, resumed its tendency to fall and the year marks another record in the number of deaths for all forms of the disease. The pulmonary tuberculosis rate declined from 0·71 in 1933 to 0·66 in 1934 and to 0·57 in 1935, the lowest figure ever recorded for the City. The rate for the non-pulmonary forms of the disease was ·15 per 1,000, a figure which is also the lowest on record.

A long view must be taken of this disease, and with that in mind the progress made is noteworthy. The decline in the present century is from 1·8 per 1,000 to ·6 in the pulmonary and from ·9 to ·2 in the non-pulmonary forms of the disease.

A further step which might be taken with advantage in connection with the disease is the allocating of a small proportion of the new houses built by the Local Authority for families who have a member suffering from tuberculosis. In the wards of the hospital for advanced cases of the disease there is a considerable number of patients who are there for segregation purposes only, their houses being unsuitable for this purpose. For such patients it would be much more economical and, under proper supervision, equally efficacious to furnish the family with such a size of house that the patient would have a bedroom to himself or herself. It is many years since I first advocated this arrangement and I believe in some Cities such a suggestion has actually been put into operation with good results.

Haymarket and Corstorphine and Cramond wards stand in an enviable position relative to tuberculosis, the rates for these wards being 0·2 as against 0·6 for the City generally and 1·4 for George Square ward.

**Infectious Disease.**—The incidence of infectious disease has been slight during the year and the types of disease mild. The balconies which have been erected at some of the pavilions of the City Hospital have been much appreciated as an addition to the hospital accommodation. Some forms of disease react very favourably to open-air treatment.

**Co-operation with University.**—The agreement which we have with the University regarding the staffing, etc., of our General Hospitals continues to operate smoothly. By means of this the work in the various hospitals is directed by the Professors of Medicine, Surgery, Midwifery and Child Life, the Professor of Bacteriology



acting as Director of our Bacteriological Services and the Professor of Pathology as Director of the Pathological Work. The scheme in general and in detail has been a success, and the co-operation most harmonious. I am of opinion that we are only in the very initial stages of a plan which will ultimately be of the greatest service to both parties.

The report of Professor Mackie, Professor of Bacteriology, is a highly scientific document and illustrative of the type of work which can only be done for us by such arrangements as we have with the University. The variety and scope of the work done for the hospitals is a good object lesson on the value of our association with the Bacteriological Department. The subjects dealt with, namely, "Identification of types of hæmolytic streptococci ;" "Type of diphtheria bacillus ;" "The study of virus diseases," etc., indicate the value of the assistance of the Bacteriological Department in some of the more obscure public health problems.

**Child Welfare Department.**—The work of the Maternity and Child Welfare Department has been carried out by the Voluntary and Official Workers with their usual enthusiasm. During the year two new clinics were opened, one in Lochend and the other in the Stenhouse Area. Some idea of the amount of supervision that is exerted over the lives of the youngest of our citizens may be had when I state that during the year no fewer than 3,497 children were kept regularly under supervision at the clinics. This means that over one-third of all the babies born are brought into contact with the workers at the clinics. The amount of preventible disease that is prevented thereby is incalculable. In spite of all this care, however, there has been a slight increase in the infant mortality, the rate this year being 70 as compared with 62 the previous year. The great part of the life-saving amongst the children has been done in the months from 2 to 12. The death-rate in the first month of life has not been much, if at all, affected. The causes which are operative in the first month are different from those operating afterwards, and include such things as prematurity, accidents at birth, and debility, and the fatal results from these are evidenced in the first few days of life. There is a field here for a great deal of research so as to investigate these causes of death which operate in the neonatal period.

The illegitimate births numbered 486, or 6·9 per cent. of the total births of the City. As an indication of the struggle that these children have for existence it may be noted that the infant mortality rate among the illegitimate children was 165, as distinguished from 70 for the whole City. This would indicate that a closer supervision is necessary in the case of the illegitimate child.

There has been a large increase in the number of attendances at the antenatal centres. No fewer than 5,485 cases of expectant mothers passed through the antenatal clinics. It is with regret that one observes an increase in the maternal mortality rate, it being 7·5 per 1,000 births compared with 6·9 in the preceding year. These mortality figures it should be noted are based on clinical investigation of all deaths due to, or associated with, childbirth.

In the City there were 19 certified midwives and these attended some 351 patients, without a recorded case of sepsis or puerperal pyrexia. There were 1,821 births attended at home by residents and pupil nurses, and 10 per cent. of the total maternal deaths occurred in their practice as against 4 per cent. in the practice of the midwives.



There were 2,756 births attended by private doctors with or without nurses, and 33 per cent. of the total maternal deaths occurred in these cases.

In the Maternity Hospitals and Training Centres there were 3,262 births and 51 per cent. of the total maternal deaths occurred in these institutions.

These figures cannot in any sense be used for comparative purposes, and it is to be borne in mind that although the deaths in hospital show the highest percentage of the maternal deaths, all difficult cases of labour are ultimately referred to them and naturally increase the number of deaths in these institutions.

**School Medical Service.**—I have, in previous reports, indicated the upward trend of nutrition in children attending our Municipal Schools but, while this is a matter for congratulation, it is not a matter for complacency. We know that the average nutrition in certain of our schools is lower than in others, and we know that our over-all average is lower than in certain fee-paying schools.

That this difference is not entirely due to the stock from which the children are drawn is proved by the fact that, in the absence of "wasting" disease, we can increase their weight by from 1 to 3 lbs. in a month at the holiday school. Here fresh air and exercise cause increase of appetite, and regular hours permit the bodies to use the better food to build up the sub-normal tissues. I would, however, again stress that it is not merely the quantity of food consumed which counts but also its suitability to the digestion and for the tissues of the growing child—matters of which too many parents are still either woefully ignorant or wantonly neglectful.

So we are brought back to the old question whether it would not be wiser, from the viewpoints of preventive medicine, sociology and genetics, to provide additional diet for the poor and give more education in the purchasing and preparation of food.

**Dental State of School Children.**—As detailed in the Report of the School Medical Service (page 113) there is a gradual increase in the number of children who enter school who have no carious or septic teeth. In Edinburgh in 1915 the percentage was 12; in 1935 it was 27·8. In Leith the percentage has been more erratic and during the past session it was only 17·5.

It must be remembered that the "buds" of the teeth are formed in the jaws before the child is born and that the materials for building these "buds" are derived ultimately from the maternal diet. Nature, however, exercises selection and will endeavour to provide for the young, hence, if the mother's diet is deficient in lime and phosphorus her body is drained of its store to provide for the unborn child. This explains, to some extent, the increase of decayed teeth in expectant mothers. Even this, however, is often inadequate and the teeth are "jerry-built" so that when used they gradually crumble away under the stress of chewing.

Sepsis is another matter. It may be partly due to deficiency of vitamin A in the diet; it may be partly due to physical delicacy of the child but, in the main, it is due to faulty hygiene of the mouth consequent on neglect by the parent.



**Rheumatism in School Children.**—There would seem to be a general consensus of opinion throughout the country that rheumatism is becoming more frequent in children of school age. In part this might be explained by a more diligent search now being made for the disease and by more careful recording of the number of cases reported, but the unanimity of observers seems to show that there is a definite increase.

This disease is protean in its symptoms and its severity ; it may show itself in a variety of throat infections, in muscular and tendon pains, in joint pains and swellings, or, more severely, as St. Vitus dance, acute rheumatic fever and for rheumatic heart disease. The prevention of the last three severe and crippling conditions lies in early treatment and careful observation of the former milder manifestations.

At the time of writing, the known cases among Edinburgh children of school age are as follows :—Reported from the rheumatic clinic (held at the Royal Hospital for Sick Children) 257 cases ; certified by family practitioners 57 ; discovered at routine examinations in 5 to 6-year-olds 33 ; in 13th year 257 ; and by school doctors at other examinations 17—a total of 621 cases ; roughly 1 per cent. of our school children. Further, of this number, 56 have to be taught in special schools, 9 taught at home, and 61 (about 1 per 1,000 of our scholars) are temporarily or permanently unfit to receive any form of education whatever.

**Rheumatism Scheme.**—In view of the increasing incidence of the disease it is generally felt that some action should be taken at least to minimise its results which are too often disastrous.

A Rheumatic Scheme in urban areas would appear to require to embrace the following items :—

- (1) Hospital or adequate home treatment of acute cases and of severe complications.
- (2) Supervisory centres of easy access in all districts so as to encourage attendance of slight and early cases. At these centres the question of the supply of medicines would arise.
- (3) Rheumatic convalescent homes for those who have been in hospital and for those, who, while not sufficiently ill to require hospital accommodation, are too ill to attend the supervisory centres. Here it would be necessary to supply educational facilities, for many of the children would require residence of several months.
- (4) Some form of home visitation to obtain information regarding the house ; to give advice on hygiene and diet ; to encourage attendance by " defaulters " at supervisory centres, and to get " follow up " reports on those who have been discharged from hospitals.

It is extremely doubtful whether adequate functioning of such a scheme could be obtained without the notification of the disease to the local Health Authority.



**“Mentally Defective” School Children.**—The work among these children continues to progress. The standard of the average child in these special schools continues to rise; the educational results to improve and the co-operation between the scholastic and the medical staffs is admirable.

I still feel it to be a matter for regret that children in these special schools must be designated “mentally defective.” It is not generally recognised that they form a special group in the community and are not judged by the same standards as those, say, in institutions. In the schools the standard is educability and the children are dealt with under the Education Acts. When anti-social conduct predominates or ineducability is marked, the Mental Deficiency Act is invoked. It is true that there are marginal cases but, on the whole, the two groups—educational and social—are sufficiently distinct to merit different legal designations.

**Venereal Diseases Department.**—There is no change to be noted in this Department except that there has been a noteworthy diminution of the total number of new cases of syphilis and gonorrhœa. In the last 10 years the numbers of new cases is practically halved; nevertheless there were during the year 647 new cases of syphilis and 1,246 cases of gonorrhœa.

**Municipal General Hospitals.**—The work in these hospitals tends to increase year by year. There is a growing tendency to hospitalise the chronic sick. This is partly accounted for by a demand for care and attention which is not readily obtained in the smaller houses. When visiting the hospitals more especially used for nursing the chronic sick, I am always impressed with two things:—(1) The sense of comfort and cleanliness which prevails, and (2) the enormous problems in preventive medicine awaiting solution. Old age without a fair degree of both bodily and mental vigour, to an onlooker at best, does not appear desirable, and the problem to be solved is why there should be such an enormous number of prematurely disabled individuals in the hospitals. What preventive measures could or should be taken earlier in life to prevent the various forms of paralysis, chronic rheumatism in its varied forms, cancer, heart disease, crippling hundreds of men and women at ages during which the majority of us are reasonably active and have a considerable degree of working capacity? The problems involved here are numerous and profound.

The staffing of the general hospitals still presents grave difficulties. The numbers are now reasonably sufficient, but there is a great difficulty in securing probationers of the right stamp. This difficulty, while fairly acute with us, is not confined to our hospitals. It seems to me that far too much emphasis has been laid, lately, on the excessive hours of duty which the nurses have to work. This subject has been engaging my close attention for some time, and it may be safely stated that it is only the night staff who work longer hours than seems advisable, and plans to alleviate this will shortly be placed before the Committee.

**Mental Services.**—The work here has continued steadily during the year. No new features have been introduced. In mental diseases, as in other fields of medicine, more emphasis is being placed on the preventive aspect of disease and more attention is being paid to the child through the establishment of child guidance clinics. A close



co-operation exists between the School Department and the clinics already existing in the City.

The accommodation in Gogarburn Institution is now fully occupied in the male side and nearly so in the female. The future development of this institution is at present engaging serious attention.

For keeping in touch with the discharged patients from Bangour Village and with the observation cases who attend the clinic in the Royal Victoria Dispensary, there has been felt a necessity for having in the service a social worker trained in psychiatric and psychological methods. The same views have been expressed by the Superintendent at Gogarburn Institution and by the School Medical Officer that a social worker trained in psychiatric and psychological practice would be of inestimable value in giving specialist reports on homes, parents and other environmental factors in dealing with "mentally defective" and "problem" children. It is true that in the case of the former, head teachers obtain invaluable information through interviews, home visitation and former pupils' clubs, and that the Voluntary Mental Welfare Association gives ungrudging assistance, while in the "problem" cases the voluntary psychological clinics do excellent work. But there are an annually increasing number of cases where there is lacking the information so necessary in forming an accurate estimate as to the best method of dealing with a child, particularly a delinquent child, so much so that our work in this connection cannot be considered complete.

**Acknowledgments.**—I have to thank the Chairman and the Members of the Public Health Committee for their sympathetic consideration and assistance in the various problems with which I have been confronted, and all the officials in the Department for their loyal co-operation.

I am, My Lord Provost, Ladies and Gentlemen,

Your Obedient Servant,

JOHN GUY,

M.D., D.P.H. (Camb.), F.R.F.P. & S. (Glas.), F.R.C.P. (Edin.),

*Medical Officer of Health.*

# SUMMARY OF STATISTICS

For the Years 1931, 1932, 1933, 1934 and 1935.

	1931	1932	1933	1934	1935
<b>Population Estimated to middle of year</b> . . .	443,042	447,800	452,773	457,099	460,877
<b>Area of City—Acres</b> . . .	32,526	32,526	32,526	32,526	32,526
<b>Density of Population—</b>					
Persons per acre . . .	13·6	13·8	13·9	14·1	14·2
<b>Houses Inhabited</b> . . .	109,421	111,241	113,497	116,419	118,741
<b>Marriages Registered</b> . . .	3,788	3,932	4,037	4,245	4,291
<b>Birth-rate</b> (Corrected for Country Births) . . .	16·2	15·5	15·1	15·7	15·3
<b>Death-rate</b> (Corrected for Country Deaths) . . .	12·9	13·5	13·2	12·8	13·3
<b>Infantile Mortality</b> . . .	69	73	66	62	70
<b>Cancer Death-rate</b> . . .	1·5	1·9	1·7	1·7	1·7
<b>Pulmonary Tuberculosis Death-rate</b> . . .	·7	·7	·7	·7	·6
<b>*Epidemic Diseases Death-rate</b>	·2	·5	·3	·3	·3

\* Includes Enteric Fever, Measles, Scarlet Fever, Whooping Cough, Diphtheria, and Diarrhœa and Enteritis under 2 years.

*Note.*—Further detailed statistics are shown in the Tables throughout this Report.



## HOUSING.

**Inhabited Houses.**—The Burgh Assessor has supplied me with the number and rentals of occupied dwelling houses on the Valuation Roll at Whitsunday, 1935. There is an increase of 2,322 when compared with the corresponding period in the previous year.

NUMBER OF DWELLING-HOUSES OCCUPIED AT WHITSUNDAY 1935.									
Ward.	Under £5.	£5 and under £10.	£10 and under £15.	£15 and under £20.	£20 and under £30.	£30 and under £40.	£40 and under £50.	£50 and upwards.	Total in each Ward.
1. Calton . . . . .	6	232	1,326	1,457	1,521	503	114	224	5,383
2. Canongate . . . . .	57	724	1,492	1,052	1,213	370	81	121	5,110
3. Newington . . . . .	2	123	663	571	1,259	805	503	1,745	5,671
4. Morningside . . . . .	1	14	33	151	1,018	2,207	1,484	1,989	6,897
5. Merchiston . . . . .	...	14	246	525	2,173	1,538	498	1,012	6,006
6. Gorgie . . . . .	12	68	1,606	2,157	3,361	388	59	99	7,750
7. Haymarket . . . . .	4	158	412	471	1,308	720	294	1,578	4,945
8. St. Bernard's . . . . .	12	289	518	481	1,616	1,496	223	907	5,542
9. Broughton . . . . .	4	152	579	992	1,408	792	249	327	4,503
10. St. Stephen's . . . . .	10	438	756	841	1,005	547	296	673	4,566
11. St. Andrew's . . . . .	22	804	711	366	279	100	62	467	2,811
12. St. Giles . . . . .	29	1,078	1,498	626	728	130	60	193	4,342
13. Dalry . . . . .	1	203	1,986	1,928	992	38	7	60	5,215
14. George Square . . . . .	15	456	970	840	1,214	495	228	358	4,576
15. St. Leonard's . . . . .	19	900	1,755	920	513	229	110	105	4,551
16. Portobello . . . . .	7	146	692	1,007	3,221	2,046	806	672	8,597
17. South Leith . . . . .	6	255	1,444	2,185	2,571	435	145	177	7,218
18. North Leith . . . . .	6	644	1,656	1,012	522	103	27	102	4,072
19. West Leith . . . . .	12	588	1,045	625	742	783	428	746	4,969
20. Central Leith . . . . .	...	260	1,578	660	495	107	15	58	3,173
21. Liberton . . . . .	33	334	1,504	938	354	316	259	575	4,313
22. Colinton . . . . .	10	161	310	177	204	585	329	840	2,616
23. Corstorphine and Cramond . . . . .	21	156	310	248	1,259	2,162	778	981	5,915
Total . . . . .	289	8,197	23,090	20,230	28,976	16,895	7,055	14,009	118,741
Edinburgh Area . . . . .	201	5,799	15,243	14,385	22,829	12,404	5,074	10,530	86,465
Leith Area . . . . .	24	1,747	5,723	4,482	4,330	1,428	615	1,083	19,432
Suburban Area . . . . .	64	651	2,124	1,363	1,817	3,063	1,366	2,396	12,844

In comparing the distribution of the houses throughout the City with that of the previous year, it is found that in 14 wards there have been increases in the number of inhabited houses, while in 8 instances decreases, due chiefly to Slum Clearance Schemes, are recorded. The wards showing the principal increases were as follows:—

Portobello . . . . .	590	Corstorphine and Cramond . . . . .	177
Liberton . . . . .	534	Colinton . . . . .	162
Haymarket . . . . .	185	Broughton . . . . .	136

**Housing Schemes.**—The information in the following table, which has been supplied by the City Chamberlain, shows the number of houses provided by the Corporation up to the period ending 31st December, 1935. Of the total houses, 8,860 or 72 per cent. were of the three-apartment type.



	Number of Apartments.										Totals.	
	One.		Two.		Three.		Four.		Five.			
	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
Improvement and Reconstruction Schemes—												
Non-State-Aided . . . .	268	44	338	56	2	...	...	...	...	...	608	4.95
State-Aided : 1923 Act . . .	28	1	816	27	2,066	69	84	3	...	...	2,994	24.35
1930 .. . . .	...	...	22	3	644	92	32	5	...	...	698	5.66
Provision of New Houses—												
Non-State-Aided . . . .	73	25	172	60	27	10	14	5	...	...	286	2.33
State-Aided : 1923 Act . . .	...	...	18	100	...	...	...	...	...	...	18	.15
1924 .. . . .	...	...	882	14	5,242	82	273	4	...	...	6,397	52.03
1919 .. . . .	...	...	77	6	879	68	214	16	125	10	1,295	10.53
Totals . . . . .	369	3	2,325	19	8,860	72	617	5	125	1	12,296	100.0

From 1st January, 1919, to 28th December, 1935, plans have been passed by the Dean of Guild Court for the erection of 32,636 houses.

## VITAL STATISTICS.

In the accompanying table a decennial survey of the increase which has taken place in the population of the City from 1861 to 1921, and a yearly survey from the latter date onwards, are given. The births and deaths with the rates per 1000 of the population are also shown, together with the infantile mortality rates per 1000 live births.

Year.	Population.	Deaths.	Rate per 1000.	Births.	Rate per 1000.	Infantile Mortality.
1861	170,444	3,946	23.1	5,694	33.4	135
1871	196,979	5,484	27.8	6,874	34.8	151
1881	228,346	4,308	18.8	7,360	32.2	128
1891	261,225	5,257	20.1	7,382	28.2	138
1901	316,921	5,633	17.7	7,920	24.9	143
1911	320,829	4,652	14.4	6,507	20.8	115
*1921	420,264	6,048	14.4	9,028	21.5	96
1922	422,112	6,447	15.3	8,772	20.8	91
1923	423,956	5,875	13.9	8,662	20.4	82
1924	425,802	6,312	14.8	8,404	19.7	89
1925	427,664	6,138	14.4	7,843	18.3	96
1926	429,535	5,710	13.3	7,926	18.5	80
1927	431,413	6,066	14.1	7,621	17.7	80
1928	433,299	5,872	13.6	7,420	17.1	75
1929	435,195	6,442	14.8	7,304	16.8	80
1930	437,098	6,038	13.8	7,307	16.7	82
1931	443,042	5,726	12.9	7,164	16.2	69
1932	447,800	6,032	13.5	6,960	15.5	73
1933	452,773	5,964	13.2	6,835	15.1	66
1934	457,099	5,873	12.8	7,188	15.7	62
1935	460,877	6,132	13.3	7,037	15.3	70

\* City boundaries extended.



## MARRIAGES.

Marriages registered during the year numbered 4,291 and represent a marriage rate of 9·3 per 1000. In 1931 there were 3,693 marriages and there has been a steady increase annually since that period.

The number of marriages registered in each quarter of the year was as follows :—

1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.
771	1,016	1,447	1,057	4,291

## BIRTHS.

During the year 7,725 births were registered in the City. From this total, there have to be deducted 813 which occurred in maternity hospitals and nursing homes to parents whose residence was outwith Edinburgh. In the course of the year there were 125 births to Edinburgh citizens residing temporarily in other parts of Scotland and these have to be included in the City records.

After making these adjustments the births allocated to the City numbered 7,037—3,686 males and 3,351 females—representing a birth-rate of 15·3 per 1,000. This number is 151 fewer than in the previous year when the birth-rate was 15·7 per 1,000.

The number of births and the birth-rates in the various municipal wards will be found in the table on page 5, while the following statement shows the corrected births registered in each quarter of the year :—

Quarter.	Total Births.	Legitimate.	Illegitimate.	Percentage of Illegitimate to Total Births.
1st . . .	1,671	1,568	103	6·2
2nd . . .	1,891	1,775	116	6·1
3rd . . .	1,773	1,639	134	7·6
4th . . .	1,702	1,569	133	7·8
Totals .	7,037	6,551	486	6·9

## DEATHS AND DEATH RATES.

Deaths from all causes numbered 6,132—3,024 males and 3,108 females, being equal to a death-rate of 13·3 per 1,000 of the population. Compared with the previous year this number is 259 more and the rate ·5 higher.

Of the total deaths, 490 were of infants under one year, representing an infantile mortality rate of 70 per 1,000 live births. In 1934 the rate was 62.



Table showing the Population, etc., also the Births and Deaths in each Ward during 1935.

WARD.	Population.	Area in Acres.	Density of Population per Acre.	BIRTHS.		INFANTILE MORTALITY.		DEATHS.			
				Number.	Rate per 1000.	Deaths.	Rate per 1000 Births.	*EPIDEMIC DISEASES.		ALL CAUSES.	
								Number.	Rate per 1000.		Number.
Calton	20,635	228	90.5	305	14.8	23	75	7	.34	304	14.7
Canongate	19,435	965	20.1	343	17.6	22	64	13	.65	269	13.8
Newington	20,714	891	23.2	218	10.5	14	64	5	.24	305	14.7
Morningside	21,733	1,358	16.0	148	6.8	9	61	2	.09	355	16.3
Merchiston	20,130	677	29.7	194	9.6	13	67	1	.04	301	15.0
Gorgie	30,797	676	45.6	527	17.1	38	72	6	.19	271	8.8
Haymarket	18,609	959	19.4	176	9.5	14	80	1	.05	211	11.3
St. Bernard's	19,298	1,250	15.4	308	16.0	18	58	4	.20	235	12.2
Broughton	16,449	472	34.8	262	15.9	15	57	2	.12	202	12.3
St. Stephen's	16,358	190	86.1	259	15.8	23	89	4	.24	253	15.5
St. Andrew's	10,266	206	49.8	174	16.9	10	57	2	.18	148	14.4
St. Giles	18,213	266	68.5	364	20.0	35	96	8	.49	294	16.1
Dalry	20,096	187	107.5	348	17.3	28	80	7	.34	258	12.8
George Square	18,332	248	73.9	257	14.0	25	97	6	.32	306	16.7
St. Leonard's	17,354	104	166.9	331	19.1	21	63	5	.28	234	13.5
Portobello	34,249	2,200	15.6	559	16.3	34	61	8	.24	416	12.1
South Leith	18,101	819	35.3	449	15.5	38	62	7	.24	326	11.3
North Leith	18,649	218	83.0	336	18.6	31	92	2	.38	265	14.6
West Leith	13,405	462	40.4	265	14.2	14	53	7	.10	206	11.0
Central Leith	17,832	142	94.4	219	16.3	16	73	9	.67	177	13.2
Liberton	9,084	6,339	2.8	472	26.5	29	61	6	.33	219	12.3
Colinton	19,172	5,602	1.6	101	11.1	6	59	1	.11	111	12.2
Corstorphine and Cramond	11,322	8,067	2.4	270	14.1	17	63	1	.05	234	12.2
Institutions	1,743	...	...	119	...	5	...	3	...	226	...
Military Quarters	...	...	...	33	...	2	...	...	...	6	...
Totals	460,877	32,526	14.2	7,037	15.3	490	70	118	.25	6,132	13.3

\* Includes Enteric Fever, Measles, Scarlet Fever, Whooping Cough, Diphtheria, and Diarrhoea and Enteritis under 2 years.

NOTE.—The Ward populations have been adjusted by deducting the population resident in the principal institutions and military quarters. Births and deaths occurring in institutions are allocated to Wards, except in cases where a permanent domicile cannot be established.



Table showing the number of Deaths (including Deaths transferred from other districts) and the Death-rates per 1000 of the Population during 1935 from all causes and from certain specified causes ; also the Population, the number of Deaths and the Death-rates per 1000, at all ages and certain age-periods.

	Annual Death-rate per 1,000	All Ages	Under 1 Year	1 and under 5 Years	Total under 5 Years	5 and under 10 Years	10 and under 15 Years	15 and under 25 Years	25 and under 35 Years	35 and under 45 Years	45 and under 55 Years	55 and under 65 Years	65 and under 75 Years	75 Years and upwards	Total above 5 Years
Age Distribution of Population	...	460,877	6,892	27,346	34,238	37,011	33,279	84,622	73,447	60,647	56,909	45,362	25,706	9,656	426,639
Deaths from all Causes	...	6,132	490	150	640	64	49	167	258	318	565	1,054	1,458	1,559	5,492
Annual Death-rate per 1,000	13.3	13.3	71.1	5.5	18.7	1.7	1.4	1.9	3.5	5.2	9.9	20.3	56.7	161.4	12.9
Enteric Fever	.00	1	...	...	...	...	...	...	1	...	...	...	...	...	1
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	.02	11	3	5	8	1	1	1	...	...	...	...	...	...	3
Scarlet Fever	.01	5	1	1	1	2	...	...	...	...	...	...	...	...	4
Whooping Cough	.08	37	19	7	36	1	...	...	...	...	...	...	...	...	1
Diphtheria and Group	.03	14	...	...	...	5	...	...	...	...	...	...	...	...	7
Influenza (Sole Cause)	.03	14	1	1	2	...	...	...	...	...	...	...	...	...	12
Erysipelas	.04	20	3	3	6	...	...	...	...	...	...	...	...	...	14
Encephalitis Lethargica	.02	10	...	...	...	...	...	...	...	...	...	...	...	...	10
Cerebro-Spinal Meningitis	.01	8	4	2	6	1	...	...	...	...	...	...	...	...	2
Tuberculosis of Respiratory System	.57	265	4	4	8	1	36	1	60	50	46	38	20	2	257
Tuberculosis of Intestines and Peritoneum	.07	36	2	11	13	10	2	2	3	1	2	...	...	...	23
Other Tuberculous Diseases	.02	13	...	...	...	1	3	4	3	1	1	...	...	...	12
Malignant Disease	.04	21	2	1	3	1	2	2	11	29	109	210	275	1	18
Rheumatic Fever	.03	15	...	...	...	1	1	1	3	3	3	1	1	...	806
Meningitis	.01	9	2	3	5	...	...	...	...	...	...	...	...	...	14
Cerebral Haemorrhage, Embolism, Thrombosis	1.29	599	...	...	...	...	...	...	...	...	...	...	...	...	4
Other Nervous Diseases	.34	157	17	11	28	4	6	6	3	8	36	109	207	236	599
Heart Disease	2.77	1,280	...	...	...	...	...	...	...	...	...	...	...	...	129
Other Diseases of Circulatory System	.30	142	...	...	...	...	...	...	...	...	...	...	...	...	1,280
Bronchitis	.59	272	16	2	17	1	3	10	29	49	83	264	429	412	1,280
Pneumonia (all forms)	.06	444	95	40	135	3	13	26	26	24	48	62	64	66	1,400
Other Diseases of Respiratory System	.22	104	3	5	8	4	2	2	3	7	5	10	25	40	96
Gastric and Duodenal Ulcer	.14	66	1	...	...	...	...	...	...	...	...	...	...	...	117
Diarrhoea and Enteritis	.16	75	47	6	53	...	...	...	...	...	...	...	...	...	255
Appendicitis	.09	43	...	...	...	...	...	...	...	...	...	...	...	...	309
Diseases of Liver and Gall Bladder	.12	58	...	...	...	...	...	...	...	...	...	...	...	...	96
Other Diseases of Digestive System	.28	131	7	6	13	4	5	9	7	5	12	19	11	3	40
Nephritis—Acute and Chronic	.40	186	4	...	...	...	...	...	...	...	...	...	...	...	9
Other Genito-Urinary Diseases	.24	115	6	1	7	1	7	3	3	8	8	20	31	37	108
Puerperal Sepsis	.03	16	...	...	...	...	...	...	...	...	...	...	...	...	16
Other Diseases associated with Childbirth	.08	37	...	...	...	...	...	...	...	...	...	...	...	...	37
Diseases of Early Infancy and Malformations	.51	237	229	1	230	2	6	4	25	6	...	...	...	...	7
Violent Deaths	.55	256	12	13	25	13	2	2	3	29	33	33	31	43	231
All Other Causes	1.36	629	11	4	15	7	7	21	15	37	64	96	111	256	614



The following table shows the allocation of the deaths in each quarter of the year, together with the equivalent death-rates :—

Quarter.	Number of Deaths.	Death-rates per 1,000.
1st . . .	1,860	16·3
2nd . . .	1,456	12·7
3rd . . .	1,267	10·9
4th . . .	1,549	13·3
Total .	6,132	13·3

On page 5 the distribution of the deaths throughout the wards in the City, together with the death-rates applicable to each, is shown.

The accompanying details extracted from the Registrar-General's preliminary statement for 1935 allow a comparison to be made of the death rate in Edinburgh with those of other large centres of population in Scotland.

	Rate per 1000 of Population.		Rate per 1000 of Population.
Glasgow . . . . .	13·9	Paisley . . . . .	13·5
<b>Edinburgh</b> . . . . .	13·3	Greenock . . . . .	13·9
Dundee . . . . .	13·2	Motherwell and Wishaw . . . . .	11·5
Aberdeen . . . . .	13·5	Clydebank . . . . .	11·6
SCOTLAND . . . . .			13·2

**Ward Mortality.**—The highest general death-rate (16·7) was recorded for George Square ward, which also returned the highest pulmonary tuberculosis death-rate (1·4) and the highest infantile mortality rate of 97 per 1,000 live births. Many overcrowded and insanitary areas still exist in this ward.

In St. Giles, another ward with many unsatisfactory housing features, the general death-rate was 16·1 per 1,000 as compared with 13·3 for the whole City. Deaths of infants under 1 year were 35, equivalent to an infantile mortality rate of 96 per 1,000 births, and the death-rate from pulmonary tuberculosis was ·9 per 1,000.

The general death-rate in the residential ward of Morningside was 16·3. One explanation of this high rate would appear to be that many retired and elderly people reside in this district of the City, and a large percentage of the deaths relate to persons in advanced years. The tuberculosis death-rate was ·3 per 1,000 of the population, and the infantile mortality rate 61.

Gorgie ward returned the lowest general death-rate for the City. This ward has a population of 30,797 and during the year 271 deaths occurred, representing a death-rate of 8·8 per 1,000. The birth-rate was 17·1 and the infantile mortality rate 72. Only 13 deaths from pulmonary tuberculosis were certified, and the death-rate from this cause was ·4 per 1,000 of the population.



North Leith, which has some unsatisfactory housing features, had the highest general death-rate (14·6), amongst the four Leith wards. Deaths from pulmonary tuberculosis numbered 20, equivalent to a death-rate of 1·1 per 1,000, and the infantile mortality rate was 92. During the year the clearance of the Trafalgar Lane Area, comprising 152 houses and a population of 571, effected a much desired improvement.

In Liberton ward, where within recent years a large population has taken up residence in the new housing area at Niddrie Mains, the very satisfactory death-rate of 12·3 was recorded. There were 472 births, representing a birth rate of 26·5 per 1,000, and only 29 deaths of infants under 1 year, equivalent to an infantile mortality rate of 61 per 1,000. The deaths from pulmonary tuberculosis numbered 19, and the rate per 1,000 of the population was 1·1.

A table showing the principal statistics in each of the twenty-three municipal wards will be found on page 5.

## CAUSES OF DEATH.

The table on page 6 shows the principal causes of death classified according to disease groups and age periods.

**Principal Epidemic Diseases.**—Enteric fever, measles, scarlet fever, whooping cough, diphtheria, and diarrhœa and enteritis in children under 2 years of age, are allocated to this group.

Deaths from these diseases numbered 118, as compared with 156 in the previous year, and an annual average of 177 for the five years 1930-1934. Only 11 deaths from measles were registered as compared with 66 in 1934.

There were 14 deaths attributed to diphtheria and this is the lowest mortality from that disease which has ever been recorded in the City.

Information regarding the notification of the diseases in this group will be found under the heading "Infectious Diseases" on page 11, while the number of deaths and the death-rates per 1,000 of the population in each municipal ward appear on page 14.

**Influenza.**—There was an increased prevalence of influenza during 1935 as compared with the previous year, but fortunately nothing in the nature of an epidemic was recorded. The excess of deaths was confined to the first three months of the year. Fourteen deaths were certified as directly due to influenza, while 141 were complicated with other diseases. Of these latter deaths, 74 were associated with pneumonia, 28 with other respiratory conditions and 39 with various other causes.







**Tuberculosis.**—Deaths from pulmonary tuberculosis numbered 265 and from non-pulmonary tuberculosis 70—a total of 335. The death-rate from all forms of the disease was equivalent to  $\cdot 7$  per 1,000 of the estimated population, a new low record for the City. In the previous year there were 382 deaths and the rate was  $\cdot 8$  per 1,000.

The Tuberculosis Officer in his report on page 19 deals more fully with the subject of tuberculosis and the work of his Department during the year.

**Cancer.**—Deaths from malignant disease continue to increase, the number for 1935 being 806 as against 798 for the preceding year. Males numbered 384 and females 422, and the death-rate per 1,000 of the population was equivalent to 1.7.

A study of the ages at death indicates that cancer is a disease associated with advancing years. In Edinburgh during 1935, 70 per cent. of the deaths related to persons over 60 years of age. A large proportion of the cases related to the alimentary tract, viz., stomach and œsophagus 201, intestines and rectum 131, liver and gall bladder 41, and pancreas 33.

Malignant disease of the genital organs was the cause of deaths among 61 women. In 35 of these the uterus was stated to be the part affected, while the ovaries and vagina were given as the site in 26 instances. The female breast was affected in 85 cases.

The table on page 9 shows the deaths classified according to age, sex, and the organ or region affected.

**Diseases of the Nervous System.**—There were 756 deaths certified as due to diseases of the nervous system, and of that number 482 or 64 per cent. referred to persons over 65 years of age.

Cerebral hæmorrhage, apoplexy and hemiplegia were stated to be the cause of 599 deaths, epilepsy 12, meningitis other than tubercular or cerebro-spinal 9, while 9 deaths were caused by infantile convulsions.

**Diseases of the Circulatory System.**—Of the 1,422 deaths from circulatory diseases, affections of the heart were responsible for 1,280. Arterio sclerosis, gangrene and other diseases of the blood vessels were the certified causes of the other 142 deaths in this group. Of the total deaths, 67 per cent. were of persons over 65 years of age.

**Diseases of the Respiratory System.**—Deaths from respiratory diseases numbered 820. The principal causes were pneumonia and bronchitis, which together accounted for 716 deaths, including 152 children under 5 years of age of whom 111 were infants in their first year. Forty-six per cent. of the total respiratory deaths occurred in persons over 65 years of age.

**Diseases of the Digestive System.**—The deaths recorded under this heading numbered 373. Diarrhœa and enteritis caused 75, gastric and duodenal ulcer 66, non-malignant diseases of the liver 58 and appendicitis 43. Of the deaths classified as diarrhœa and enteritis, 50 were children under 2 years of age.



**Diseases of the Genito-Urinary System.**—Acute and chronic nephritis were given as the cause of 186 of the 301 deaths from diseases of the genito-urinary system. Diseases of the prostate were responsible for 54 deaths, while 61 were due to various other conditions.

**Deaths by Violence.**—Included in this group were 66 suicidal deaths—45 males and 21 females. In a further 190 instances death was due to motor accidents, falls and other forms of misadventure.

## INFECTIOUS DISEASES.

The various diseases falling to be dealt with under this heading are as follows:—

(1) Diseases which are notified in terms of:—

(a) Section 6 of the Infectious Disease (Notification) Act, 1889.

(b) The Public Health (Infectious Diseases) Regulations (Scotland) 1932, dated 9th December, 1932, made by the Department of Health for Scotland under Section 4 (1) of the Infectious Disease (Notification) Act, 1889 (52 and 53 Vict. C.72) and Section 78 of the Public Health (Scotland) Act, 1897 (60 and 61 Vict. C.38).

(2) Measles and whooping cough (first case under 5 years of age, in each household).

The following table shows the number of notifications for each month of the year:

Disease.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Diphtheria and Membranous Croup . . . . .	40	24	30	25	34	19	19	25	25	12	35	20	308
Erysipelas . . . . .	25	22	29	30	21	15	18	14	11	26	25	28	264
Scarlet Fever . . . . .	153	131	114	151	154	104	74	56	108	172	142	152	1,511
Typhoid Fever . . . . .	...	3	1	3	4	1	2	9	2	...	4	3	32
Puerperal Fever . . . . .	7	5	5	8	8	13	8	10	11	10	6	6	97
Puerperal Pyrexia . . . . .	5	1	7	1	2	2	4	4	6	7	4	6	49
Cerebro-spinal Fever . . . . .	3	2	3	...	2	2	2	2	2	...	...	1	19
Infective Jaundice . . . . .	...	...	...	...	...	...	...	1	...	...	...	...	1
Tuberculosis, Pulmonary . . . . .	37	29	54	41	39	45	30	33	25	32	37	35	437
Tuberculosis, other forms . . . . .	18	22	28	30	23	15	15	18	17	16	13	18	233
Ophthalmia Neonatorum . . . . .	4	4	4	3	7	4	2	4	5	...	4	6	47
Malaria . . . . .	1	2	...	2	1	1	2	...	...	1	...	4	14
Dysentery . . . . .	3	2	5	2	8	4	3	8	3	11	4	13	66
Acute Primary Pneumonia . . . . .	93	69	75	40	28	18	13	8	13	20	32	29	438
Acute Influenzal Pneumonia . . . . .	10	34	25	5	...	1	1	...	...	...	3	6	85
Measles . . . . .	5	27	65	104	69	66	94	52	18	38	93	223	854
Whooping Cough . . . . .	132	144	150	132	89	62	45	53	26	13	24	7	877
Poliomyelitis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...
Polio-encephalitis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica . . . . .	...	...	1	...	...	...	...	...	...	1	...	...	2
Totals . . . . .	536	521	596	577	489	372	332	297	272	359	426	557	5 334



**Enteric Fever.**—There were 32 cases of enteric fever reported to the Department during the year. Only one death was registered. Twelve of the patients contracted the disease in districts outwith the City and four were infected whilst on holiday abroad.

An outbreak of enteric fever occurred amongst passengers on the S.S. *Athenia*, who attended a pilgrimage to Lourdes between 16th and 20th July. The pilgrims arrived back in Glasgow, on 23rd July, and the first indication of the outbreak was the occurrence of enteric fever early in August in two of the pilgrims who resided in the West of Scotland.

On 10th August there was received from the Medical Officer of Health of Glasgow, a list of 67 Edinburgh citizens who had been on the pilgrimage, and these were at once placed under supervision. Subsequently three of the pilgrims were removed to Edinburgh City Hospital suffering from enteric fever, while a fourth case was admitted to the City Hospital from an address in West Lothian.

The same ship carried a second party of pilgrims from this country to Lourdes, leaving Glasgow on 24th July, returning on 4th August. Among the passengers on this cruise were 21 residing in Edinburgh. These were kept under close observation, but no sickness occurred.

**Diphtheria.**—There were 308 notifications of diphtheria received during the year as compared with 546 in 1934, and 606 in 1933.

The type of diphtheria present in the City was of a mild nature and only 14 deaths occurred. The death-rate was equal to 4·5 per cent. of the cases.

The decline in the death-rate from diphtheria is one of the most satisfactory features of public health administration. During the quinquennial period 1887-1891, the average annual mortality from the disease was 24·8 per cent. of the cases notified. The stringent measures adopted to control the disease, together with the more scientific methods of treatment, have effected a steady decline in the mortality. During the period 1931-1935, the very satisfactory average of 3·9 per cent. was recorded.

**Scarlet Fever.**—The prevalent type of scarlet fever was very mild. There were 1,511 cases reported during the year and only five deaths, representing a death-rate of ·33 per cent. of the notifications.

**Cerebro-Spinal Meningitis.**—Cases of cerebro-spinal meningitis intimated numbered 19, a decrease of 15 when compared with the previous year.

There were 13 deaths, 5 of which were patients who had come from country districts to the Royal Hospital for Sick Children or other institution and died in the City Hospital where they had been removed for treatment.

Of the 8 City deaths, 6 children under 5 years of age succumbed to the disease.



**Erysipelas.**—There were 264 persons reported to be suffering from erysipelas, and of these, 20 died. Six of the deaths referred to children under 5 years, and seven to persons over 65 years of age.

The percentage of deaths to cases was 7.5.

**Puerperal Fever and Pyrexia.**—Notifications of puerperal fever numbered 97 and puerperal pyrexia 49, as compared with 119 and 55 respectively, in the previous year.

Reference is made to notifications and deaths from these diseases in the report by the Child Welfare Medical Officer, which appears on page 54.

**Ophthalmia Neonatorum.**—Forty-seven intimations of ophthalmia neonatorum were received during the year under review.

In the reports by the Child Welfare and Venereal Diseases Medical Officers on pages 54 and 74, detailed accounts are given concerning these cases.

**Measles and Whooping Cough.**—Measles was prevalent in the City more or less throughout the year, but it was not until the month of December that the disease assumed epidemic form. During that month there were 223 cases notified. The total for the year was 854, and only 11 deaths were recorded. The low death-rate from such a large number of cases is significant of the mild type of the disease which prevailed in the City.

Severe cases with complications were removed to the City Hospital for treatment.

There were 877 cases of whooping cough reported and of that number 37 died. With one exception all the deaths referred to children under the age of 5 years.

**Tuberculosis.**—The notifications of respiratory tuberculosis numbered 437 and the deaths 265, compared with 536 and 302 respectively in 1934. The death-rate (.57) was the lowest that has ever been returned for the City.

In the non-pulmonary forms of tuberculosis the total notifications numbered 233 as compared with 258 for the preceding year. The total number of deaths from the non-pulmonary forms was 70, being 10 less than in 1934. This figure likewise constitutes the lowest death-rate ever recorded for the City (.15.). Forty per cent. of the deaths were in children under 10 years of age.

A detailed account of the work of the Tuberculosis Department is given by the Tuberculosis Officer, on page 19.

Notifications of and deaths from the Principal Epidemic Diseases throughout the wards in the City are shown in the table on page 14, while on page 15 a statement is given regarding the type of house occupied by the infected persons.



Table showing the Infectious Disease Notifications and Deaths (except Phthisis) in each Ward during 1935.

No.	WARD	ENTERIC FEVER.		PUERPERAL FEVER.		DIPHTHERIA.		SCARLET FEVER.		ERYSIPELAS.		CEREBRO-SPINAL FEVER.		MEASLES.		WHOOPING COUGH.		PNEUMONIA (all Forms).	
		Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.
1	Calton	1	..	5	3	8	1	61	1	9	2	..	29	..	34	3	31	25	
2	Canongate	..	..	4	..	13	1	36	..	11	1	..	48	..	39	5	23	19	
3	Newington	..	..	1	..	20	..	87	1	11	2	..	22	..	21	3	22	20	
4	Morningside	..	..	2	..	11	..	150	..	8	..	..	17	..	8	2	14	13	
5	Merchiston	..	..	..	..	7	1	52	..	6	..	..	20	..	..	..	10	9	
6	Gorgie	..	..	9	..	6	..	149	..	12	..	..	74	..	90	3	23	21	
7	Haymarket	..	..	2	..	10	..	35	..	5	1	..	16	..	15	1	10	8	
8	St. Bernard's	3	1	3	..	6	..	84	..	4	..	..	54	..	35	1	17	15	
9	Broughton	..	..	3	2	9	..	41	..	12	..	2	31	..	28	1	22	19	
10	St. Stephen's	1	..	3	..	6	..	33	..	7	..	..	60	..	44	..	17	15	
11	St. Andrew's	1	..	3	..	5	..	20	..	10	..	..	21	..	17	..	18	17	
12	St. Giles	2	..	3	1	24	3	25	..	7	..	1	39	..	28	2	31	29	
13	Dalry	1	..	4	..	13	2	55	..	7	..	..	69	..	18	1	12	10	
14	George Square	..	..	3	1	16	1	50	..	8	..	..	37	..	13	1	24	22	
15	St. Leonard's	..	..	3	1	11	..	59	..	16	3	..	31	..	50	1	30	29	
16	Portobello	4	..	4	..	23	..	121	..	18	..	..	78	..	119	2	31	30	
17	South Leith	1	..	10	..	13	..	19	1	2	..	..	48	..	65	1	34	31	
18	North Leith	1	..	4	..	11	..	62	..	14	3	..	24	..	56	..	29	28	
19	West Leith	1	..	1	..	5	..	30	..	11	1	..	27	..	49	..	24	22	
20	Central Leith	1	..	6	1	37	2	41	..	13	..	..	19	..	35	7	12	6	
21	Liberton	1	..	..	..	5	1	55	..	15	1	..	35	..	41	4	22	15	
22	Colinton	..	..	2	..	4	..	18	..	3	..	..	5	..	9	..	12	9	
23	Corstorphine and Cramond Institutions	11	2	21	14	34	1	100	4	6	..	..	12	..	15	..	10	4	
	Military Quarters	..	..	..	..	..	..	94	..	37	5	..	38	..	39	..	43	27	
		..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	1	1	
	Totals	32	*3	97	†30	308	16	1,511	‡7	264	‡21	19	§13	854	11	877	37	523	444
	Case- and Death-rates (per 1000 population) for year	·06	·00	·21	·06	·66	·03	3·27	·01	·57	·04	·04	·02	1·85	·02	1·90	·08	1·13	·96
	Case- and Death-rates (per 1000 population) for year 1934	·02	·00	·26	·07	1·19	·05	5·29	·03	·84	·06	·07	·04	7·00	·14	·41	·01	·98	·75

The Deaths in this Table represent those actually occurring among the cases notified although taking place after 31st December.

\* Includes 2 deaths transferred out

† Includes 14 deaths transferred out.

‡ Includes 2 deaths transferred out.

§ Includes 5 deaths transferred out.

Table showing the Notifications of Infectious Diseases, classified according to size of house in which the infected persons resided.

DISEASE	1 Apartment.		2 Apartments.		Apartments.		4 Apartments.		5 Apartments.		Over 5 Apartments.		Institutions and Military Quarters.		Total Cases.
	Number of Cases.	Percentage to Total Cases.	Number of Cases.	Percentage to Total Cases.	Number of Cases.	Percentage to Total Cases.	Number of Cases.	Percentage to Total Cases.	Number of Cases.	Percentage to Total Cases.	Number of Cases.	Percentage to Total Cases.	Number of Cases.	Percentage to Total Cases.	
Diphtheria . . . . .	16	5.2	67	21.8	100	32.5	41	13.3	17	5.5	33	10.7	34	11.0	308
Erysipelas . . . . .	5	1.9	70	26.5	68	25.8	43	16.3	29	11.0	12	4.5	37	14.0	264
Scarlet Fever . . . . .	59	3.9	296	19.6	422	27.9	247	16.4	94	6.2	298	19.7	95	6.3	1,511
Typhoid Fever . . . . .	...	...	5	15.6	3	9.4	2	6.3	2	6.3	9	28.1	11	34.3	32
Puerperal Fever and Puerperal Pyrexia . . . . .	6	4.1	46	31.5	48	32.9	11	7.5	5	3.4	3	2.1	27	18.5	146
Cerebro-spinal Meningitis . . . . .	...	...	8	42.1	3	15.8	...	...	1	5.2	...	...	7	36.8	19
Totals . . . . .	86	3.8	492	21.6	644	28.2	344	15.1	148	6.5	355	15.5	211	9.3	2,280



## MOTOR AMBULANCE SERVICES.

Three motor ambulances are maintained at the City Hospital for the removal of cases of infectious disease. The drivers live at the hospital and the machines are available day and night.

In September, 1935, a new 20 h.p. ambulance of the latest type, with an internal-heating installation, was placed on service for the removal of patients to the three General Hospitals. The machine is garaged in a central part of the city and is fully employed with hospital admissions, making transfers from one hospital to another, and conveying patients to the Royal Victoria Dispensary for X-ray examinations and other forms of treatment.

Transport to the General Hospitals is also undertaken by an ambulance directed by the Public Assistance Department. In addition, this machine conveys patients to Bangour Mental Hospital and Gogarburn Certified Institution. To meet emergencies the Public Health and the Public Assistance Departments have a working arrangement to call on each other for ambulance services when required. Occasional service is also provided by the Police Ambulances.

The Police Ambulances are at the call of the citizens generally for the removal of accident cases to the Royal Infirmary and other hospitals. The St. Andrew's Ambulance Association have three ambulances which are sent on request to convey patients to nursing homes and other institutions.

## DISINFECTION.

The disinfection of houses, etc., is carried out by a special staff attached to the Public Health Department.

The bedding and infected articles of clothing are conveyed to the disinfecting station in motor vans and there treated under high pressure steam or formaldehyde gas.

A statement is given below showing the number of dwelling houses disinfected during the last three years :—

	1933.		1934.		1935.	
	Number.	Apartments.	Number.	Apartments.	Number.	Apartments.
Dwelling-houses, etc. :— After Tuberculous Disease . . . .	950	1,310	872	1,234	834	1,094
.. other .. . . .	4,843	6,438	2,423	3,262	2,264	2,766



The number of articles dealt with at the disinfecting station during the year are given in the following table :—

Description.	No. of Articles.		Description.	No. of Articles.	
	After Tuberculous Disease.	After Other Diseases.		After Tuberculous Disease.	After Other Diseases.
Mattresses and Palliasses . . . . .	543	2,940	Body Clothes . . . . .	704	16,760
Blankets, Sheets, Quilts, etc. . . . .	1,367	16,210	Carpets and Rugs . . . . .	18	739
Beds, Pillows, Bolsters, etc. . . . .	1,242	6,165	Miscellaneous . . . . .	257	2,818
Curtains, Table Covers, Wraps, etc. . . . .	26	743	Destroyed by request . . . . .	784	427
Table Napery, Toilet Covers, Towels, etc. . . . .	39	1,673	Totals . . . . .	4,980	48,475

**Straw Packing.**—The fumigation of straw packing used in connection with the export of certain goods is necessary to comply with regulations issued by various foreign countries. This work is carried out at the Northern General Hospital, and during the year, 8 consignments were dealt with and the necessary certificates granted.

**Cleansing of Persons.**—Facilities for personal cleansing are provided at the disinfecting station. Of the 652 persons who availed themselves of the opportunity to attend for baths and disinfection of their clothing, 46 adults and 243 children suffered from scabies. A further 361 adults and 2 children were treated for verminous conditions.

### RECEPTION HOUSE.

There was no smallpox or other disease calling for the quarantine of contacts in the Reception House, but the building was kept in readiness to deal with any emergency that might have arisen.

### INTERMENTS.

(In terms of Section 69, Public Health (Scotland) Act, 1897).

Application was made in 231 instances by relatives of deceased persons for assistance towards the cost of interment. Careful enquiry was made in each case and as a result the claims of 9 applicants were rejected, while 18 others were withdrawn. The Department arranged for the burial of 204 persons at a cost of £261. 17s. Of that sum, £29. 10s. 5d. was recovered from relatives, leaving £232. 6s. 7d. to be met by the Local Authority.

The following statement shows the expenditure in connection with interments during the last five years :—

Year.	Number.	Total Cost of Interments and Removals.	Sums Recovered from Relatives	Net Expenditure.
1931 . . . . .	79	£166 4 0	£33 8 3	£132 15 9
1932 . . . . .	144	254 8 0	58 0 5	196 7 7
1933 . . . . .	181	386 14 0	38 16 1	347 17 11
1934 . . . . .	168	297 4 0	38 7 5	258 16 7
1935 . . . . .	204	261 17 0	29 10 5	232 6 7



## HOSPITAL EXPENDITURE.

The following table shows the cost per occupied bed in the hospitals under the control of the Public Health Department. The particulars apply in each case to the financial year to 15th May, 1935, and are based on the gross ordinary expenditure, excluding loan charges :—

Institution.	Daily Average Number of Occupied Beds.	Gross Ordinary Expenditure Year to 15th May 1935.	Cost per Occupied Bed per Week.
City Hospital . . . . .	448	£45,616	39/2
Western General Hospital . . . . .	244	29,850	47/1
Northern General Hospital . . . . .	253	16,448	25/-
Eastern General Hospital . . . . .	371	27,950	29/-
Royal Victoria Hospital . . . . .	72	6,547	35/-
Royal Victoria Farm Colony . . . . .	15	1,278	32/9
Victoria Park House . . . . .	21	1,528	28/5
Bangour Mental Hospital . . . . .	1,036	61,642	22/10
Gogarburn Certified Institution . . . . .	348	4,610	21/8

## PUBLIC HEALTH EXPENDITURE.

The increase in Public Health Expenditure consequent on the introduction of new schemes from time to time is shown in the following table.

Year.	Gross Expenditure.	Revenue.	Net Expenditure.
1909-10	£35,159	£699	£34,459
1910-11	34,869	718	34,150
1911-12	35,072	780	34,291
1912-13	37,618	2,690	34,927
1913-14	46,094	14,548	31,546
1914-15	56,768	18,716	38,051
1915-16	56,827	12,997	43,829
1916-17	58,323	23,216	35,107
1917-18	75,198	30,552	44,645
1918-19	99,563	43,029	56,533
1919-20	130,877	49,138	81,738
1920-21	210,875	89,098	121,777
1921-22	184,315	68,450	115,865
1922-23	146,395	67,477	78,917
1923-24	149,873	47,554	102,319
1924-25	156,155	48,949	107,206
1925-26	156,919	54,185	102,734
1926-27	157,895	56,439	101,455
1927-28	* 172,763	56,999	115,764
1928-29	* 177,008	60,512	116,496
1929-30	* 182,136	62,559	119,577
1930-31	* 394,088	48,070	346,018
1931-32	* 354,499	48,205	306,294
1932-33	* 381,293	82,596	298,697
1933-34	* 377,444	76,733	300,711
1934-35	* 374,943	75,704	299,239

\* Interest and Debt Charges included.



## TUBERCULOSIS.

REPORT BY TUBERCULOSIS OFFICER.

The results obtained in the past year by the Tuberculosis Department in the campaign against tuberculosis further justify the claim that advance is steadily, if slowly, being made in the suppression of this disease and they further encourage the hope that the continued efforts will lead to its ultimate abolition. The full realisation of such a consummation must, however, under present conditions, be a gradual process in view of the many and varied complex factors which are so intimately associated with the tuberculosis problem.

During the year 1935 there were 99 fewer cases of pulmonary tuberculosis notified than in the preceding year. This represents an incidence of  $\cdot 9$  per 1000 as compared with  $1\cdot 2$  for the year 1934. Of the 437 cases which were notified 32 per cent. represented persons under 25 years of age. Investigation of the housing conditions revealed the fact that 69 per cent. of the notified cases occupied houses of three rooms or less. Thirty of the patients notified as suffering from pulmonary tuberculosis—representing 6·8 per cent.—were contact cases living in association with an already known case of the disease.

St. Giles' Ward returned the highest notification incidence rate, viz. :— $1\cdot 8$  per 1000 of the ward population.

The deaths from pulmonary tuberculosis for the past year numbered 265 as compared with 302 in 1934—this represents a death rate of  $\cdot 57$  per 1000 and is a new record constituting the lowest rate ever recorded for the city. The death rate for the year 1934 was  $\cdot 66$  per 1000. The highest ward death rate was registered in George Square where the figure was  $1\cdot 4$  per 1000—the lowest rate was in Haymarket ( $\cdot 2$ ) and Corstorphine and Cramond ( $\cdot 2$ ). It is much to be deplored that, during the past year 48 deaths, representing no less than 18 per cent. of the total deaths from pulmonary tuberculosis, were first brought to the notice of the Department through the medium of the local registrar's weekly death returns. The necessary steps should be taken to rectify this regrettable position by a timeous reminder to those concerned of their statutory obligations. It is no longer necessary to have to emphasise the importance of early diagnosis but the equally clamant importance of early notification appears by some to be either overlooked or underestimated. Only after notification can the machinery, curative and prophylactic, be set in motion. The active case of pulmonary tuberculosis which is unnotified is a case which is uncontrolled and in consequence must be regarded as a potential source of danger to the other members of the community.

In the non-pulmonary forms of tuberculosis the total notifications numbered 233, as compared with 258 for the preceding year. Seven of the notified cases were "contacts."

The total number of deaths from the non-pulmonary forms was 70, being 10 less than in the preceding year. This figure likewise constitutes the lowest death rate ever recorded for the city ( $\cdot 15$ ). Forty per cent. of the recorded deaths were in children under 10 years of age.



A study of the table on page 24 will reveal the favourable position, relative to the incidence of tuberculosis, occupied by Edinburgh as compared with other large centres of population.

The fact that, during the year 1935, 1345 cases were referred to the Tuberculosis Officer for examination and diagnosis encourages the belief that the available facilities of the Tuberculosis Department are appreciated by the general practitioners of the community. This number of referred cases represents an increase of 306 over the figure for the preceding year.

The services of the Tuberculosis Officer are always at the disposal of the general practitioner and during the year 86 consultations took place at the homes of patients who, for various reasons, were unable to visit the Dispensary.

A detailed review of the work undertaken at the various Tuberculosis Institutions during the past year will be found in the following pages.

Once again I have to acknowledge with sincere and grateful thanks my deep indebtedness to all members of the Tuberculosis staff at the Dispensaries, in the Hospitals and in the clerical department, for their able and willing help and their unfailing loyalty and devotion to the work of the Department.

### PULMONARY TUBERCULOSIS.

**Notifications.**—The number of cases of pulmonary tuberculosis reported to the Department during 1935 was 437, representing an incidence rate of  $\cdot 9$  per 1000 of the estimated population. During the previous year there were 536 notifications and the incidence rate was 1.2 per 1000.

In the following table the number of cases intimated annually since 1926, together with the incidence rates per 1000 of the population are shown.

1926	.	.	.	.	656 or 1.5 per 1000
1927	.	.	.	.	593 or 1.4 ..
1928	.	.	.	.	581 or 1.3 ..
1929	.	.	.	.	596 or 1.4 ..
1930	.	.	.	.	558 or 1.3 ..
1931	.	.	.	.	565 or 1.3 ..
1932	.	.	.	.	513 or 1.1 ..
1933	.	.	.	.	553 or 1.2 ..
1934	.	.	.	.	536 or 1.2 ..
1935	.	.	.	.	437 or $\cdot 9$ ..

Of the 437 notified cases during 1935, 239 were males and 198 females, as compared with 290 and 246 respectively in the previous year.

Persons under the age of 25 years represented 32 per cent. of the total. The greater attention now being paid to the examination of all family contacts is resulting in the earlier detection of cases which otherwise might not have been notified until a later period in life.



The age and sex of the persons reported during 1935 as suffering from pulmonary tuberculosis are shown in the following table :—

Sex.	Under 5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70 and over.	Total.
Male . . . . .	8	2	8	15	22	29	29	24	17	16	21	20	13	10	5	239
Female . . . . .	3	3	13	26	40	30	22	15	8	11	7	8	4	4	4	198
Total . . . . .	11	5	21	41	62	59	51	39	25	27	28	28	17	14	9	437

In the next table, the notifications are arranged according to municipal wards.

	Notifi- cations.	Rate per 1000.		Notifi- cations.	Rate per 1000.
Calton . . . . .	16	·8	George Square . . . . .	28	1·5
Canongate . . . . .	32	1·6	St. Leonard's . . . . .	29	1·7
Newington . . . . .	15	·7	Portobello . . . . .	30	·9
Morningside . . . . .	16	·7	South Leith . . . . .	30	1·0
Merchiston . . . . .	8	·4	North Leith . . . . .	24	1·3
Gorgie . . . . .	21	·7	West Leith . . . . .	7	·4
Haymarket . . . . .	5	·3	Central Leith . . . . .	17	1·3
St. Bernard's . . . . .	24	1·2	Liberton . . . . .	28	1·6
Broughton . . . . .	14	·8	Colinton . . . . .	3	·3
St. Stephen's . . . . .	9	·6	Corstorphine and Cramond . . . . .	13	·7
St. Andrew's . . . . .	7	·7	Institutions (other than Sanatoria) . . . . .	9	...
St. Giles . . . . .	32	1·8	Military Quarters . . . . .	1	...
Dalry . . . . .	19	·9			

The incidence of tuberculosis in the respective wards varies from year to year. The high incidence rate of 1·8 per thousand of the population was returned for St. Giles' Ward. In other "old town" wards, such as St. Leonard's, Canongate and George Square the rates were 1·7, 1·6, and 1·5 per 1000 respectively. The commendable efforts made during recent years by the Local Authority, together with the far-reaching preventive measures which are constantly being advocated have, however, resulted in a very marked decline in the incidence of the disease.

In the following table the type of house occupied by the infected persons is shown. Sixty-nine per cent. of the sufferers were living in houses of three rooms or less :—

1-roomed house.	2-roomed house.	3-roomed house.	4 rooms and over.	Lodging-Houses.	Institutions, Etc.	Total.
42	138	121	114	13	9	437

**Deaths.**—If, as may fairly be claimed, the success of efforts towards the suppression of tuberculosis may be estimated by the death-rate, then unquestionably progress falls to be recorded. The deaths from pulmonary tuberculosis registered during 1935 were 265, representing a death-rate of ·57 per 1000 of the population, the lowest ever attained in the City. In 1934 there were 302 deaths and the rate was ·66 per 1000.







**Deaths in Relation to Notification.**—The deaths from pulmonary tuberculosis since 1926 are classified to show the lapse of time between notification and death :—

Year.	Within 1 month.	From 1 to 3 months.	From 3 to 6 months.	From 6 months to 1 year.	From 1 to 2 years.	Over 2 years and under 3.	Over 3 years and under 4.	From 4 years upwards.	Notified after Death.	Total
1926 . . .	49	42	36	38	42	27	11	42	69	356
1927 . . .	46	41	28	47	60	30	14	47	68	381
1928 . . .	56	41	23	26	47	26	14	51	61	345
1929 . . .	53	33	39	36	52	23	11	53	62	362
1930 . . .	56	34	26	29	53	14	14	39	68	333
1931 . . .	47	33	27	25	43	26	20	50	55	326
1932 . . .	38	42	25	28	37	33	7	48	55	313
1933 . . .	32	43	29	30	49	36	19	49	35	322
1934 . . .	42	34	21	42	38	24	16	38	47	302
1935 . . .	25	22	14	26	44	25	19	42	48	265

It is a regrettable feature that so many cases should first come to notice either when the disease is far advanced or after death has supervened. During the year under review, 48 or 18 per cent. of the total deaths first came to our knowledge through the medium of the local registrars' weekly death returns.

A large number of patients die within a short period of notification. In many cases, this is due to their failure to seek early medical advice or to their reluctance for social or other reasons to being regarded as tuberculous.

### NON-PULMONARY TUBERCULOSIS.

**Notifications.**—There were 233 cases of non-pulmonary tuberculosis intimated during the year, representing an incidence rate of  $\cdot 5$  per 1000 of the estimated population.

The following summary shows the number of cases reported annually since 1926 :

1926 . . . . .	433 or 1.0 per 1000
1927 . . . . .	359 or $\cdot 8$ ..
1928 . . . . .	347 or $\cdot 8$ ..
1929 . . . . .	317 or $\cdot 7$ ..
1930 . . . . .	295 or $\cdot 7$ ..
1931 . . . . .	254 or $\cdot 6$ ..
1932 . . . . .	272 or $\cdot 7$ ..
1933 . . . . .	243 or $\cdot 5$ ..
1934 . . . . .	258 or $\cdot 6$ ..
1935 . . . . .	233 or $\cdot 5$ ..

The age and sex of the notified cases are shown in the following table :—

Sex.	Under 5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70 and over.	Total.
Male . . .	19	28	22	10	12	7	5	4	3	4	1	5	2	2	1	125
Female . . .	10	14	15	15	15	4	8	6	5	3	5	3	3	1	1	108
Totals . . .	29	42	37	25	27	11	13	10	8	7	6	8	5	3	2	233



The largest percentage refers to children under 10 years of age, to whose welfare prime importance is being given. Close co-operation exists between the Tuberculosis Officer and the School Medical Officers as well as with the Child Welfare Department, so that children presenting any suspicious symptoms are at once brought under observation. It is thus possible to arrange for the provision of early treatment if such is necessary.

In the following table, the cases are classified to show the part of the body affected by the disease :—

Glands . . . . .	62	Joints—	
Abdomen . . . . .	62	Hip . . . . .	6
Meninges and Brain . . . . .	34	Knee . . . . .	5
Genito-Urinary . . . . .	19	Shoulder . . . . .	2
Spine . . . . .	11	Elbow . . . . .	2
Lupus . . . . .	9		— 15
General . . . . .	5		
	— 202		
Bones (except Spine)—		Others . . . . .	9
Leg . . . . .	3		
Thigh . . . . .	2	Total . . . . .	233
Foot . . . . .	1		
Hand . . . . .	1		
	— 7		

**Deaths.**—The deaths from all forms of non-pulmonary tuberculosis numbered 70 and the death-rate was equal to  $\cdot 15$  per 1000 of the population, the lowest on record. In 1934 there were 80 deaths representing a death-rate of  $\cdot 17$  per 1000. The sex, age at death, and the organ or region affected by the disease are tabulated below :—

Cause of Death.	All Ages.			Age Periods.										
	Both Sexes.	Males.	Females.	-1	1-	5-	10-	15-	25-	35-	45-	55-	65-	75 and over.
Tuberculous Meningitis . . . . .	36	23	13	2	11	10	6	3	3	1	...	...	...	...
Tuberculosis of Intestines and Peritoneum . . . . .	13	4	9	...	1	1	3	2	2	1	2	...	...	1
.. .. Vertebral Column . . . . .	5	4	1	...	1	...	...	1	...	...	...	...	...	...
.. .. Other Bones and Joints . . . . .	3	1	2	...	...	...	1	1	...	...	1	1	1	...
.. .. Skin . . . . .	2	1	1	...	...	...	...	...	...	...	...	2	...	...
.. .. Lymphatic System . . . . .	4	2	2	...	...	...	...	1	...	1	...	...	...	...
.. .. Genito-urinary System . . . . .	5	3	2	...	...	...	...	1	3	...	1	1	...	...
Disseminated Tuberculosis, acute and chronic . . . . .	2	1	1	2	...	...	...	...	...	...	...	...	...	...
Other Non-Pulmonary Tuberculosis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals . . . . .	70	39	31	4	13	11	10	9	8	3	3	5	3	1

The death-rates quoted herewith are extracted from the Registrar-General's preliminary statement for 1935, and enable a comparison to be made with Edinburgh and other large centres of population :—

Town.	Death rate per 1000.		Town.	Death rate per 1000.	
	Pulmonary Tuberculosis.	All forms of Tuberculosis.		Pulmonary Tuberculosis.	All forms of Tuberculosis.
Glasgow . . . . .	$\cdot 86$	1.08	Paisley . . . . .	$\cdot 65$	$\cdot 73$
Edinburgh . . . . .	$\cdot 57$	$\cdot 72$	Greenock . . . . .	$\cdot 76$	$\cdot 86$
Dundee . . . . .	$\cdot 67$	$\cdot 89$	Motherwell & Wishaw . . . . .	$\cdot 59$	$\cdot 71$
Aberdeen . . . . .	$\cdot 40$	$\cdot 56$	Clydebank . . . . .	1.01	1.22



## INSTITUTIONAL TREATMENT.

The total number of beds provided for the residential treatment of tuberculosis patients at the various municipal hospitals is as follows :—

Royal Victoria Hospital, Pulmonary Tuberculosis	.	76 beds.
Polton Farm Colony	" " .	18 "
Colinton Mains Hospital	" " .	148 "
" " " Non-pulmonary Tuberculosis		73 "
Total	. . .	315 beds.

**Royal Victoria Hospital.**—The earlier the stage of the disease at which a patient can be given Sanatorium treatment the greater the prospect of permanent arrest. The accommodation at the Royal Victoria Hospital is utilised for patients who are in the early stages of pulmonary tuberculosis and a careful selection is necessary to ensure that the maximum amount of benefit will be derived. As in former years there was a great demand for admission to the institution.

In addition to the essential requirements for treatment, suitable forms of light work, under medical supervision, are provided for the adult patients.

The following table shows the number of patients treated in the hospital during the year :—

	Remained at 1st January.	Admitted.	Discharged.	Died.	Remaining at 31st December.
Men . . .	31	67	60	1	37
Women . . .	36	66	65	...	37
Children . . .	3	8	10	...	1
Totals . . .	70	141	135	1	75

Artificial Pneumothorax was instituted in 17 per cent. of the patients admitted ; in some of the cases it was combined with phrenicectomy and in others with aurotherapy in one or other form.

During the year 41 patients received treatment by gold salts, but in 13 cases the treatment had to be abandoned on account of complications supervening. The sputum of 27 of the patients so treated (representing 65·8 per cent.) became negative for tubercle bacilli on completing the course of injections.

In the course of the year, 135 patients were discharged and one died as a result of an acute non-tuberculous condition.



The next table gives particulars relating to age and sex.

Sex.	Under 5	5-10	10-15	15-20	20-30	30-40	40-50	50-60	Over 60	Total.
Males . . . . .	...	5	5	10	22	16	6	4	...	68
Females . . . . .	...	1	3	13	35	12	2	2	...	68
Totals . . . . .	...	6	8	23	57	28	8	6	...	136

The average length of residence of the discharged patients was 187 days.

**Colinton Mains Hospital.**—Accommodation is provided at this hospital for the treatment of all forms of tuberculosis, 148 beds being reserved for pulmonary tuberculosis and 73 for non-pulmonary cases.

**Pulmonary Tuberculosis.**—A large proportion of the admissions are far advanced cases. This is regrettable as the treatment of such rarely gives much hope of permanent benefit. Many, however, do respond to a course of treatment and are discharged to their homes greatly improved in health. Visiting nurses attend them there and advice and treatment are given where necessary by the medical staff of the department.

There were 122 deaths, representing 26 per cent. of those treated in hospital during the year, while 222 patients were discharged.

The following table shows the number of patients dealt with in the course of the year :—

	Remained at 1st January.	Admitted	Discharged.	Died.	Remaining at 31st December.
Men . . . . .	86	208	129	79	86
Women . . . . .	43	134	92	42	43
Children . . . . .	...	2	1	1	...
Totals . . . . .	129	344	222	122	129

The duration of treatment of discharged patients averaged 137 days. Of the 344 patients who died or were discharged, 3 were found to be suffering from diseases other than tuberculosis.

The age and sex of the remaining 341 patients were as under :—

Sex.	Under 5	5-10	10-15	15-20	20-30	30-40	40-50	50-60	Over 60	Total.
Males . . . . .	...	...	2	14	51	43	38	40	18	206
Females . . . . .	...	...	2	15	51	38	15	9	5	135
Totals . . . . .	...	...	4	29	102	81	53	49	23	341



**Non-Pulmonary Tuberculosis.**—There were 83 cases of non-pulmonary tuberculosis admitted to the hospital during the year, and in 16 or 19 per cent. of these, the disease was located in the spine. In 10 or 12 per cent. of the cases, the hip joint was affected, while 22 or 27 per cent. suffered from abdominal tuberculosis.

The following table shows the number of patients dealt with during the year :—

Sex.	Remained at 1st January.	Admitted.	Discharged.	Died.	Remaining at 31st December.
Males . . .	35	40	41	5	29
Females . . .	27	43	33	3	34
Totals . . .	62	83	74	8	63

The sex and age distribution of the patients admitted were :—

Sex.	Under 5	5-10	10-15	15-20	20-30	30-40	40-50	50-60	Over 60	Total.
Males . . . . .	2	10	6	8	6	2	4	1	1	40
Females . . . . .	5	5	8	4	7	7	3	2	2	43
Totals . . . . .	7	15	14	12	13	9	7	3	3	83

The part affected by the disease in the 83 patients admitted to hospital was as under :—

Part Affected.	Males.	Females.	Part Affected.	Males.	Females.
Abdomen . . . . .	2	20	Sternum . . . . .	1	1
Abdomen and Chest . . . . .	2	...	Shoulder . . . . .	1	...
Abdomen and Glands . . . . .	1	...	Ankle . . . . .	...	1
Knee . . . . .	5	...	Elbow . . . . .	1	...
Hip . . . . .	8	2	Epididymitis . . . . .	3	...
Spine . . . . .	5	11	Mastoid . . . . .	...	2
Cervical Glands . . . . .	7	3	Tuberculoma . . . . .	...	1
Axillary Glands . . . . .	...	1	Skin (Lupus) . . . . .	1	...
Generalised Adenitis . . . . .	1	...	Hand (Dactylitis) . . . . .	1	...
Peritonitis . . . . .	1	1	Totals . . . . .	40	43

Results with regard to patients discharged or dying during the year :—

Parts Affected on Admission.	Males.	Appar-ently Cured.	Im-proved.	Not Im-proved.	Died.	Females.	Appar-ently Cured.	Im-proved.	Not Im-proved.	Died.	Totals.
Abdomen . . . . .	6	1	5	...	...	10	...	9	...	1	16
Abdo. and Chest . . . . .	4	...	1	2	1	...	...	...	...	...	4
Abdo. and Glands . . . . .	1	...	...	...	1	...	...	...	...	...	1
Spine . . . . .	7	...	6	1	...	6	...	4	1	...	13
Hip . . . . .	6	1	5	...	...	4	...	3	...	1	10
Knee . . . . .	3	...	1	2	...	2	...	2	...	...	5
Cervical Glands . . . . .	6	2	3	...	1	5	2	3	...	...	11
Axill. Glands . . . . .	...	...	...	...	...	1	...	1	...	...	1
Foot . . . . .	1	...	1	...	...	2	...	1	1	...	3
Ankle . . . . .	...	...	...	...	...	2	...	2	...	...	2
Rib . . . . .	...	...	...	...	...	1	...	1	...	...	1
Sternum . . . . .	...	...	...	...	...	1	...	1	...	...	1
Peritonitis . . . . .	1	...	...	...	1	2	...	2	...	...	3
Elbow . . . . .	1	...	1	...	...	...	...	...	...	...	1
Foot and Elbow . . . . .	1	...	1	...	...	...	...	...	...	...	1
Lupus . . . . .	2	...	1	...	1	...	...	...	...	...	2
Epididymitis . . . . .	3	...	3	...	...	...	...	...	...	...	3
Orchitis . . . . .	1	...	1	...	...	...	...	...	...	...	1
Dactylitis . . . . .	1	...	1	...	...	...	...	...	...	...	1
Meningitis . . . . .	1	...	1	...	...	...	...	...	...	...	1
Cold Abscess . . . . .	1	...	1	...	...	...	...	...	...	...	1
Totals . . . . .	46	4	32	5	5	36	2	28	3	3	82



The parts affected by the disease in patients who died, together with the ultimate cause of death were :—

Part Affected.			Ultimate Cause of Death.
Males—	T.B. Glands . . . . .	1	Generalised T.B.
	Abdomen and Chest . . . . .	1	Generalised T.B.
	Lupus . . . . .	1	Generalised T.B.
	Abdominal Glands . . . . .	1	T.B. Meningitis
	Peritonitis . . . . .	1	Generalised T.B.
Females—	Spine . . . . .	1	Generalised T.B.
	Abdomen . . . . .	1	Generalised T.B.
	Hip . . . . .	1	Generalised T.B.

**Polton Farm Colony.**—There were 17 colonists in residence during the year, 14 males and 3 females. The patients at the Colony engage in a course of training in pig rearing, poultry keeping and market gardening, under the supervision of an experienced manager. They derive much benefit from this form of occupational treatment and permanent improvement has been noted in many instances.

The expenditure for the upkeep of the institution and the farm for the year to 15th May, 1935, was £2842 3s. 9d., while for the same period £1529 11s. 3d. was realised by the sale of eggs, poultry, pigs and other produce.

### TUBERCULOSIS DISPENSARIES.

The Dispensary is rightly regarded as the spear-head of the attack in the fight against Tuberculosis. One of its main functions is to afford every possible assistance in establishing a diagnosis in suspected cases. That the services available at the Dispensary are appreciated and seem to meet a real need would appear to be acknowledged from the fact that during the year no less than 1345 cases were referred to the Tuberculosis Officer for an opinion regarding the possible presence of tubercle—being an increase of 306 over the year 1934. Of the total number of referred cases 108 were suspected of tuberculosis other than the pulmonary form.

The importance of contact examination is constantly emphasised and every effort is made by the medical and nursing staff of the Dispensary to persuade family contacts to be medically examined, and especially is this urged in the case of the younger members of the family. Whilst the majority of contacts avail themselves of the opportunity thus afforded, a by no means negligible number are reluctant to present themselves for examination and as no powers are available to compel such examination it is inevitable that, from time to time, cases go unrecognised and thus constitute a hidden danger to other members of the community.

A special point is also made of exercising after-care at the Dispensary in the case of patients who have completed their course of treatment in one or other of the Tuberculosis institutions, and to obviate the necessity of such patients leaving their employment in order to report at the Dispensary for the purpose of a check up, a special evening session is held weekly at which they may report after their usual business hours.



The following table shows the number of attendances during the year at each of the two dispensaries :—

	New Cases.		Old Cases.	
	Edinburgh.	Leith.	Edinburgh.	Leith.
Men . . .	716	94	3,586	820
Women . . .	702	112	4,008	683
Children . . .	866	178	3,842	873
Totals . . .	<u>2,284</u>	<u>384</u>	<u>11,436</u>	<u>2,376</u>

**Home Visitation.**—The medical and nursing staff paid 12,857 visits to patients at their homes, the numbers in each month being as follows :—

	Insured.	Not Insured.	Total.
January . . .	568	629	1,197
February . . .	559	658	1,217
March . . .	555	688	1,243
April . . .	454	537	991
May . . .	455	576	1,031
June . . .	584	547	1,131
July . . .	398	472	870
August . . .	334	462	796
September . . .	459	468	927
October . . .	623	611	1,234
November . . .	595	637	1,232
December . . .	447	541	988
Totals . . .	<u>6,031</u>	<u>6,826</u>	<u>12,857</u>

**Artificial Sunlight Treatment.**—This form of treatment is reserved for patients suffering from the non-pulmonary forms of tuberculosis, chiefly affecting the abdomen, glands and skin. Four arc and one mercury vapour lamps are installed at the Royal Victoria Dispensary and during the spring and winter months the facilities are fully taken advantage of. The results obtained continue to be most encouraging. Of the 298 patients who attended at the dispensary for irradiations during the year 250 were medical and 48 surgical cases.

In addition to the dispensary patients the school medical department utilises the clinic for the treatment of children suffering from debility and other illnesses.

The number of exposures made was 14,525.

**Extra Nourishment.**—This form of domiciliary treatment is granted to patients who, through stress of circumstances, are unable to provide it for themselves. In cases where the Tuberculosis Officer is satisfied that benefit will be derived a course of special food consisting of milk, fresh eggs and butter is prescribed. Where improvement in health is noted and if the Tuberculosis Officer considers it desirable, an order to continue the supply is given.

**Drugs.**—The patients attending the dispensaries are supplied with all the necessary drugs and medicines, free of charge.

The Department also expended the sum of £200 7s. 6d. in providing drugs for insured tuberculosis patients on whose behalf prescription forms had been issued by medical practitioners. These prescriptions are received from the chemists and by arrangement are sent to the Central Checking Bureau for Scotland in order to secure uniformity in pricing.



# CITY HOSPITAL FOR INFECTIOUS DISEASES.

REPORT BY MEDICAL SUPERINTENDENT.

During the year there were 3,301 patients admitted to the wards, of whom 419 were suffering from tuberculosis. The above total includes cases admitted from districts outwith the City boundaries. The greatest number treated in hospital on any one day was 507. The average daily number under treatment was 429.

**Health of Staff.**—I regret to report the death of one nurse from influenza complicated by broncho-pneumonia. In addition the following infectious diseases were contracted by members of the nursing staff during the course of their duties:—Measles (1); chickenpox (1); enteric fever (1); pleurisy (1); and scarlet fever (1). The mild scarlatinal infection occurred in a nurse who, in spite of active immunization, did not develop complete immunity—as evidenced by a faint Dick positive reaction on retest.

**Diphtheria and Scarlet Fever.**—The incidence of diphtheria still remains relatively low and the type of disease mild. The virtual disappearance of laryngeal diphtheria is noteworthy. Direct laryngoscopy has again proved invaluable in the diagnosis of laryngeal infections.

The prevalent type of scarlet fever is still very mild. The “infecting” case rate of 1.3 per cent. is exceptionally low and in the present state of our knowledge regarding the infectivity of scarlet fever is a figure not likely to be improved upon.

**Training of Nurses.**—Of 39 nurses who completed their training during the year 31 went to various hospitals for general training, and 4 obtained posts as staff nurses. Thirty-five nurses passed the State Examination.

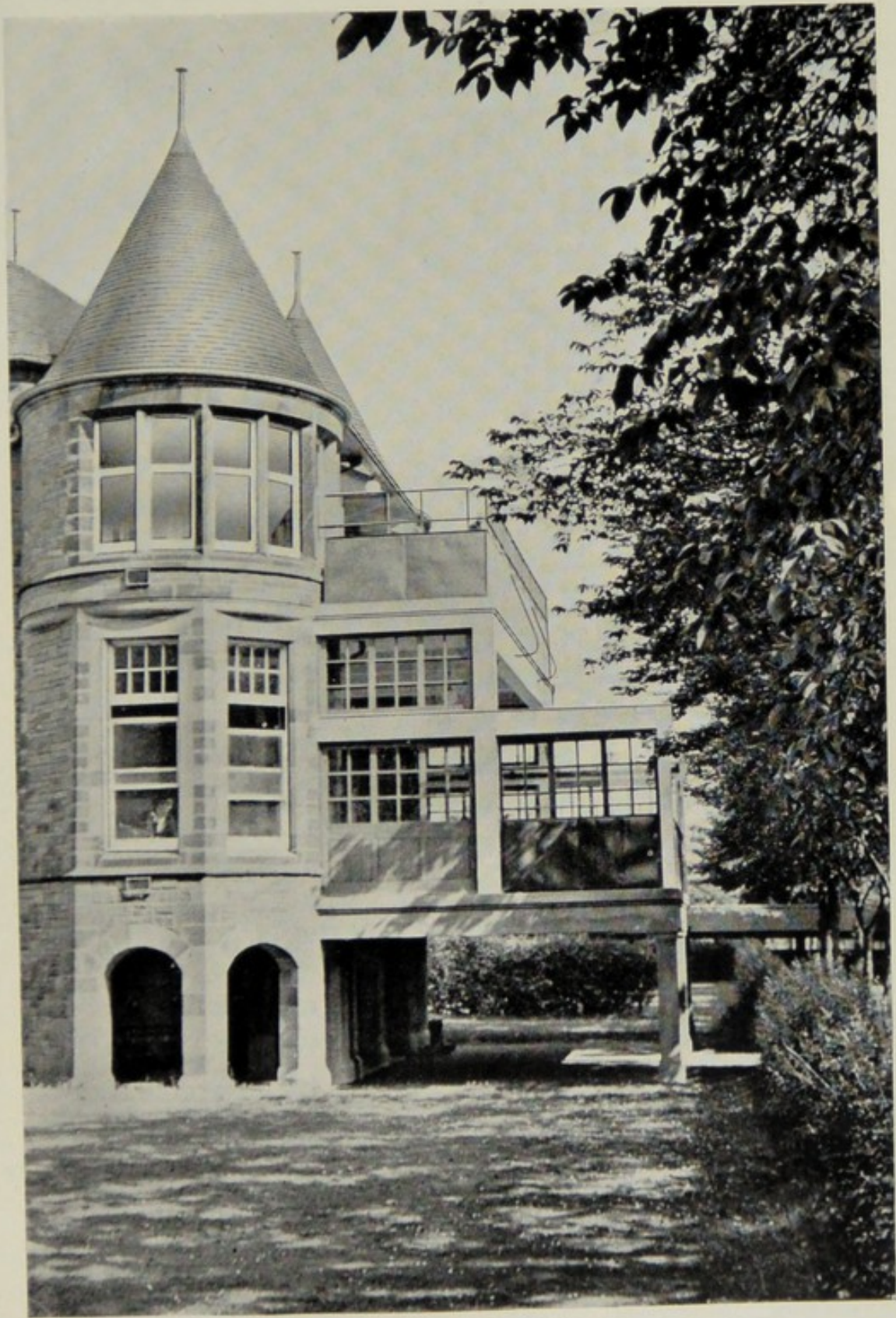
**Teaching.**—Two hundred and eighty-six undergraduates attended clinics at the hospital. These were divided into six sections entailing 90 hours' instruction. Two courses of instruction for the Diploma in Public Health were attended by 21 graduates. Three meetings were held during the summer vacation for post-graduate instruction. Including lectures to the nursing staff, 236 hours were devoted to teaching during the course of the year.

**Medical Staff.**—Dr. Charles Scott, our aural specialist, again rendered valuable service. During the course of the year he performed 7 paracentesis, 26 mastoidectomies and removed tonsils and adenoids in 189 patients. Several cases of paranasal sinusitis came under his care for proof puncture and drainage.

In surgical cases Mr Illingworth's prompt and efficient assistance has been greatly appreciated. He operated on the following cases:—Appendicitis, intussusception and pelvic abscess.

The work performed by the Senior Assistant Medical Officer, Dr. R. C. M. Pearson, deserves the highest praise. He has proved an exceptionally capable and loyal colleague and an efficient bacteriologist. The junior resident medical officers have all performed their ward duties in a competent manner.





CITY FEVER HOSPITAL  
New Balconies—Pavilion 15.





CITY FEVER HOSPITAL.

Patients enjoying the Fresh Air and Sunshine on one of the New Balconies.



**Nursing and General Staff.**—It is with particular pleasure that I acknowledge my indebtedness to the Matron and members of the nursing and domestic staffs for their loyal co-operation throughout the year. The various members of the male staff deserve praise for the willing and capable manner in which they performed their various duties.

**Balconies, Cubicle Ward, Food Boxes, etc.**—The balcony extensions to Pavilion 15 have proved a great asset. The new balconies accommodate 22 and 12 beds respectively in place of the 3 bed capacity of the previous balconies. Puerperal fever and pneumonia cases in particular respond very favourably to open-air treatment and the patients are highly appreciative of the accommodation provided.

One hundred and thirty-eight patients were admitted to the cubicle ward between 6th September—the date of opening—and 31st December. All types of cases were handled, including acute measles and chickenpox; no cross infections occurred. The provision of a cubicle ward has simplified administration.

The new system of food distribution by means of special food boxes has given every satisfaction and has done away with the need for reheating food in the ward kitchens.

I append the usual particulars relating to the various infectious diseases treated in the hospital.

### DIPHTHERIA.

Of 612 cases admitted to the diphtheria pavilions, 296 were finally diagnosed as suffering from diphtheria. The addition of one diphtheria case erroneously diagnosed as suffering from scarlet fever brings the diphtheria total to 297. Of the remaining 316 patients, 197 were regarded as "carriers" or "bacteriological diphtherias," whilst 119 were found to be suffering from other diseases. The great majority of the 119 misdiagnosed cases were found to be suffering from hæmolytic streptococcal tonsillitis or tonsillo-pharyngitis; 6 were suffering from scarlet fever; 3 from pneumonia; 1 from measles and 1 from whooping-cough.

There were 14 deaths ascribed to diphtheria; 4 patients died within 24 hours of admission to hospital. The fatality rate calculated on actual clinical cases (297 cases) was 4.71 per cent. Excluding laryngeal cases the fatality rate was 4.48 per cent. The mortality rate of 7 laryngeal cases was 14.29 per cent. (1 death).

In eight cases admitted to hospital suspected to be suffering from laryngeal diphtheria the diagnosis was not confirmed; 3 were found to be suffering from a hæmolytic streptococcal infection of the larynx; 2 from a staphylococcal infection of the larynx; 2 from a pneumococcal infection of the larynx; 1 from pneumonia.

	No.	Deaths.
Total number of laryngeal cases of diphtheria . . . . .	7	1
Cases which did not require operative treatment . . . . .	5	1
Cases treated by aspiration only . . . . .	1	...
Cases intubated following aspiration . . . . .	1	...



The one laryngeal death occurred in a patient, practically moribund on admission, who was suffering from an extensive diphtheritic pneumonia.

The paralysis rate, excluding cardiac involvement, was 8.08 per cent.

Serum rashes were noted in 27 cases or 9.09 per cent.

Table showing age and sex of diphtheria patients :—

Age—Period in Years.	0-1 years.	1+ years.	2+ years.	3+ years.	4+ years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30-39 years.	40-49 years.	50+ years.	Total.
Recovered	Males .	1	4	11	7	13	42	24	6	4	2	...	114
	Females .	1	1	8	8	14	54	28	9	29	11	5	1
Died	Males .	...	1	...	1	2	2	2	...	...	...	...	8
	Females .	...	...	...	...	2	2	2	...	...	...	...	6
Total .	2	6	19	16	31	100	56	15	33	13	5	1	297

Diphtheria fatality rate, 4.71 per cent. (14 deaths).

**Drinker Respirator.**—This apparatus which was recently installed has already been utilised in two cases and would appear to be of great potential value in diphtheritic or other types of respiratory paralysis.

### SCARLET FEVER.

During the year there were 1,301 patients admitted to the hospital notified as suffering from scarlet fever. The diagnosis was confirmed in 1,193 cases. The addition of 6 cases notified as diphtheria, 2 as measles, 1 as rubella, and 1 as cerebro-spinal meningitis brings the scarlet fever total to 1,203.

Amongst the 108 cases erroneously diagnosed, the following diseases were noted :—Tonsillitis and/or pharyngitis (42); measles (12); erythema (12); chickenpox (7); nasal catarrh (9); pneumonia (4); no disease (4); urticaria (3); whooping cough (3); influenza (2); diphtheria (1); tubercular peritonitis (1); tonsillitis and mastoid (1); alveolar abscess and staphylococcal septicæmia (1); enema rash (1); endocarditis (1); rubella (1); otitis media and convulsions (1); streptococcal septicæmia (1); mumps (1).

The case mortality was 0.58 per cent. (7 deaths).

In four patients the scarlatinal infection played a very minor part in the fatal issue, death being actually due to :—Aortic incompetence (1); cerebral abscess (1); broncho-pneumonia (1); rheumatic carditis (1).

The following are the principal complications which were noted :—

Rhinitis (purulent)	. . . . .	119 cases or 9.89 per cent.
Adenitis	. . . . .	118 .. 9.81 ..
Otorrhœa	. . . . .	96 .. 7.98 ..
Arthritis and/or myofibrositis	. . . . .	37 .. 3.08 ..
Nephritis	. . . . .	19 .. 1.58 ..
Vaginitis	. . . . .	5 .. 0.42 ..



Table showing age and sex of scarlet fever patients :—

Age—Period in Years.	0-1 yrs.	1+ yrs.	2+ yrs.	3+ yrs.	4+ yrs.	5-9 yrs.	10-14 years.	15-19 years.	20-29 years.	30-39 years.	40-49 years.	50-59 years.	60+ years.	Total.	
Recovered	Males . . .	6	13	42	48	50	201	73	38	48	21	7	2	...	549
	Females . . .	4	22	35	36	47	256	91	48	58	31	10	8	1	647
Died	Males . . .	...	...	...	...	...	1	1	...	...	...	1	...	...	3
	Females . . .	...	1	...	...	...	2	...	1	...	...	...	...	...	4
Total . . .	10	36	77	84	97	460	165	87	106	52	18	10	1	1,203	

Scarlet Fever fatality rate, 0.58 per cent. (7 deaths).

There were 16 alleged "infecting cases" or 1.33 per cent. of the total number of scarlet fever convalescents discharged. Of the 16 alleged "infecting cases" 12 were "clean cases" whilst in hospital. The 16 "infecting cases" were responsible for 17 "return cases." The return case rate was 1.41 per cent.

Anti-toxic serum was administered to 572 patients (47.54 per cent.).

Tonsils and adenoids were removed in 135 cases or 11.22 per cent.

Mastoidectomy was performed in 17 cases or 1.41 per cent.

Relapse occurred in 7 cases or 0.58 per cent.

### MEASLES.

There were 157 cases admitted to the wards notified as suffering from measles. The diagnosis was confirmed in 143 patients. In addition there were 12 cases of measles misdiagnosed as scarlet fever, 4 as rubella, 1 as diphtheria, 1 as whooping cough and 1 as enteric—bringing the measles total to 162. The corrected diagnosis in 14 patients erroneously notified as measles was as follows:—Scarlet fever (2); toxic or septic erythema (7); broncho-pneumonia (1); pneumococcal tonsillo-pharyngitis (1); cerebro-spinal meningitis (1); naso-pharyngeal catarrh (1); streptococcal laryngitis (1).

There were 9 deaths from measles of which 7 resulted from broncho-pneumonia as a complication.

Table showing age and sex of measles patients :—

Age-period in Years.	0-1 years.	1+ years.	2+ years.	3+ years.	4+ years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30+ years.	Total.	
Recovered	Males . . .	8	13	5	4	7	20	2	1	3	1	64
	Females . . .	5	11	14	11	4	24	6	5	7	2	89
Died	Males . . .	2	4	...	...	...	...	...	1	...	...	7
	Females . . .	1	...	...	...	...	...	...	...	...	1	2
Total . . .	16	28	19	15	11	44	8	7	10	4	162	

Measles fatality rate 5.55 per cent. (9 deaths).



## WHOOPING-COUGH.

The number of cases admitted to the wards notified as suffering from whooping-cough was 154. The diagnosis was confirmed in 143 patients. In addition there were three cases of whooping cough erroneously diagnosed as scarlet fever, one as diphtheria, one as chickenpox and one as dysentery, making a total of 149 patients suffering from whooping-cough. Of the 11 cases misdiagnosed as whooping-cough 6 were found to be suffering from bronchitis, 2 from lobar pneumonia, 1 from measles, 1 from streptococcal tonsillitis and in one no evidence of disease could be found.

There were 17 deaths, of which 12 (70·6 per cent.) were due to broncho-pneumonia.

Table showing age and sex of whooping-cough patients :—

Age-period in Years		0-1 years.	1+ years.	2+ years.	3+ years.	4+ years.	5-9 years.	10+ years.	Total.
Recovered	Males . . . . .	16	19	11	9	7	7	...	69
	Females . . . . .	13	18	12	1	9	9	1	63
Died	Males . . . . .	3	3	1	1	...	...	...	8
	Females . . . . .	4	2	1	...	2	...	...	9
Total . . . . .		36	42	25	11	18	16	1	149

Whooping-cough fatality rate, 11·40 per cent. (17 deaths).

## PUERPERAL FEVER.

The diagnosis of puerperal sepsis was confirmed in 136 out of 153 cases notified as puerperal fever or puerperal pyrexia. Forty-seven patients were admitted from districts outwith the City boundaries.

There were 16 deaths from puerperal infection (11·76 per cent.).

Fifty-two patients were primiparæ and eighty-four multiparæ. Four deaths (7·69 per cent.) occurred among the primiparæ and 12 (14·29 per cent.) among the multiparæ.

The corrected diagnosis in 17 cases was as follows :—Urinary infection (7) ; mastitis (3) ; influenza and pneumonia (2) ; miscarriage (2) ; pulmonary tuberculosis (1) ; eclampsia (1) ; no disease (1).

The urinary tract was infected in 49 patients (36·02 per cent.) ; *B. coli* was the organism commonly found.

Table showing age of puerperal infection patients :—

Age-period in Years.	15-19 years.	20-29 years.	30-39 years.	40+ years.	Total.
Recovered . . . . .	8	70	38	4	120
Died . . . . .	...	11 (13·58%)	5 (11·62%)	...	16
Total . . . . .	8	81	43	4	136

Puerperal Infection fatality rate, 11·76 per cent. (16 deaths).



Forty-four per cent. of the cases were admitted on or before the third day of illness. The average day of illness on which the patient first received treatment in hospital was the fourth.

*Streptococcus hæmolyticus* was isolated from the uterus in 57 patients (41·91 per cent.), of whom 9 died (15·89 per cent.).

*Streptococcus hæmolyticus* was isolated from the blood in 20 patients (14·70 per cent.), of whom 14 died (70 per cent.).

### ENTERIC FEVER.

Forty cases were admitted to the hospital notified as suffering from enteric fever. The diagnosis was confirmed in 30 patients.

The corrected diagnosis in 10 cases was as follows :—Food-poisoning (2) ; bacillary dysentery (1) ; acute ulcerative colitis (1) ; colitis and streptococcal septicæmia (1) ; lobar pneumonia (1) ; pleurisy with effusion (1) ; tubercular abdomen (1) ; measles (1) ; no disease (1).

The infecting organism was the bacillus typhosus in 7 cases, and the bacillus paratyphosus B. in 23 cases.

Three deaths occurred ; one from cardio-vascular failure in a *B. typhosus* infection ; two from intestinal hæmorrhage, and nephritis and cardio-vascular failure respectively in *B. paratyphosus B.* infections.

Table showing age and sex of enteric fever patients :—

Age—Period in Years.	0-4 years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30-39 years.	40-49 years.	50-59 years.	60+ years.	Total	
Recovered	Males .	1	1	1	2	2	2	1	2	...	12
	Females .	1	...	...	1	8	3	2	...	...	15
Died	Males .	...	...	...	...	1	...	...	...	...	1
	Females .	...	...	...	...	...	2	...	...	...	2
Total .	2	1	1	3	11	7	3	2	...	30	

Enteric Fever fatality rate, 10·0 per cent. (3 deaths).

### ERYSIPELAS.

There were 176 cases admitted to the wards notified as suffering from erysipelas. The diagnosis was confirmed in 141 patients.

The corrected diagnosis in the remaining 35 cases was as follows :—Cellulitis (12) ; dermatitis venenata (5) ; septic erythema (2) ; supra-orbital herpes (2) ; seborrhœic eczema (4) ; abscess (5) ; otitis media (1) ; chronic rheumatoid arthritis (1) ; urticaria (1) ; sunburn (1) ; varicose dermatitis (1).



Twenty of the 141 cases died. Two deaths occurred in the non-erysipelatous group. The actual cause of death in two erysipelas patients was rodent ulcer and gastric neoplasm respectively.

The inflammation primarily affected the face in 111 (78·72 per cent.) of the 141 cases. Twenty patients (14·18 per cent.) had suffered from a previous attack. One patient had had six prior attacks.

Table showing age and sex of erysipelas patients :—

Age—Period in Years.	0-4 years.	5-9 years.	10-19 years.	20-29 years.	30-39 years.	40-49 years.	50-59 years.	60-69 years.	70+ years.	Total.	
Recovered	Males . . .	7	...	3	3	2	16	9	8	6	54
	Females . . .	4	4	7	7	13	17	6	5	4	67
Died	Males . . .	5	...	...	...	2	1	...	4	1	13
	Females . . .	2	...	...	...	...	...	3	...	2	7
Total . . .	18	4	10	10	17	34	18	17	13	141	

Erysipelas fatality rate, 14·18 per cent. (20 deaths).

### CEREBRO-SPINAL MENINGITIS.

Thirty-four suspected cases of cerebro-spinal fever were admitted to hospital, of which 18 proved to be meningococcal infections. In addition there was one case of meningococcal meningitis misdiagnosed as measles, making a total of 19 cases of cerebro-spinal meningitis.

The following diseases were noted in the group of 16 misdiagnosed cases :— Tubercular meningitis (3); pneumonia (3); tonsillo-pharyngitis (3); influenza (1); cerebral aneurysm (1); gastro-enteritis (1); bacillary dysentery (1); catarrhal herpes (1); scarlet fever (1); miscarriage (1).

Thirteen cases of meningococcal meningitis died.

The fatality rate for all ages was 68·42 per cent. ; excluding infants 57·14 per cent.

Table showing age and sex of cerebro-spinal meningitis patients :—

Age—Period in Years.	Under 1 year.	1-4 years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30-39 years.	40-49 years.	50+ years.	Total.
Recovered	Males . . .	...	3	...	...	...	2	...	...	5
	Females . . .	...	...	...	1	...	...	...	...	1
Died	Males . . .	3	3	1	...	1	...	1	...	9
	Females . . .	2	1	1	...	...	...	...	...	4
Total . . .	5	7	2	1	1	...	3	...	...	19

Cerebro-spinal meningitis fatality rate, 68·42 per cent. (13 deaths).



## CHICKENPOX.

One hundred and sixteen cases notified as chickenpox were admitted to hospital, of which 106 were correctly diagnosed. In addition there were seven patients suffering from chickenpox misdiagnosed as scarlet fever, making a total of 113 cases of varicella.

The following diseases were noted in the misdiagnosed group :—Toxic or septic erythema (6) ; impetigo (1) ; whooping-cough (1) ; no disease (2).

Two deaths occurred. Death in one infant followed operative measures for the relief of a congenital obstructive jaundice. The second infant died from cellulitis and septicæmia, arising from hæmolytic streptococcal infection of one of the chickenpox lesions.

Table showing age and sex of patients suffering from chickenpox :—

Age-period in Years.		0-1 years.	1+ years.	2+ years.	3+ years.	4+ years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30+ years.	Total.
Recovered	Males .	1	9	6	6	2	20	4	...	...	1	49
	Females .	3	7	7	4	6	24	5	4	2	...	62
Died	Males .	2	...	...	...	...	...	...	...	...	...	2
	Females .	...	...	...	...	...	...	...	...	...	...	...
Total .		6	16	13	10	8	44	9	4	2	1	113

Chickenpox fatality rate, 1·77 per cent. (2 deaths).

## BACILLARY DYSENTERY.

Fifty-five cases were admitted to the wards notified as dysentery. The diagnosis was confirmed in 54. In addition there was one case of dysentery erroneously diagnosed as enteric fever and one as cerebro-spinal meningitis, making a total of 56. Various strains of *B. dysenteriæ* Flexner were isolated from 16 cases and *B. dysenteriæ* Sonne from 24. There was one death from a Flexner infection.

Table showing age and sex of bacillary dysentery patients :—

Age-period in Years.		0-1 years.	1+ years.	2+ years.	3+ years.	4+ years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30+ years.	Total.
Recovered	Males .	2	1	5	3	2	5	2	2	4	3	29
	Females .	1	5	3	1	2	5	2	3	3	1	26
Died	Males .	...	1	...	...	...	...	...	...	...	...	1
	Females .	...	...	...	...	...	...	...	...	...	...	...
Total .		3	7	8	4	4	10	4	5	7	4	56

Bacillary Dysentery fatality rate, 1·78 per cent. (1 death).



## EPIDEMIC PAROTITIS.

Thirty-seven cases were admitted to hospital notified as suffering from mumps. The diagnosis was confirmed in 35 patients. In addition there was one case of mumps erroneously diagnosed as scarlet fever, making a total of 36. There were no deaths.

Table showing age and sex of epidemic parotitis patients :—

Age-period in Years.	0-1 years.	1+ years.	2+ years.	3+ years.	4+ years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	Total.
Recovered	Males . . .	...	...	1	...	3	4	11	3	22
	Females . . .	...	...	...	3	6	...	2	3	14
Died	Males . . .	...	...	...	...	...	...	...	...	...
	Females . . .	...	...	...	...	...	...	...	...	...
Total . . .	...	...	...	1	3	9	4	13	6	36

## PNEUMONIA.

Thirty-seven patients were admitted to hospital notified as primary pneumonia or influenzal broncho-pneumonia. The diagnosis was confirmed in 20 cases. In addition there were 4 cases of pneumonia erroneously diagnosed as diphtheria, 3 as scarlet fever, 3 as cerebro-spinal meningitis, 2 as puerperal infection, 2 as whooping-cough, 1 as enteric fever and 1 as measles, making a total of 36 pneumonia patients. Seventeen patients, of whom 1 died, were suffering from lobar pneumonia, and 19, of whom 11 died, from broncho-pneumonia. There were 12 deaths.

The following diseases were noted in the misdiagnosed cases :—Influenza (11) ; bronchitis (1) ; asthma and bronchitis (1) ; bronchiectasis (1) ; pulmonary tuberculosis (1) ; pneumococcal angina (1) ; streptococcal angina (1).

Table showing age and sex of pneumonia patients :—

Age-Period in Years.	0-4 years.	5-9 years.	10-14 years.	15-19 years.	20-29 years.	30-39 years.	40-49 years.	50-59 years.	60-69 years.	Total.
Recovered	Males . . .	2	6	2	1	1	2	...	...	15
	Females . . .	3	2	...	1	2	1	...	...	9
Died	Males . . .	2	...	...	...	1	2	2	...	7
	Females . . .	...	1	...	...	2	...	...	2	5
Total . . .	7	9	2	2	6	2	4	2	2	36



## OTHER DISEASES.

**Rubella.**—Six cases were admitted to hospital notified as rubella. The diagnosis was confirmed in one patient. Four of the cases were found to be suffering from measles and one from scarlet fever. In addition there was one case of rubella misdiagnosed as scarlet fever.

**Epidemic Encephalitis.**—One case admitted to hospital notified as epidemic encephalitis was proved to be suffering from tubercular meningitis. This patient died.

**Acute Poliomyelitis.**—One patient alleged to be suffering from acute poliomyelitis was ultimately diagnosed as a case of catarrhal influenza.

**Anthrax.**—A slaughter-house employee was admitted to the wards suffering from cutaneous anthrax—lesion on right thumb. The administration of Sclavo's serum resulted in a rapid recovery.

**Malaria.**—One case notified as malaria was found to be suffering from acute pyelitis.

**Vincent's Angina.**—One case notified as Vincent's Angina proved to be a case of pneumococcal angina.

Eighteen post-mortem examinations were performed.

## LABORATORY REPORT.

Nature of Specimen.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly Total.
Throat swabs for <i>S. Hæmolyticus</i> . . . . .	104	78	75	105	57	55	53	42	66	66	102	55	858
Throat swabs for <i>B. diphtheriæ</i> . . . . .	429	308	273	261	206	204	166	94	145	212	183	236	2,717
Sputum for Tubercle Bac. . . . .	114	132	107	113	136	105	117	102	94	117	90	103	1,330
Cerebro-spinal Fluids . . . . .	18	6	21	19	27	38	5	15	28	6	2	4	299
Urines . . . . .	26	24	32	60	44	41	29	65	53	60	43	40	189
Stools . . . . .	28	14	13	25	42	17	15	26	35	23	22	39	517
Blood Cultures for <i>S. Hæmolyticus</i> (examined thrice) . . . . .	17	13	9	21	14	8	9	10	4	21	16	10	152
Uterine smears for <i>S. Hæmolyticus</i> . . . . .	25	14	13	23	24	18	24	38	16	24	20	13	252
Blood for Widal's React. . . . .	2	2	2	...	2	1	4	7	6	3	2	3	34
Others . . . . .	10	16	12	13	18	9	10	17	7	17	22	10	161
Monthly Total . . . . .	773	607	557	640	570	496	432	416	454	549	502	513	6,509



## BACTERIOLOGICAL SERVICES.

The following report is submitted by the Director of Bacteriological Services on the work carried out for the City in the Bacteriology Department of Edinburgh University from January to December, 1935.

### ROUTINE BACTERIOLOGICAL EXAMINATIONS

(including examinations for Municipal Hospitals).

	Jan	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total for year
Swabs and cultures from throat, nose and ear examined for <i>B. diphtheriae</i> :—													
Total . . . . .	610	404	326	353	385	271	237	223	258	344	371	353	4135
Positive . . . . .	105	62	61	81	76	32	33	23	32	55	42	45	647
Negative . . . . .	505	342	265	272	309	239	204	200	226	289	329	308	3488
<i>B. diphtheriae</i> Virulence tests :—													
Total . . . . .	64	28	25	46	40	22	13	7	10	30	18	13	316
Positive . . . . .	40	15	15	20	11	8	9	1	5	12	10	6	152
Negative . . . . .	24	13	10	26	29	14	4	6	5	18	8	7	164
Throat, nose and ear swabs for general bacteriological examination :—													
Total . . . . .	110	105	75	67	69	72	45	42	51	78	83	58	855
Positive-Hæmolytic Streptococci . . . . .	47	47	36	26	25	30	14	13	20	44	46	26	374
Positive-organisms of Vincent's Infection . . . . .	1	2	4	2	2	1	2	2	2	2	4	1	25
Sputum examined for <i>B. tuberculosis</i> :—													
Total . . . . .	136	150	195	140	147	136	124	97	109	123	150	141	1648
Positive . . . . .	13	18	16	30	19	22	20	17	16	17	19	19	226
Negative . . . . .	123	132	179	110	128	114	104	80	93	106	131	122	1422
Fæces and urine examined for organisms of enteric fever, dysentery or food-poisoning :—													
Total . . . . .	16	12	27	13	21	6	30	133	40	48	36	49	431
Pos.- <i>B. typh.</i> . . . . .	...	...	...	...	...	...	...	1	...	...	...	...	1
Pos.- <i>B. para B.</i> . . . . .	...	...	3	1	1	1	1	...	...	2	2	...	13
Pos.- <i>B. dys. Flexner</i> . . . . .	1	...	1	...	...	1	2	...	2	2	...	...	11
Pos.- <i>B. dys. Sonne</i> . . . . .	1	2	...	...	1	...	...	...	...	...	1	2	7
Blood for Widal reaction* (including <i>Br. abortus</i> agglutination test) :—													
Total . . . . .	4	4	4	7	11	7	9	15	5	18	9	7	100
Pos.- <i>B. typh.</i> . . . . .	...	...	...	2	...	1	1	5	1	...	...	1	11
Pos.- <i>B. para A.</i> . . . . .	...	...	...	...	2	...	...	...	...	...	...	...	2
Pos.- <i>B. para B.</i> . . . . .	...	...	1	...	3	...	1	3	...	1	1	1	11
Negative . . . . .	4	4	3	5	6	6	7	7	4	17	8	5	76
Blood for Wassermann reaction :—													
Total . . . . .	139	64	48	62	39	33	54	61	64	99	67	58	788
Positive . . . . .	26	11	7	12	6	10	10	7	14	9	12	5	129
Negative . . . . .	113	53	41	50	33	23	44	54	50	90	55	53	659
Blood for Syphilis Flocculation tests :—													
Total . . . . .	145	58	42	42	38	30	52	62	61	93	67	58	748
Positive . . . . .	17	11	6	9	8	8	10	11	15	8	10	7	120
Negative . . . . .	128	47	36	33	30	22	42	51	46	85	57	51	628
Cerebro-spinal fluid for Wassermann reaction :—													
Total . . . . .	11	5	10	12	7	6	13	7	15	22	21	23	152
Positive . . . . .	3	1	4	...	1	1	1	...	3	2	2	2	20
Negative . . . . .	8	4	6	12	6	5	12	7	12	20	19	21	132

\* Some of these were repeat examinations from the same patient.



	Brought forward	9,173
Sputum . . . . .	General bacteriological examination . . . . .	47
Sputum . . . . .	Examined for Pneumococcus (including determination of serological type) . . . . .	11
Sputum . . . . .	„ for B. pertussis . . . . .	1
Sputum . . . . .	„ for Meningococcus . . . . .	3
Blood . . . . .	for culture (general) . . . . .	75
Blood . . . . .	for culture of Pneumococcus . . . . .	2 (1 pos.)
Blood . . . . .	for culture of Br. abortus . . . . .	3
Blood . . . . .	Examined for Leptospira icterohæmorrhagiæ (including animal inoculation test) . . . . .	2 (1 pos.)
Blood . . . . .	„ for Malaria parasites . . . . .	1
Blood . . . . .	for culture of B. paratyphosus B. . . . .	3 (1 pos.)
Blood . . . . .	for culture of B. dysenteriæ Sonne . . . . .	1 (1 pos.)
Urine . . . . .	General bacteriological examination . . . . .	310
Urine . . . . .	Examined for B. tuberculosis . . . . .	32 (5 pos.)
Urine . . . . .	„ for Gonococcus . . . . .	2 (1 pos.)
Urine . . . . .	„ for Leptospira icterohæmorrhagiæ . . . . .	2 (1 pos.)
Fæces . . . . .	„ for B. tuberculosis . . . . .	10
Pus . . . . .	General bacteriological examination . . . . .	109
Pus . . . . .	Examined for B. tuberculosis . . . . .	4
Cerebro-spinal fluid . . . . .	General bacteriological examination . . . . .	11
Cerebro-spinal fluid . . . . .	for cytological examination, Protein, Globulin and Colloidal Gold tests . . . . .	177
Cerebro-spinal fluid . . . . .	Examined for B. tuberculosis . . . . .	4
Cerebro-spinal fluid . . . . .	„ for Meningococcus . . . . .	2 (1 pos.)
Vaginal, uterine and urethral smears and swabs . . . . .	„ for Gonococcus . . . . .	58 (7 pos.)
Vaginal, uterine and urethral smears and swabs . . . . .	General bacteriological examination (including examination for hæmolytic streptococci) . . . . .	15
Conjunctival smears . . . . .	General bacteriological examination . . . . .	15
Conjunctival smears . . . . .	Examined for Gonococcus . . . . .	9 (1 pos.)
Pleural and peritoneal fluids . . . . .	General bacteriological examination . . . . .	59
Pleural and peritoneal fluids . . . . .	Examined for B. tuberculosis . . . . .	13
Gastric contents . . . . .	General bacteriological examination . . . . .	2
Gastric contents . . . . .	Examined for B. tuberculosis . . . . .	12 (1 pos.)
Hairs and scrapings from skin . . . . .	„ for Ringworm fungi . . . . .	5
Food samples . . . . .	General bacteriological examination . . . . .	2
Autogenous vaccines prepared . . . . .		8
Rats examined for plague infection* . . . . .		32
Water specimens for bacteriological examination . . . . .		95
Milk . . . . .	Examined for Hæmolytic Streptococci . . . . .	42 (9 pos.)
Miscellaneous examinations . . . . .		18
	TOTAL	<u>10,370</u>

\* These were carcasses of rats caught in docks or on board ships arriving from foreign ports and were examined as a precautionary measure. All were negative.



## EXAMINATIONS FOR MUNICIPAL HOSPITALS.

## Western General Hospital.

	Total.	Positive.	Negative.
Throat, nose and ear swabs for <i>B. diphtheriæ</i>	300	55	245
Throat, nose and ear swabs for general bacteriological examination	112	...	...
<i>B. diphtheriæ</i> Virulence tests	42	21	21
Throat swabs for Hæmolytic streptococci	106	82	23
Throat swabs for Vincent's infection	10	7	3
Throat and aural swabs for <i>B. tuberculosis</i>	2	1	1
Sputum for <i>B. tuberculosis</i>	20	3	17
Sputum for general bacteriological examination	18	...	...
Sputum for <i>Pneumococcus</i> (including determination of serological types)	8	...	...
Sputum for <i>B. pertussis</i>	1	...	1
Blood for Wassermann reaction	384	57	327
Blood for Syphilis Flocculation tests	343	49	294
Blood for Widal reaction	20	2	18
Blood for culture	41	...	...
Cerebro-spinal fluid for Wassermann reaction	75	12	63
Cerebro-spinal fluid for Cytological examination, Protein, Globulin and Colloidal Gold tests	86	...	...
Cerebro-spinal fluid for general bacteriological examination	5	...	...
Cerebro-spinal fluid for <i>B. tuberculosis</i>	1	...	1
Pleural, peritoneal and other fluids for general bacteriological examinations	37	...	...
Pleural fluid for <i>B. tuberculosis</i>	8	...	8
Pus for general bacteriological examination	84	...	...
Fæces and urine for organisms of enteric and dysentery groups	94	11	83
Fæces for <i>B. tuberculosis</i>	8	...	8
Urine for general bacteriological examination	230	...	...
Urine for <i>B. tuberculosis</i>	15	1	14
Vaginal, uterine and urethral smears for <i>Gonococcus</i>	20	3	17
Vaginal, uterine and urethral swabs for <i>B. diphtheriæ</i>	3	...	3
Conjunctival smears for <i>Gonococcus</i>	5	1	4
Conjunctival smears for bacteriological examination	2	...	...
Gastric contents for <i>B. tuberculosis</i>	13	1	12
Hairs for Ringworm fungi	3	1	2
Autogenous vaccines prepared	2	...	...
Miscellaneous	10	...	...
	<u>2,108</u>		

## Eastern General Hospital.

	Total.	Positive.	Negative.
Throat, nose and ear swabs for <i>B. diphtheriæ</i>	31	5	26
Throat swabs for Hæmolytic streptococci	10	9	1
Throat, nose and ear swabs for general bacteriological examination	4	...	...
Blood for Wassermann reaction	194	28	166
Blood for Syphilis Flocculation tests	191	30	161
Blood for Widal reaction	26	3	23
Blood for <i>Leptospira icterohæmorrhagiæ</i>	1	...	1
Blood for culture	17	...	...
Cerebro-spinal fluid for general bacteriological examination	11	...	...
Cerebro-spinal fluid for Wassermann reaction	31	3	28
Cerebro-spinal fluid for Cytological examination, Protein, Globulin and Colloidal Gold tests	50	...	...
Sputum for general bacteriological examination	2	...	...
Sputum for type of <i>Pneumococcus</i>	1	...	...
Fæces and urine for organisms of enteric and dysentery groups	32	1	31
Urine for general bacteriological examination	11	...	...
Urine for <i>Gonococcus</i>	1	1	...
Urine for <i>Leptospira icterohæmorrhagiæ</i>	2	1	1
Vaginal, uterine and urethral smears for <i>Gonococcus</i>	13	2	11
Pus for general bacteriological examination	4	...	...
Fluid for <i>B. tuberculosis</i>	2	...	2
Conjunctival smears for general bacteriological examination	1	...	...



**Northern General Hospital.**

	Total.	Positive.	Negative.
Throat, nose and ear swabs for <i>B. diphtheriæ</i>	11	1	10
<i>B. diphtheriæ</i> Virulence tests	5	...	5
Throat swabs for Hæmolytic streptococci	1	1	...
Blood for Wassermann reaction	121	26	95
Blood for Syphilis Flocculation tests	118	24	94
Blood for Widal reaction	3	1	2
Sputum for <i>B. tuberculosis</i>	1	...	1
Cerebro-spinal fluid for Wassermann reaction	22	2	20
Cerebro-spinal fluid for Cytological examination, Protein, Globulin and Colloidal Gold test	23	...	...
Cerebro-spinal fluid for general bacteriological examination	2	...	...
Fæces and urine for organisms of enteric and dysentery groups	3	...	3
Urine for general bacteriological examination	1	...	...
Pus for general bacteriological examination	2	...	...
	<u>313</u>		

**City Hospital for Infectious Diseases.**

	Total.	Positive.	Negative.
Throat, nose and ear swabs and cultures for <i>B. diphtheriæ</i>	472	262	210
<i>B. diphtheriæ</i> Virulence tests	218	104	114
Throat swabs for Hæmolytic streptococci	2	1	1
Throat swabs for general bacteriological examination	1	...	...
Sputum for <i>B. tuberculosis</i>	5	2	3
Blood for Wassermann reaction	10	1	9
Blood for Syphilis Flocculation tests	10	2	8
Blood for Widal reaction	20	15	5
Blood for culture	8	...	...
Fæces and urine for organisms of enteric and dysentery groups	97	13	84
Fæces for <i>B. tuberculosis</i>	2	...	2
Urine for <i>B. tuberculosis</i>	4	2	2
Urine for general bacteriological examination	16	...	...
Cerebro-spinal fluid for Wassermann reaction	2	...	2
Cerebro-spinal fluid for Cytological examination, Protein, Globulin and Colloidal Gold tests	2	...	...
Cerebro-spinal fluid for general bacteriological examination	3	...	...
Cerebro-spinal fluid for <i>B. tuberculosis</i>	2	...	2
Cerebro-spinal fluid for Meningococcus	1	1	...
Vaginal, uterine and urethral smears for Gonococcus	3	...	3
Pleural, peritoneal and other fluids for <i>B. tuberculosis</i>	6	...	6
Pus for general bacteriological examination	5	...	...
Blood cultures for <i>B. paratyphosus B.</i>	3	1	2
Blood cultures for <i>B. dysenteriæ Sonne</i>	1	1	...
Autogenous vaccines prepared	3	...	...
Miscellaneous	4	...	...
	<u>900</u>		

**Royal Victoria Dispensary.**

	Total.	Positive.	Negative.
Throat, nose and ear swabs for <i>B. diphtheriæ</i>	5	2	3
Throat swabs for Hæmolytic streptococci	2	2	...
Sputum for <i>B. tuberculosis</i>	968	145	813
Urine for <i>B. tuberculosis</i>	3	...	3
Blood for Widal reaction	2	...	2
Blood for Wassermann reaction	5	...	5
Fæces and urine for organisms of enteric and dysentery groups	1	...	1
Fæces for <i>B. tuberculosis</i>	1	...	...
Blood culture	1	...	...
Urine for general bacteriological examination	2	...	...
	<u>989</u>		

**Bangour Mental Hospital.**

	Total.	Positive.	Negative.
Throat, nose and ear swabs for <i>B. diphtheriæ</i>	39	2	37
Blood for Wassermann reaction	65	10	55
Blood for Syphilis Flocculation tests	63	13	50
Cerebro-spinal fluid for Wassermann reaction	8	4	4
Cerebro-spinal fluid for Cytological examination, Protein, Globulin and Colloidal Gold tests	8	...	...
Pus for general bacteriological examination	1	...	...
	<u>184</u>		



**Gogarburn Certified Institution.**

	Total.	Positive.	Negative.
Throat, nose and ear swabs for <i>B. diphtherie</i>	2	...	2
Total Examinations for Municipal Hospitals	5,131		

**SPECIAL INVESTIGATIONS.****DIRECT CULTURE IN THE EXAMINATION OF SPUTUM AND OTHER MATERIAL FOR *B. TUBERCULOSIS*.**

The routine method for the detection of tubercle bacilli in sputa from suspected tuberculous subjects consists in the microscopical examination of stained smear preparations. While in many cases of active pulmonary tuberculosis acid-fast bacilli are detectable in the sputum without difficulty, in others, as is well known, the most careful microscopic search is required. The amount of material which can be examined by the ordinary method is only a minute fraction of a sample of sputum, and negative results may not be significant from the diagnostic standpoint. Methods are of course available for concentrating acid-fast bacilli in material to be examined microscopically, but even these have their limitations in the detection of tubercle bacilli when they are in small numbers in the sample dealt with. In recent years considerable advances have been made in the technique of cultivating tubercle bacilli directly from pathological material and an inquiry has been commenced in this laboratory to ascertain to what extent positive bacteriological diagnoses can be increased by cultural methods as compared with the usual routine microscopic examination. It should, of course, be emphasised that the cultural test only yields a definite result after a month owing to the slow growth of the tubercle bacillus on culture medium. In addition to sputa, specimens of milk, urine, fæces, etc., have been dealt with in this inquiry.

With the object of destroying organisms other than tubercle bacilli, each specimen was treated with 6 per cent. hydrochloric acid and thereafter neutralised with 4 per cent. sodium hydroxide, culture media being inoculated with the deposit following centrifugation. At first three media were used—(1) Dorset's egg medium (D), (2) glycerin-egg (G) and (3) Jensen's modification of Löwenstein's medium (containing glycerin) (L). The results of the first 49 successfully cultured specimens were as follows :—

Medium,	Sputum.	Pus.	Urine.	Milk.
L + D + G +	23	...	...	...
L + D + G -	5	...	...	...
L + D - G +	5	...	...	...
L + D - G -	12	1	1	...
L - D + G -	1	...	...	1

+ = growth typical of the tubercle bacillus.  
- = no growth typical of the tubercle bacillus.



The Jensen-Löwenstein medium gave positive results in all save two specimens, one of which was milk containing bovine tubercle bacilli, and the other sputum in which the organism was probably bovine in type. It may be noted here that while glycerin promotes the growth of the human type of tubercle bacillus, a non-glycerin medium is required for the bovine type. The use of Dorset's egg and glycerin-egg media was then discontinued and the Jensen-Löwenstein medium without glycerin was substituted (NGL). In a series of 51 sputa, 1 cerebro-spinal fluid and 1 urine, all with positive cultures, the results were as follows :—

L +	NGL +	.	.	.	51
L +	NGL -	.	.	.	2

At the present time 452 specimens have been cultured, the combined film and culture results being as follows :—

Result.	Sputum.	C.S.F.	Pus.	Milk.	Fæces.	Urine.	Total.
Film + Culture +	85	1	1	1	1	...	89
Film - Culture +	31	...	...	...	...	2	33
Film + Culture -	2*	...	...	2†	...	...	4
Film - Culture -	318	3	1	3	...	1	326
	436	4	2	6	1	3	452

\* Cultured on Löwenstein (L) medium only.

† Organisms morphologically identical with but not necessarily *B. tuberculosis*.

The comparative value of the two methods of examination is illustrated by the following table of positive results, two milks, positive in films but negative on culture, being excluded on the ground that morphologically indetical organisms other than *B. tuberculosis* may be present in milk :—

Positive by film and/or culture examination	124.
„ cultural examination . . .	122.
„ film examination . . .	91.

As far as the present investigation has proceeded, the adoption of cultural methods has revealed the presence of acid-fast bacilli with growths typical of the tubercle bacillus in a certain proportion of specimens, mainly sputa, which, by careful film examination alone, were considered to be negative. While there is no reason to doubt that these are tubercle bacilli, representative strains are at present under examination by the animal inoculation test to confirm their identity.

If the combined film and culture tests be taken to yield the maximum positive results, then film examination alone realised only 73 per cent. of that maximum.



## TUBERCULOUS MENINGITIS.

The investigation, carried out in conjunction with Dr. A. Macgregor and Dr. W. Craig of the Royal Hospital for Sick Children, on cases of tuberculous meningitis in the Edinburgh hospitals, has now been completed. The examination of the cerebro-spinal fluids from cases showing evidence of meningeal irritation, apart from clinical meningitis, and which may possibly have been tuberculous in causation was also included in this study. The summarised results are as follows :—

<i>No tubercle bacilli isolated.</i>	<i>Tubercle bacilli isolated.</i>	
146 cases	78 cases	
	20·6 per cent.	69·4 per cent.
	Bovine type	Human type

Thus the bovine type was the cause of death in at least one out of every five cases of meningitis among the series examined. This fact illustrates the part played by the bovine tubercle bacillus in producing a fatal form of tuberculosis in the human subject and emphasises the need for the control of milk-borne tuberculosis.

(C. A. Green.)

## THE IDENTIFICATION OF PATHOGENIC TYPES OF HÆMOLYTIC STREPTOCOCCI BY LANCEFIELD'S PRECIPITIN REACTION.

The hæmolytic streptococcus is the causal organism of a variety of infectious diseases such as scarlet fever, erysipelas, tonsillitis, puerperal fever and septicæmia. Numerous observations are on record, however, which indicate that the presence of this organism is not necessarily followed by infection. Thus, in any community, probably 30 per cent. of persons will be found to harbour the streptococcus in the naso-pharynx without clinical disturbance. Similarly this organism may be recovered from the birth canal immediately before and after parturition in uncomplicated cases, despite the fact that the hæmolytic streptococcus is the most frequently found and the most dangerous cause of puerperal infection. These factors, therefore, point to the possible existence of non-virulent strains, but previous attempts to differentiate between these two groups have not been attended with any degree of practical success. Lancefield (1933, 1935) has now described a precipitin reaction by which, it is claimed, differentiation may be secured. By means of this test Lancefield classified hæmolytic streptococci into various groups named A, B, C, D, E, etc., of which group A comprised the majority of strains pathogenic to the human subject. The importance of these observations from the point of view of preventive medicine is self-evident.

The antigen used in the test was a hydrochloric acid extract of the strain of hæmolytic streptococcus under investigation, to which were added the sera of animals immunised against representatives of all the various groups respectively. The production of a precipitate with the antiserum of one or other group indicated relationship with that particular group.



This test is now being used in a preliminary investigation and a limited number of strains of hæmolytic streptococci from scarlatina, tonsillitis, septicæmia and other conditions have all been found to give a strong Group A precipitin reaction. Further tests will require to be carried out with strains of presumably low pathogenicity before the practical utility of the test can be ascertained.

(C. A. Green).

REFERENCES :—

- Lancefield, R. C. (1933). *J. Exper. Med.* 57, 571.  
Lancefield, R. C., and Hare, R. (1935). *Ibid.* 61, 335.

### TYPES OF THE DIPHTHERIA BACILLUS.

The investigation of biological types of the diphtheria bacillus carried on in Edinburgh for some years was extended in the winters of 1934-35 and 1935-36 to strains isolated from carriers. Of 106 strains (1·6 per cent.) isolated from 6,793 individuals (330 adults, 6,463 children), 33 (32 per cent.) were virulent and 73 (68 per cent.) avirulent. All the carriers were children.

Among the strains proved virulent by animal inoculation the type most commonly isolated was the "mitis" form (24 per cent.) which in active cases generally gives rise to a "mild infection."

Sixty-two of the avirulent strains exhibited colonies of the "gravis" type and were indistinguishable from typical, virulent strains of *B. diphtheriæ*. This is in marked contrast to the situation in Leeds where strains exhibiting "gravis" colonies are almost invariably virulent and are frequently isolated from severe toxic cases of the disease.

At the beginning of the investigation of carrier types, "intermediate" forms were only rarely isolated (2 per cent.) though they prevailed among active cases of diphtheria. Only 5 per cent. of virulent "gravis" types occurred among the strains from carriers, but recently there has been an increase in the number of such strains isolated from active cases. Thus the change of type-incidence among strains from active cases was not reflected in any corresponding change of incidence among strains from carriers; and the percentage of each type isolated from carriers during the winter of 1934-35 and that of 1935-36 was almost identical.

In view of the frequency of avirulent strains among school children in Edinburgh it would seem advisable to stress the importance of a virulence test before hospitalization of healthy carriers.

(M. H. Christison and H. A. Wright.)

### UNRECOGNISED BRUCELLA ABORTUS INFECTION.

In this country Undulant Fever in man and Contagious Abortion in cattle are caused by the same organism, *Brucella abortus*. Man may acquire infection by the consumption of milk containing the organism or by contact with infected animals or meat. Most of the population of this country is exposed to the first risk, for about one-third of unpasteurised milk contains live *Br. abortus*. Considering the extent



of this contamination surprisingly few cases of the disease occur. To the second risk, contact with animals, veterinary workers are particularly exposed. In their case the chance of contracting infection is even greater than among others whose occupations involve handling of animals or animal carcasses, for the most potent source of infection is to be found in assistance in calving or in the removal of products of gestation.

Evidence of infection may be found in the presence of agglutinins for *Br. abortus* in the blood. This does not necessarily indicate that clinically recognisable undulant fever has been produced. The infection may not have been sufficiently severe to produce recognisable symptoms. In this country Wilson found that the blood sera of 15 of 63 veterinary surgeons contained agglutinins for *Br. abortus* in a titre of 1 in 20 or over. This indicates that at least 23·8 per cent. of such persons had been infected at some time.

It was thought that an examination of blood serum from veterinary students would supply information as to the relation between contact with cattle and the occurrence of infection. Such an investigation has been carried out over the last three years. The results may be given shortly in tabular form. Agglutination in a titre of 1 in 20 or over was taken as positive.

Year of study	Total.	Number Positive.	Number Negative.	Percentage Positive.
Post-graduate . . . . .	24	14	10	58·3
4th year . . . . .	26	4	22	15·4
3rd year . . . . .	54	5	49	9·3
2nd year . . . . .	29	3	26	13·4
1st year . . . . .	49	5	44	10·2
Total . . . . .	182	31	151	17·0
Medical students (controls) . . . . .	96	4	92	4·2

It will be seen that a very high proportion of post-graduate students gave a positive result. These had all engaged in practice. In the other groups the proportion giving a positive result is also much higher than among the medical students who serve as controls. This may be accounted for by the fact that many of the veterinary students were brought up on farms while others assisted veterinary surgeons during college vacations.

If the veterinary students be further divided into those having much and those having little contact with cattle, a striking difference can be appreciated.

	Total.	Number Positive.	Number Negative.	Percentage Positive.
Much contact with cattle . . . . .	130	30	100	23·0
Little contact with cattle . . . . .	52	1	51	1·9



One student developed a disease which was recognised as undulant fever while another developed a febrile illness the symptoms of which, coupled with a high agglutination titre, enabled a retrospective diagnosis of undulant fever to be made.

Many of the students were examined in succeeding years and in some cases it was found that, while they originally gave a negative reaction, after practical work their reactions became positive.

These observations provide further information regarding the occurrence of latent or unrecognised infection by *Br. abortus* and illustrate how rarely even the maximum risk of infection leads to declared disease in the human subject.

(C. P. Beattie.)

## THE STUDY OF VIRUS DISEASES.

With the improvement of technical methods and the introduction of better laboratory equipment, special attention is now being paid to the study of virus diseases which occupy such an important place in the field of public health.

From researches on the ætiology of variola and vaccinia a great wealth of data has been elicited which has led to a better understanding of the nature of this group of diseases. Furthermore such information has been applicable to the study of certain suspected virus diseases, and much progress thereby achieved.

As a result of modern work it is necessary to alter our existing conceptions with regard to the fundamental nature of viruses in general. For example, it would be no longer accurate to accord the description "ultramicroscopic" and "filterable" as terms applicable to these agents as a whole. The recent work of Paschen on Vaccinia and Variola has showed that in certain cases these viruses represent particulate objects, which are capable of demonstration by special methods of staining, though these may be smaller than the average bacterium, *e.g.*, 0.2 of a micron, in diameter. In addition the viruses as a group may be proved to vary greatly in size and are accordingly only filterable through filter-membranes of a sufficient porosity to pass them. Thus, variolous and vaccinal material owe their infectivity to the presence of these minute "elementary bodies" or "Paschen bodies," so designated after the name of their discoverer. It is of historical interest that these minute bodies were probably first described in 1887 by Dr. Robert Buist of Edinburgh, who was a public vaccinator of the city at that time.

Due to the work of Gordon, it has been shown that extracts of skin crusts from variola yield a specific flocculation reaction with an antivaccinal serum, and this phenomenon has subsequently been used for the practical diagnosis of small-pox. Similarly, concentrated and purified suspensions of elementary bodies are agglutinated like bacteria by a specific serum and such agglutination tests have proved to be a means of demon-



strating the identity of the viruses of Chicken-pox and Herpes Zoster. Finally, the same principle has been employed with the object of establishing the ætiological relationship of suspected elementary bodies obtained from exudates in acute rheumatism. The latter investigations as yet lack independent confirmation.

In the past much dubiety has existed with regard to the precise nature of these viruses and their mode of propagation in tissues. The subject is as yet imperfectly understood in respect of certain virus diseases, such as the Rous Sarcoma of the fowl and the Mosaic disease of the tobacco plant, and great difficulty has been experienced in determining whether the material used for transmission of the disease represents animate or inanimate matter.

There is less doubt however, with regard to the living nature of the specific elementary bodies observed in, and responsible for, Variola, Vaccinia, Psittacosis and Ectromelia. Their mode of multiplication and growth has been studied in tissue culture and it has emerged from such investigations that these viruses may be regarded as intracellular parasites. The presence of the virus within the cell is associated with the formation of "inclusion bodies," which may be situated either within the cytoplasm or nucleus of the cell. By the aid of micromanipulation apparatus inclusion bodies have been removed from the cell and shown to be capable of reproducing the same disease when inoculated into a healthy animal.

Experiments such as these afford strong evidence in favour of the fact that, the elementary bodies associated with, and responsible for certain virus diseases behave in an analogous manner to the visible bacteria.

In this laboratory a series of studies have been made recently on the characters of certain well recognised viruses. Inquiries are also in progress on the ætiological agents of certain diseases generally regarded as virus infections or claimed by certain observers to be of their nature. A considerable amount of attention has been devoted to the practical demonstration of elementary bodies in vaccinia by various microscopic methods and a satisfactory method of staining these has been evolved, which has greatly facilitated their observation.

Cultivation of these bodies in the chorio-allantoic membrane of the developing chick, corneal inoculation of the rabbit and high-speed centrifugation (15,000 revolutions per minute) have been utilised as means of aiding their demonstration. This work has indicated their organismal nature.

Further, similar material from other virus diseases whenever available, has been investigated by the same methods, *e.g.*, Herpes Zoster, Lymphogranuloma inguinale (or Climatic bubo), Rabies, Benign lymphocytic meningitis, Psittacosis, Ectromelia of mice, Infectious papillomatosis of rabbits and Louping ill of sheep.

The claims made that specific virus bodies can be demonstrated in exudates from acute rheumatism are also being investigated, and facilities for this inquiry have been granted by the Director of the Medical Unit of the Municipal Hospitals.



The general aim of the work referred to, is to acquire familiarity with the better known virus diseases with the object of applying this knowledge to a study of those of lesser known character.

(C. E. van Rooyen).

### THE MONKEY MALARIA PARASITE (*Plasmodium Knowlesi*) IN THE TREATMENT OF GENERAL PARALYSIS OF THE INSANE.

Following the work of Knowles and Gupta (1932) who successfully demonstrated the pathogenicity of *Plasmodium knowlesi* to man, van Rooyen and Pile (1935) have utilised this parasite for the treatment of General Paralysis of the Insane. Inoculation of a patient with 10 c.c. of blood from an infected monkey, is followed after an incubation period of 8-10 days by pyrexia of quotidian type. Temperature seldom exceeds 105 degs. F., and there is usually little or no constitutional upset. No special diet is required and the course of treatment is so mild in character and devoid of toxic symptoms (in comparison with benign tertian malarial infection) that this mode of therapy is eminently suited to elderly and debilitated subjects. After eight rises in temperature have occurred, the infection can be readily terminated by the administration of Quinine Hydrochloride gr.x, three times daily for three days. Relapses are rare in occurrence but are easily checked by the further exhibition of quinine. The monkey parasite offers certain advantages over the employment of *Plasmodium vivax*, other than those alluded to above. For example, it is practicable to maintain infected monkeys at the laboratory and issue blood to clinicians when required at short notice. Furthermore, such blood, unlike that from a parietic patient infected with malaria, may be used for the treatment of non-syphilitic conditions such as disseminated sclerosis.

Once the infection has established itself in any case it is possible to transmit the condition from one patient to another requiring similar treatment, and 4 to 5 passages may thus effectively be carried out.

Owing to the high degree of parasitisation caused by this protozoon in a susceptible human individual, it is justifiable to conclude that a greater degree of reticulo-endothelial stimulation may be produced than could be achieved by the use of the human parasite, *P. vivax*.

Theoretically, therefore, one would expect to obtain better clinical results from the use of this parasite than those derived from infection with *P. vivax*. From preliminary observations there is reason to believe that such expectation seems justifiable and in consequence the employment of *Plasmodium knowlesi* as a therapeutic agent for the treatment of general paralysis of the insane, holds much promise for the future.

- Knowles, R. and Gupta, B.M. Das. (1932) *Indian Med. Gaz.*, 67, 391.  
van Rooyen, C.E. and Pile, G. R. (1935) *Brit. Med. J.*, ii, 662.

(C. E. van Rooyen.)



The following papers on subjects related to preventive medicine have been published from the laboratory during the year :

- "Undulant Fever in Scotland." By C. P. Beattie, J. Smith and W. J. Tulloch, *Lancet*, 1935, *1*, 1427 (also from City Bacteriological Laboratory, Aberdeen, and Bacteriology Department, University College, Dundee).
- "A Pathogenic diphtheroid bacillus from a fatal case of meningitis." By H. J. Gibson, *Journ. Path. and Bact.*, 1935, *41*, 239.
- "A study of the streptococci from fifty cases of bovine mastitis." By H. J. Gibson and R. O. Muir, *Journ. Hygiene*, 1935, *35*, 238.
- "Experiments on reactivation of the virus in neutral serum-virus mixtures." By R. K. Goyal, *Journ. Immunology*, 1935, *29*, 111.
- "The relationship of Jochmann's and other enzymes to the encephalitogenic agent in lymphadenomatous lymph glands." By I. MacKenzie and C. E. van Rooyen, *Brit. Med. Journ.*, 1935, *1*, 406.
- "Further observations on the types of *Corynebacterium diphtheriæ*." By H. A. Wright and M. H. Christison, in collaboration with A. L. K. Rankin, R. C. M. Pearson and J. A. Cuthbert (City Hospital for Infectious Diseases), *Journ. Path. and Bact.*, 1935, *41*, 447.
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- "Observations on infection by *Plasmodium knowlesi* (Ape Malaria) in the treatment of general paralysis of the insane." By C. E. van Rooyen and G. R. Pile, *Brit. Med. Journ.*, 1935, *ii*, 662 (also from Midlothian and Peebles Asylum, Rosslynlee).

The Bacteriological Services have been carried out under the direction of Professor T. J. Mackie.

The Professional Staff of the University who took part in the work during 1935 were :—Dr. H. J. Gibson, Dr. C. P. Beattie, Dr. A. Haddow and Dr. C. A. Green, Lecturers ; Dr. Scott Thomson and Dr. May H. Christison, Assistants.

Voluntary assistance in special investigations was given by Dr. C. E. van Rooyen, Halley Stewart Research Fellow and Honorary Lecturer, Dr. Helen A. Wright, Crichton Research Scholar, and Miss Barbara J. Shearer, B.Sc.

## MUNICIPAL HOSPITALS.

### BIOCHEMICAL LABORATORY.

#### MEDICINE DEPARTMENT.

REPORT FOR YEAR ENDING 31ST DECEMBER, 1935.

The number of analyses carried out is approximately the same as during the year 1934. There has been a considerable increase in the work done on behalf of the Eastern General, Northern General, and City Hospitals, but a decrease in that on behalf of the Western General Hospital. This decrease is entirely due to the fact that during 1934 a large number of urine analyses were made in connection with the glycine treatment of muscular dystrophy, an investigation which was concluded at about the end of that year. In other respects the number of analyses made for the Western General Hospital during 1935 has actually increased.

The appended details of analyses show 293 under the heading "miscellaneous." These were not on samples from patients, but on materials in connection with the treatment of patients—e.g., analyses of milk, etc., for balanced diets.



## BIOCHEMICAL LABORATORY.

Details of Analyses, carried out during the period 1st January to 31st December, 1935.

	Reports.	Analyses.
Western General Hospital . . . . .	524	1,199
Eastern General Hospital . . . . .	118	224
Northern General Hospital . . . . .	74	88
City Hospital . . . . .	26	25
Royal Victoria Hospital . . . . .	2	2
		Miscellaneous 293
Totals . . . . .	<u>744</u>	<u>1,831</u>

Number of Patients . . . . . 400.

Analyses.	Western General Hospital.	Eastern General Hospital.	Northern General Hospital.	City Hospital.	Royal Victoria Hospital.	Totals.
<b>BLOOD :—</b>						
Sugar . . . . .	144	67	64	4	2	281
Urea N. . . . .	221	40	14	12	...	287
CO <sub>2</sub> Comb. . . . .	52	2	...	1	...	55
Creatinine . . . . .	62	23	...	...	...	85
Cholesterol . . . . .	44	11	...	...	...	55
Albumin . . . . .	55	11	...	...	...	66
Globulin . . . . .	55	11	...	...	...	66
Fibrinogen . . . . .	12	...	...	...	...	12
N.P.N . . . . .	78	26	1	...	...	105
Van den Bergh . . . . .	42	10	5	1	...	58
Icteric Index . . . . .	63	9	4	1	...	77
Fouchet . . . . .	...	...	...	...	...	...
Calcium . . . . .	57	5	...	1	...	63
Phosphorus . . . . .	28	...	...	...	...	28
Phosphatase . . . . .	29	1	...	...	...	30
Takata Ara. . . . .	5	...	...	...	...	5
Glutathione . . . . .	14	...	...	...	...	14
Tetra-Chlor. . . . .	14	...	...	...	...	14
Iron . . . . .	6	...	...	...	...	6
Uric Acid . . . . .	8	...	...	...	...	8
Chlorides . . . . .	2	...	...	...	...	2
Cell Volume . . . . .	5	...	...	...	...	5
<b>URINE :—</b>						
Sugar . . . . .	17	1	...	5	...	23
Urea N. . . . .	63	...	...	...	...	63
Creatinine . . . . .	13	...	...	...	...	13
Creatine . . . . .	13	...	...	...	...	13
Total N. . . . .	13	...	...	...	...	13
Sulphate . . . . .	6	...	...	...	...	6
<b>C.S.F. :—</b>						
Sugar . . . . .	3	...	...	...	...	3
Calcium . . . . .	1	...	...	...	...	1
Chlorides . . . . .	6	...	...	...	...	6
Total Prot. . . . .	17	1	...	...	...	18
<b>ASCITIC FLUID :—</b>						
Urea N. . . . .	2	...	...	...	...	2
Cholesterol . . . . .	3	...	...	...	...	3
Total Protein . . . . .	3	...	...	...	...	3
Albumin . . . . .	7	...	...	...	...	7
Globulin . . . . .	6	...	...	...	...	6
<b>PLEURAL FLUID :—</b>						
Cholesterol . . . . .	1	...	...	...	...	1
Chlorides . . . . .	1	...	...	...	...	1
Albumin . . . . .	3	...	...	...	...	3
Globulin . . . . .	3	...	...	...	...	3
<b>FÆCES :—</b>						
Fats . . . . .	9	6	...	...	...	15
<b>MISCELLANEOUS :—</b>						
	13	...	...	...	...	13
TOTALS . . . . .	1,199	224	88	25	2	1,538
					MISCELLANEOUS	293
					GRAND TOTAL	1,831



## MATERNITY AND CHILD WELFARE.

REPORT BY MATERNITY AND CHILD WELFARE MEDICAL OFFICER.

The following is a report of the work carried on under the Maternity and Child Welfare Scheme for the year 1935. The usual statistical tables referred to under each heading will be found at the end of the report.

### **Ante-Natal Supervision** (Table 1).

During the year the attendances at the 10 ante-natal centres showed a total of 27,744. This is an increase of 1,176 compared with the attendances recorded in the previous year. Health Visitors come into contact with a large number of expectant mothers in the course of their routine visits, but in addition they paid 2,977 special visits upon women attending these clinics.

### **Post-Natal Supervision** (Table 2).

Clinics are held for this purpose at the two chief Maternity Hospitals in the City. The purpose of these clinics is to discover any disabilities left as a result of recent childbirth and to correct these at an early stage so as to prevent subsequent ill-health in later life. The number of attendances registered at these clinics during the year was 2,880.

### **Midwives Act** (Table 3).

The number of practising midwives on the Local Authority's roll for the current year was 19—a decrease of 2 compared with 1934. During the year registered midwives notified 351 births or 4 per cent. of the total births in the City. An analysis of these 351 births shows that—(1) 12 were of still-born infants or 3·4 per cent. of the cases attended, and 3·1 per cent. of the total 380 still-births notified for the whole City, (2) 6 died within the first 10 days of life or 2·5 per cent. of the total 237 deaths for the City occurring within 10 days of birth, (3) 3 were notified cases of ophthalmia neonatorum. The number of cases of emergency for which midwives had to call in the assistance of general practitioners was 36 compared with 34 for the previous year. The number of deaths of mothers was 2, the same as last year.

### **Maternity Homes Act, 1928.**

The number of Maternity Institutions or Homes under the supervision of the Local Authority on the 1st January was 35. During the year 2 new Homes were registered for the first time and one Home was given up, leaving a total of 36 still under supervision at the end of the year.

### **Puerperal Fever and Pyrexia** (Tables 4 to 9).

Fewer cases of puerperal fever and pyrexia were notified in 1935—67 of the former and 79 of the latter—a reduction of 27 and 9 respectively compared with the figures for 1934. Of the 67 notified cases of puerperal fever subsequent investigation con-



firmed the diagnosis in 61 cases. Of the 79 notified cases of pyrexia 36 developed into cases of confirmed puerperal fever. Altogether therefore, there were 97 confirmed cases of puerperal fever in the City during the year. An analysis of these 97 confirmed cases showed that 16 ended fatally, 5 having been originally notified as cases of pyrexia—a case mortality of 13.9 per cent. (16.6 per cent. in 1934). Of the remainder the case mortality was 18.0 per cent. (13.3 per cent. in 1934).

### **Maternal Deaths** (Tables 10 to 15).

During the year there were 85 deaths due to or associated with child-birth—an increase of 1 on the previous year—of these, 32 were of women belonging to outside areas, thus leaving 53 as the correct figure for the City. In 1934 there were 50 such deaths, 48 in 1933, 47 in 1932, 51 in 1931 and 59 in 1930. The maternal mortality rate of the City was 7.53 per 1,000 births compared with 6.95 in 1934 and 7.02 in 1933. It should be noted that these maternal mortality figures are based on clinical investigation of all deaths due to or associated with childbirth.

Puerperal sepsis accounted for 11 deaths or a rate of 1.3 per 1,000 births, compared with 21 or 2.9 in 1934 and 11 or 1.6 in 1933. Similar figures for the deaths from toxæmias of pregnancy were 11 deaths or a rate of 1.3 per 1,000 births for the year, compared with 7 or 0.9 in 1934 and 13 or 1.9 in 1933.

### **Births** (Tables 16 to 20).

There were 189 fewer births registered compared with the previous year. In 1935 the figure was 7,725 compared with 7,913 in 1934. After necessary transfers had been made the number allocated to the City was 7,037, compared with 7,188 for 1934. Of these births 3,686 were males and 3,351 were females. The corrected birth rate for the City was 15.3, compared with 15.7 for 1934 and 15.1 for 1933.

The total births notified during the year was 8,192, compared with 8,323 for the previous year. Of this total 567 were notified as premature, compared with 540 in 1934, and 380 were notified as still-births, compared with 424 in 1934.

The illegitimate births numbered 486 or 6.9 per cent. of the total corrected births—a figure which varies very little from year to year.

### **Ophthalmia Neonatorum** (Table 21).

One more case was notified during the year, compared with 1934. Of the 47 cases notified 3 resulted in impaired eyesight, one child becoming completely blind, whilst the other two lost vision in one eye only.

### **Deaths** (Tables 22 to 30).

The number of deaths of infants under one year registered during 1935 was 490, compared with 449 in the previous year. The infant mortality rates were 70 and 62 respectively.

The neonatal period always remains the most fatal period of infancy. Of the 490 deaths referred to no less than 242 occurred during the first month of life or 49.4 per cent., equivalent to a rate of 34.3 per 1,000 births, and 154 died within the first week or 31.4 per cent., equivalent to a rate of 21.8 per 1,000 births.



Deaths of illegitimate infants numbered 80 out of a total 490 deaths under one year. The figures for 1934 were 44 and 449 respectively.

The total number of deaths between one and 5 years was 150, and the total from birth to 5 years was 640. The corresponding figures for illegitimate children only, were 13 and 93 respectively. Table 27 shows the infant mortality rates in yearly periods and five yearly averages since 1905. Tables 28 and 29 show the infant mortality rates according to age periods and causes of death. Table 30 shows the number of deaths due to respiratory disease since 1925, according to age periods.

### Visits in the Homes.

During the year 5,793 infants under one year were kept under supervision by the Health Visitors and received 24,704 visits, also 48,541 visits were paid to children between 1 and 5 years of age, and 2,977 special antenatal visits were made. The Voluntary Health Workers were given 1,309 cases during the year to keep in touch with and these were regularly visited once a fortnight.

### Clinics.

During the year two new clinics were started, one in the Lochend area, which was begun on the 17th May, and one in the Stenhouse area, on 17th October. This year, for the first time, are also included the figures for the Child Welfare Clinic held at the Royal Maternity Hospital. Clinics are now held in 16 centres in various parts of the City.

#### *Preventive Clinics (Table 31).*

During the year 3,497 children were kept regularly under supervision at these clinics, with a total attendance of 40,262. The comparable figures for 1934 were 2,864 and 34,008 respectively.

#### *Curative Clinics (Table 32).*

There were 3,105 new cases seen at these clinics, where attendances reached a figure of 20,340. In 1934, 3,284 new cases were treated with an attendance of 18,016.

#### *Ultra Violet Ray Clinics (Table 33).*

During the year 174 children attended these clinics. Exposures to the mercury vapour lamp numbered 1,787 and to the carbon arc lamp 1,753.

#### *Rheumatic Clinic (Table 34).*

The number of notifications during the year was 40, compared with 77 in 1934. The clinic is held at the Royal Hospital for Sick Children and is under the clinical charge of Dr. Norman S. Carmichael and Dr. Lewis Thatcher, whose joint report regarding the work during the past year is as follows.

"Fifty cases were referred to the clinic during the year; the rheumatic manifestations from which they suffered, compared with those of previous years, are shown on table 34. The diagnosis in the 7 non-rheumatic cases was as follows :



General instability of the nervous system . . .	3
Debility with marked undernutrition . . .	2
Congenital malformation of the heart . . .	2

There were 570 visits paid by old cases, representing the attendances of 139 rheumatic children; in addition, the Health Visitor paid 20 visits to the homes of those about whom further information was required.

Cases in need of investigation and institutional treatment were admitted to hospital to report back when discharged therefrom, or from the associated Convalescent Home. Twenty-six convalescent children—18 girls and 8 boys—were sent to the Misses Romanes' Home at Fushiebridge, where they derived much benefit. Advantage was taken of other organisations, for cases where suitable accommodation in the country was not otherwise available. Cases requiring remedial physical exercises were treated as out-patients at the special department of the Children's Hospital.

Experience of work at the rheumatic clinic for five years has convinced us of its value in the management of rheumatic children, and as a central agency whereat data for investigation may be readily obtained.

We have had no difficulty in obtaining hospital accommodation for cases in need of it during the acute or subacute stages of their illness. There are, in our opinion, insufficient suitable facilities for the prolonged period of convalescence necessary, not only for all those suffering from chorea and carditis, but also for many cases showing the less conspicuous, though none the less serious manifestations of rheumatic disease. This want is especially felt where for some reason such as unsatisfactory home conditions or marked undernutrition, regular supervision at the clinic is found to be insufficient. We are sure that there is a real need for a Convalescent Home where the physical and mental activities of these children can be controlled over a period of months rather than of weeks, and where congenial occupation and suitable education can be arranged for. We know of no other way of doing all that is possible to minimise the risk of recurrence of the disease, and to avoid, as far as possible, the chronic invalidism for which juvenile rheumatism is so often responsible."

### **Mothercraft Classes** (Table 35).

Three hundred mothers attended the mothercraft classes during the year, being 3 less than in 1934. Of these 176 entered for the Hutchison Shield Trophy examination, being 12 more than sat the examination in 1934. The Silver Shield was gained by Mrs Robert Noble for the Pleasance Centre. Prizes were presented for other work for which there was a record entry—96 mothers and 14 fathers sending in articles of work, compared with 75 mothers and 4 fathers last year. A gathering of the mothers was held in June in Spylaw Park, Colinton, when Councillor George Gibson and Mrs Gibson kindly presented the shield and other prizes to the various winners and encouraged the officials by their presence and interest in this most important part of the Department's activities.



### **Special Demonstrations in Cookery.**

During the year the demonstrations were carried on by Mrs Bruce at three of the Centres, viz. :—Junction Road, Leith ; Leith Links and Prestonfield—where in all 26 classes were held with a total enrolment of 47 women. The total average attendance of women at the classes was 7. (Junction Road 5, Leith Links 6·75, Prestonfield 7·5.)

Mrs Bruce is to be congratulated upon the way she has been able to interest the mothers in this branch of the Department's activities.

### **Milk and Dinners (Table 36).**

The figures for 1935 show some increase upon that of the previous year.

### **Day Nurseries (Table 37).**

In these there has been an increased attendance of 2,812 upon the previous year, the figures being 22,332 for 1935, compared with 19,520 in 1934. This increase applies to both infants and children at each of the four nurseries except Viewforth, where there were 59 fewer attendances of infants.

### **Toddler Playgrounds (Table 38).**

There are now 18 of these playgrounds compared with 15 last year, three new ones having been started during the year, namely, at Jamaica Street, Abbeyhill and Granton areas.

More detailed information regarding these playgrounds will be found in the separate Annual Report issued by the Voluntary Health Workers' Association, whose other activities also are a great help to the official workers.

### **Child Gardens (Table 39).**

Most of these, though under Voluntary Management, are closely linked up with the Child Welfare Department whose Medical Officers periodically examine all the children who attend them. There are now twelve Child Gardens in the City, one of which is entirely under the control of the Education Committee.

### **Homes for Mothers and Infants.**

All of these Homes receive grants from the Corporation in recognition of the work they do in association with the Maternity and Child Welfare Scheme.

(1) *The Edinburgh Home for Mothers and Babies at 17 Claremont Park, Leith*, had in residence on the 1st January, 1935, 11 mothers and 8 infants. During the year 25 mothers and 19 infants were admitted and 28 mothers and 21 infants were discharged, leaving at the end of the year 8 mothers and 6 infants still resident in the Home.



(2) *The Salvation Army Home for Mothers and Infants at Bonnington Bank House.* This Home had in residence on the 1st January, 1935, 20 mothers and 11 infants. During the year 34 mothers and 32 infants were admitted and 33 mothers and 28 infants were discharged, leaving at the end of the year 21 mothers and 15 infants in residence in the Home.

(3) *Hawthornbrae Convalescent Home, Duddingston.* During the year 18 mothers and 15 infants and 1 child were sent to this Home and paid for by the Corporation. The average stay was two weeks.

(4) *Edinburgh Home for Babies, 30 Colinton Road.* There is accommodation for 20 babies in this Home, which is always fully occupied. In the associated Home at 3 Forbes Road, under Miss Waldie's care, 6 babies were in residence on 1st January, 1935. During the year 10 were admitted and 10 discharged, leaving 6 still resident in the Home at the end of the year.

(5) *Humbie Children's Village.* During the year 158 toddler children were sent for periods of three or four weeks, compared with 218 in 1934.

**Other Homes.** There are a few other Homes which receive mothers and children, though not directly subsidised by the Corporation, such as the *Leadburn Home for Tired Mothers* and *Providence House at Kinghorn*. Another Home situated at *Fushie-bridge* and for which the Misses Romanes make themselves financially responsible, receives children recommended through the rheumatic clinic. This is the only Home available for such cases, many of which are found not to be suitable cases for the ordinary convalescent homes. During the year 26 such rheumatic children were admitted—18 girls and 8 boys—with great benefit to their health. There they were enabled to carry out medical instructions in regard to the amount of rest and exercise which their condition required. In addition to these rheumatic children other 2 girls and 4 boys and several mothers and babies were given the benefit of the Home during the year.

**Victoria Park Home.**—This Home is entirely under the management of the Corporation and is for the admission of infants and toddlers suffering from debility. During the year 166 cases were admitted, compared with 145 in 1934. The average daily number of children under care was 21.

**Acknowledgments.**—I should like to acknowledge the valuable help I have received from all workers—official and voluntary—throughout the year, all of which has been essential to the carrying on of the work of the Department.

It is with real regret and sadness that the news of the death of Bailie Mrs Somerville, in September, 1935, was received by the official staff of the Child Welfare Department. Mrs Somerville was an indefatigable worker on behalf of mothers and children, many of whom have received help and encouragement from her in the course of her visits and interviews with them. Though a lady of many interests and activities, Mrs Somerville will be blessed and remembered best by Child Welfare workers in connection with the Toddler Playground movement and the Welfare Housing Trust in both of which activities she was a pioneer in the City.



TABLE 1.—ANTE-NATAL CLINICS.

CENTRE.	Number of Clinics held.	ATTENDANCES.		
		New Cases.	Old Cases.	Total.
Cowgate . . . . .	96	420	690	1,110
Torphichen Street . . . . .	51	189	1,390	1,579
Marshall Street . . . . .	47	62	320	382
Royal Maternity Hospital . . . . .	364	2,406	11,043	13,449
Leith . . . . .	48	388	799	1,137
Elsie Inglis Memorial Hospital . . . . .	155	1,479	6,345	7,824
Niddrie . . . . .	24	222	499	721
Prestonfield . . . . .	28	70	254	324
Portobello . . . . .	52	111	416	527
Stockbridge . . . . .	52	138	553	691
Totals . . . . .	917	5,485	22,309	27,744
Figures for 1934 . . . . .	912	5,296	21,272	26,568

TABLE 2.—POST-NATAL CLINICS.

CENTRE.	No. of Clinics held.	Attendances.
Royal Maternity Hospital. . . . .	53	1,255
Elsie Inglis Memorial Hospital . . . . .	51	1,465
Seen at other Centres . . . . .	...	160
Totals . . . . .	104	2,880

TABLE 3.—MIDWIVES ACT.

1. The number of certified Midwives who intimated to the Local Authority their intention to practise in the district . . . . .	19
2. (a) Total number of Births (notified) . . . . .	8,192
(b) Total number of Deaths of New-born Children (within 10 days) . . . . .	237
(c) Actual number of Births attended by Midwives . . . . .	351
(d) Deaths of New-born Children occurring in the practice of Midwives . . . . .	6
(e) Number of Births not attended by a Doctor or Midwife . . . . .	3
3. (a) Total number of cases of Ophthalmia Neonatorum . . . . .	47
(b) Actual number of Ophthalmia Neonatorum cases occurring in the practice of Midwives . . . . .	3
(c) Actual number of cases occurring where confinement not attended by a Doctor or Midwife . . . . .	0
4. (a) Total number of cases of Puerperal Sepsis . . . . .	97
(b) Total number of Deaths from Puerperal Sepsis . . . . .	11
(c) Actual number of cases of Sepsis in practice of Midwives . . . . .	0
(d) Actual number of Deaths from Puerperal Sepsis in practice of Midwives . . . . .	0
(e) Actual number of cases occurring where confinement not attended by a Doctor or Midwife . . . . .	0
5. (a) Total number of cases of Confirmed Puerperal Pyrexia . . . . .	49
(b) Total number of Deaths from Puerperal Pyrexia . . . . .	7
(c) Actual number of cases of Puerperal Pyrexia in practice of Midwives . . . . .	0
(d) Actual number of Deaths from Puerperal Pyrexia in practice of Midwives . . . . .	0
(e) Actual number of cases occurring where confinement not attended by a Doctor or Midwife . . . . .	0
6. (a) Total number of Still-births . . . . .	380
(b) Actual number of cases of Still-births occurring in the practice of Midwives . . . . .	12
7. Cases of Emergency . . . . .	36



Cases of emergency in which medical practitioners were called in, under Section 22 of the Act, during 1935 are noted in the following classified list, and number 36 as compared with 34 in 1934 :—

*Cases of Emergency.*

Delay in Labour . . . . .	2
Still-birth . . . . .	12
Retained Placenta . . . . .	1
Perineal Tear . . . . .	6
Illness of Mother . . . . .	5
Illness of Child . . . . .	4
Prolapse of Cord . . . . .	1
Breech Presentation . . . . .	1
Shoulder Presentation . . . . .	1
Persistent Right Occipito Posterior . . . . .	1
Contracted Pelvis . . . . .	2
	<hr/>
	36
	<hr/>

TABLE 4.—PUERPERAL PYREXIA.

Total number of cases of puerperal pyrexia notified . . . . .	79
Total number subsequently developing into puerperal fever . . . . .	36
Total number of deaths of cases notified as puerperal pyrexia—	
Puerperal septicaemia . . . . .	3
Broncho Pneumonia . . . . .	1
Influenzal Pneumonia . . . . .	1
Toxic Nephritis . . . . .	1
Eclampsia . . . . .	1
	<hr/>
	7

TABLE 5.—PUERPERAL FEVER.

Total number of cases of puerperal fever notified . . . . .	67
Total number of cases notified but not confirmed—	
Urinary Infection . . . . .	1
Pyelitis . . . . .	2
Pulmonary Tuberculosis . . . . .	1
Miscarriage . . . . .	1
No disease . . . . .	1
	<hr/>
	6
	<hr/>
	61
	<hr/>

TABLE 6.—RÉSUMÉ OF CONFIRMED CASES OF PUERPERAL FEVER.

Notified as puerperal fever . . . . .	61
Notified as puerperal pyrexia . . . . .	36
	<hr/>
TOTAL . . . . .	97
	<hr/>



TABLE 7.—DEATHS FROM CONFIRMED CASES OF PUERPERAL FEVER.

Number notified as puerperal fever . . . . .	11
Number notified as puerperal pyrexia . . . . .	5
TOTAL . . . . .	<u>16</u>

TABLE 8.—AGES of PATIENTS suffering from PUERPERAL FEVER.

15 years and under 20 years . . . . .	6
20 years and under 25 years . . . . .	27
25 years and under 30 years . . . . .	30
30 years and under 35 years . . . . .	27
35 years and under 40 years . . . . .	5
40 years and over . . . . .	2
TOTAL . . . . .	<u>97</u>

TABLE 9.—AGES at DEATH of PATIENTS suffering from Confirmed PUERPERAL FEVER.

15 years and under 20 years . . . . .	1
20 years and under 25 years . . . . .	3
25 years and under 30 years . . . . .	7
30 years and under 35 years . . . . .	3
35 years and under 40 years . . . . .	2
TOTAL . . . . .	<u>16</u>

TABLE 10.—MATERNAL DEATHS.

MATERNAL DEATHS, 1931-1935.	1931	1932	1933	1934	1935
	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Cases attended by—					
Private Doctors and died in their own homes . . . . .	16	13	10	10	11
Private Doctors and removed to Institutions . . . . .	49	32	23	22	22
Midwives and died at home . . . . .	...	...	...	4	4
Dispensaries and Pupil Nurses and removed to Institutions	4	11	10	10	6
Dispensaries and Pupil Nurses at home . . . . .	...	2	...	...	4
Attended in Institutions . . . . .	31	42	55	50	51
No Medical care . . . . .	...	...	2	4	2
Totals . . . . .	100	100	100	100	100



TABLE 11.—MATERNAL DEATHS.

AGES AT DEATH —		3 or 6.0 per cent. of the total.			
Under 20 years	. . . . .	3	6.0	..	..
20 years and under 25 years	. . . . .	7	13.0	..	..
25 years and under 30 years	. . . . .	25	47.0	..	..
30 years and under 35 years	. . . . .	10	19.0	..	..
35 years and under 40 years	. . . . .	6	11.0	..	..
40 years and under 45 years	. . . . .	2	4.0	..	..
TOTAL	. . . . .	53	100.0		

TABLE 12.—MATERNAL DEATHS.

CAUSES OF DEATH :—		<i>Infective Complications.</i>	
<i>Septicæmia.</i>		Influenzal Pneumonia . . . . .	4
Puerperal sepsis . . . . .	11	Broncho Pneumonia . . . . .	1
<i>Toxæmia.</i>		Pleuro Pneumonia . . . . .	1
Eclampsia . . . . .	4	Acute Bronchitis . . . . .	1
Hyperemesis . . . . .	2	Asthma, Bronchitis . . . . .	1
Nephritis . . . . .	2	Empyema . . . . .	1
Toxæmia without convulsions . . . . .	3	Pulmonary Tuberculosis . . . . .	3
	— 11	Acute Endocarditis . . . . .	3
<i>Hæmorrhage.</i>			— 15
Postpartum Hæmorrhage . . . . .	1	<i>Other Conditions.</i>	
<i>Embolism.</i>		Cerebral Hæmorrhage . . . . .	2
Number of Deaths . . . . .	6	Acute Intestinal Obstruction . . . . .	1
<i>Shock.</i>		Acute Gastric Dilatation . . . . .	1
Number of Deaths . . . . .	4	Death under anæsthetic . . . . .	1
			— 5
		TOTAL . . . . .	53

TABLE 13.—MATERNAL DEATHS.

MATERNAL DEATHS 1935.	Septicæmia.	Toxæmia.	Hæmorrhage.	Embolism.	Other conditions complicating or associated with Child-birth.	Totals.
Cases attended by—						
Private Doctors and died at home . . . . .	0	0	0	1	5	6
Private Doctors and removed to Institutions . . . . .	2	5	0	0	5	12
Midwives and died at home . . . . .	0	0	0	2	0	2
Dispensaries and Pupil Nurses and removed to Institutions . . . . .	3	0	0	0	0	3
Dispensaries and Pupil Nurses at home . . . . .	1	0	1	0	0	2
In Institutions . . . . .	5	6	0	2	14	27
No Medical Care . . . . .	0	0	0	1	0	1
Totals . . . . .	11	11	1	6	24	53



TABLE 14.—MATERNAL DEATHS, 1926-1935.

## TOTALS.

	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
Septicæmia . . . .	13	17	20	19	13	16	14	11	21	11
Toxæmia . . . . .	8	10	10	12	19	10	7	13	7	11
Hæmorrhage . . . .	6	9	7	9	4	5	4	2	5	1
Embolism . . . . .	5	5	4	2	1	4	2	3	2	6
Other Conditions . .	10	12	17	9	22	16	20	19	15	24
	42	53	58	51	59	51	47	48	50	53

TABLE 15.—MATERNAL DEATHS, 1926-1935.

## RATE PER 1000 BIRTHS.

	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
Septicæmia . . . . .	1·6	2·2	2·7	2·6	1·8	2·2	2·0	1·6	2·7	1·3
Toxæmia . . . . .	1·0	1·3	1·3	1·6	2·6	1·4	1·0	1·9	·9	1·3
Hæmorrhage . . . . .	·8	1·2	·9	1·2	·5	·7	·6	·3	·6	·1
Embolism . . . . .	·6	·7	·5	·3	·1	·6	·3	·4	·3	·7
Other Conditions . .	1·3	1·6	2·3	1·2	3·0	2·2	2·1	2·8	1·9	2·9

TABLE 16.—Particulars regarding BIRTHS after necessary corrections have been made for transfers.

Quarter.	Total Births.	Legitimate.	Illegitimate.	Percentage of Illegitimate to Total Births.
1st . . . . .	1,671	1,568	103	6·2
2nd . . . . .	1,891	1,775	116	6·1
3rd . . . . .	1,773	1,639	134	7·6
4th . . . . .	1,702	1,569	133	7·8
Totals . . . . .	7,037	6,551	486	6·9

TABLE 17.—BIRTHS allocated according to the three areas of the extended City.

Area.	Births.	Rate per 1000 of Population.
Edinburgh . . . . .	4,773	14·8
Leith . . . . .	1,269	16·1
Suburban . . . . .	843	18·3
Institutions . . . . .	119	...
Military Quarters . . . . .	33	...
Whole City . . . . .	7,037	15·3



TABLE 18.—Corrected BIRTH-RATES for the eight large towns in Scotland and for the whole of Scotland for 1935.

TOWN.	Per 1000 of Population.	TOWN.	Per 1000 of Population.
Glasgow . . . . .	19.7	Paisley . . . . .	17.7
Edinburgh . . . . .	15.3	Greenock . . . . .	21.2
Dundee . . . . .	17.9	Motherwell and Wishaw . . . . .	19.6
Aberdeen . . . . .	18.0	Clydebank . . . . .	18.7
SCOTLAND . . . . .		17.8	

TABLE 19.—NOTIFICATION OF BIRTHS—Analysis of 8,192 Births notified during the year.

I.	Births attended by Private Doctors . . . . .	1,819
II.	Births attended by Private Doctors with a District Nurse—	
	(1) Queen's Nurses . . . . .	823
	(2) Buccleuch Place Nurses . . . . .	114
		937
III.	Births attended by Registered Midwives . . . . .	351
IV.	Births attended at home by Students and Pupil Nurses—	
	(1) Royal Maternity Hospital . . . . .	899
	(2) Elsie Inglis Memorial Hospital . . . . .	542
	(3) Cowgate Dispensary . . . . .	274
	(4) Marshall Street Dispensary . . . . .	14
	(5) Deaconess Hospital . . . . .	92
		1,821
V.	Births attended in Maternity Hospitals and Training Centres—	
	(1) Royal Maternity Hospital . . . . .	1,921
	(2) Elsie Inglis Memorial Hospital . . . . .	1,132
	(3) Deaconess Hospital . . . . .	3
	(4) Western General Hospital . . . . .	206
		3,262
VI.	Births unattended . . . . .	2
	(in addition there was 1 birth which was not notified).	
		8,192

TABLE 20.—Analysis of comparable figures in percentages of the BIRTHS for the past five years.

	1931	1932	1933	1934	1935
Births attended by—	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Private Doctors . . . . .	36	35	35	34	34
Private Doctors with a District Nurse } . . . . .					
Registered Midwives . . . . .	5	4	4	4	4
Students and Pupil Nurses in Patient's Home . . . . .	21	21	21	23	22
In Maternity Hospitals and Training Centres . . . . .	38	40	40	39	40
	100	100	100	100	100



TABLE 21.—OPHTHALMIA NEONATORUM. The interval in days between the Birth of the Child and the onset of the disease.

Days . . .	1	2	3	4	5	6	7	8	9	10	Over 10 days and under 3 months.	No Particulars.	Total.
Cases . . .	5	0	5	5	3	1	5	5	4	4	4	6	47

The Confinement was attended by :—

A Doctor and Nurse . . . . .	6 cases.
Nurses from Institutions . . . . .	11 cases.
Dispensaries . . . . .	6 cases.
In Institutions . . . . .	21 cases.
Midwives . . . . .	3 cases.—Total, 47 cases.

Treatment was given :—

At Home . . . . .	7 cases.
At Home and Welfare Centres . . . . .	8 cases.
In Hospital . . . . .	32 cases.—Total, 47 cases.

Hospital treatment was given :—

In Northern General Hospital . . . . .	28 cases.
In Elsie Inglis Hospital . . . . .	4 cases.—Total, 32 cases.

A Queen's Jubilee Nurse or a Nurse from the Royal Maternity Hospital attended to those children who were treated in their homes.

TABLE 22.—Distribution of the DEATHS under ONE YEAR in the different districts of the City, together with the MORTALITY-RATE for the respective areas.

Area.	Deaths under 1 year.	Deaths per 1000 Births.
Edinburgh . . . . .	342	72
Leith . . . . .	89	70
Suburban . . . . .	52	62
Institutions . . . . .	5	...
Military Quarters . . . . .	2	...
Whole City . . . . .	490	70
Figures for 1934 . . . . .	449	62



TABLE 23.—Edinburgh—INFANTILE MORTALITY (deaths under ONE YEAR per 1000 Births).

Year.	Infantile Mortality.	Year.	Infantile Mortality.	Year.	Infantile Mortality.	Year.	Infantile Mortality.
1880	143	1895	152	1910	103	1925	96
1881	128	1896	122	1911	115	1926	80
1882	121	1897	164	1912	110	1927	80
1883	128	1898	*141	1913	101	1928	75
1884	135	1899	147	1914	110	1929	80
1885	120	1900	132	1915	132	1930	82
1886	136	1901	143	1916	100	1931	69
1887	137	1902	119	1917	‡123	1932	73
1888	128	1903	117	1918	94	1933	66
1889	133	1904	125	1919	§117	1934	62
1890	144	1905	124	1920	89	1935	70
1891	138	1906	112	1921	96	...	...
1892	135	1907	121	1922	91	...	...
1893	148	1908	†114	1923	82	...	...
1894	125	1909	113	1924	89	...	...

\* Sanitary Dept. formed 1898. † Voluntary Visiting in homes. ‡ Child Welfare Dept. formed May, 1917.

§ Reflection world influenza epidemic, 1918-1919. || City Boundaries extended.

TABLE 24.—Particulars regarding BIRTHS, DEATHS of CHILDREN at age periods from ONE to FIVE YEARS, and also the INFANTILE MORTALITY in each of the twenty-three Municipal Wards.

WARD.	BIRTHS.		DEATHS.						Infantile Mortality (Rate per 1000 Births).
	Number.	Per 1000 of Population.	Under 1 Year.	1-2.	2-3.	3-4.	4-5.	Total.	
Calton . . . . .	305	14.8	23	6	1	2	...	32	75
Canongate. . . . .	343	17.6	22	8	2	2	1	35	64
Newington . . . . .	218	10.5	14	4	...	...	...	18	64
Morningside . . . . .	148	6.8	9	...	...	...	...	9	61
Merchiston . . . . .	194	9.6	13	1	...	...	...	14	67
Gorgie . . . . .	527	17.1	38	3	3	1	3	48	72
Haymarket . . . . .	176	9.5	14	1	...	...	...	15	80
St. Bernard's . . . . .	308	16.0	18	...	2	...	1	21	58
Broughton . . . . .	262	15.9	15	5	1	...	...	21	57
St. Stephen's . . . . .	259	15.8	23	1	1	...	...	25	89
St. Andrew's . . . . .	174	16.9	10	1	...	...	...	11	57
St. Giles . . . . .	364	20.0	35	9	5	1	2	52	96
Dalry . . . . .	348	17.3	28	2	...	1	1	32	80
George Square . . . . .	257	14.0	25	4	...	...	...	30	97
St. Leonard's . . . . .	331	19.1	21	5	2	2	1	31	63
Portobello . . . . .	559	16.3	34	9	3	1	2	49	61
South Leith . . . . .	449	15.5	28	2	1	...	2	33	62
North Leith . . . . .	336	18.6	31	5	...	2	2	40	92
West Leith . . . . .	265	14.2	14	1	1	...	...	16	53
Central Leith . . . . .	219	16.3	16	3	1	2	2	24	73
Liberton . . . . .	472	26.5	29	6	1	4	3	43	61
Colinton . . . . .	101	11.1	6	1	...	...	1	8	59
Corstorphine and Cramond . . . . .	270	14.1	17	...	1	...	...	18	63
Institutions . . . . .	119	...	5	1	2	2	2	12	...
Military Quarters . . . . .	33	...	2	1	...	...	...	3	...
Totals . . . . .	7,037	15.3	490	79	27	20	24	640	70
Edinburgh Area . . . . .	4,773	14.8	342	59	20	10	12	443	72
Leith Area . . . . .	1,269	16.1	89	11	3	4	6	113	70
Suburban Area . . . . .	843	18.3	52	7	2	4	4	69	62
Institutions . . . . .	119	...	5	1	2	2	2	12	...
Military Quarters . . . . .	33	...	2	1	...	...	...	3	...



TABLE 25.—CAUSES of DEATH among CHILDREN under FIVE YEARS during 1935.

CAUSE OF DEATH.	Under 1 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 Months.	3, and under 6 Months.	6, and under 9 Months.	9, and under 12 Months.	Total under 12 Months.	12 Months and under 2 Years.	2, and under 3 Years.	3, and under 4 Years.	4, and under 5 Years.	Total 1-5 Years.	Total under 5 Years.
	Chickenpox . . . . .	...	...	...		...	...	...	...		...	...	...	...		
Measles . . . . .	...	...	...	...	...	...	...	1	2	3	5	...	...	...	5	8
Scarlet Fever . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Whooping Cough . . . . .	...	...	1	...	1	3	5	5	5	19	9	4	1	3	17	36
Diphtheria and Croup . . . . .	...	...	...	...	...	...	...	...	...	...	2	1	2	2	7	7
Erysipelas . . . . .	...	1	1	...	2	1	...	...	...	3	2	1	...	3	6	6
Tuberculous Meningitis . . . . .	...	...	...	...	...	...	...	1	1	2	5	1	3	2	11	13
Abdominal Tuberculosis . . . . .	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1
Other Tuberculous Disease . . . . .	...	...	...	...	...	1	1	2	2	6	1	1	1	2	5	11
Meningitis (not Tuberculous) . . . . .	1	1	...	...	2	...	...	...	...	2	2	1	...	...	3	5
Hydrocephalus . . . . .	2	...	1	...	3	3	...	...	...	6	...	...	...	...	...	6
Convulsions . . . . .	3	...	...	...	3	2	2	1	...	8	1	...	...	...	1	9
Pneumonia (all forms) . . . . .	7	6	6	1	20	22	23	19	11	95	29	7	3	1	40	135
Bronchitis . . . . .	1	...	1	3	5	4	5	2	...	16	1	...	...	...	1	17
Laryngitis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea and Enteritis . . . . .	...	3	4	4	11	18	9	6	3	47	3	1	...	2	6	53
Other Digestive Diseases . . . . .	...	...	...	1	1	1	1	2	5	10	2	2	3	2	9	19
Congenital Malformations . . . . .	4	1	3	1	9	1	1	...	1	12	...	...	...	...	1	12
Congenital Heart . . . . .	2	...	...	...	2	4	4	...	...	10	1	...	...	...	1	11
Premature Birth . . . . .	79	14	11	3	107	5	...	...	...	112	...	...	...	...	...	112
Atrophy, Debility and Marasmus . . . . .	15	1	2	5	23	12	4	1	2	42	...	...	...	...	...	42
Atelectasis . . . . .	5	...	1	...	6	...	...	...	...	6	...	...	...	...	...	6
Injury at Birth . . . . .	31	4	2	...	37	1	1	...	...	39	...	...	...	...	...	39
Suffocation, overlaying . . . . .	...	...	...	...	...	5	1	...	...	6	1	1	...	...	2	8
Syphilis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rickets . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
All other Causes . . . . .	4	2	2	2	10	14	7	8	7	46	10	12	7	8	37	83
Totals . . . . .	154	33	35	20	242	97	64	48	39	490	76	32	20	22	150	640

TABLE 26.—CAUSES of DEATH among ILLEGITIMATE CHILDREN under FIVE YEARS during 1935.

CAUSE OF DEATH.	Under 1 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 Months.	3, and under 6 Months.	6, and under 9 Months.	9, and under 12 Months.	Total under 12 Months.	12 Months and under 2 Years.	2, and under 3 Years.	3, and under 4 Years.	4, and under 5 Years.	Total 1-5 Years.	Total under 5 Years.
	Chickenpox . . . . .	...	...	...		...	...	...	...		...	...	...	...		
Measles . . . . .	...	...	...	...	...	...	...	...	...	...	2	...	...	...	2	2
Scarlet Fever . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough . . . . .	...	...	...	...	...	...	...	2	1	3	1	...	...	...	1	4
Diphtheria and Croup . . . . .	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1
Erysipelas . . . . .	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1
Tuberculous Meningitis . . . . .	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1
Abdominal Tuberculosis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Tuberculous Disease . . . . .	...	...	...	...	...	...	1	...	1	2	1	...	...	...	1	3
Meningitis (not Tuberculous) . . . . .	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1
Hydrocephalus . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Convulsions . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia (all forms) . . . . .	...	1	...	...	1	5	3	3	1	13	1	...	...	...	1	14
Bronchitis . . . . .	...	...	...	1	1	1	...	1	...	3	1	...	...	...	1	4
Laryngitis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea and Enteritis . . . . .	...	1	...	1	2	7	2	2	1	14	...	...	...	...	...	14
Other Digestive Diseases . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1
Congenital Malformations . . . . .	...	1	...	...	1	...	...	...	...	1	...	...	...	...	...	1
Congenital Heart . . . . .	...	...	...	...	...	1	1	...	...	2	...	...	...	...	...	2
Premature Birth . . . . .	15	1	2	1	19	...	...	...	...	19	...	...	...	...	...	19
Atrophy, Debility and Marasmus . . . . .	1	...	2	1	4	2	1	...	...	7	...	...	...	...	...	7
Atelectasis . . . . .	1	...	...	...	1	...	...	...	...	1	...	...	...	...	...	1
Injury at Birth . . . . .	2	1	...	...	3	...	...	...	...	3	...	...	...	...	...	3
Suffocation, overlaying . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Syphilis . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rickets . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
All other Causes . . . . .	2	...	2	1	5	...	2	3	1	11	1	1	...	1	3	14
Totals . . . . .	21	5	6	5	37	17	10	11	5	80	9	2	...	2	13	93



TABLE 27.

INFANTILE MORTALITY. 1905-1934.			DEATHS OF CHILDREN under 5 years. 1905-1934.		
Year.	Infantile Mortality.	Average for 5 years.	Year.	No. of Deaths.	Average for 5 years.
1905	124	...	1905	1,439	...
1906	112	...	1906	1,348	...
1907	121	...	1907	1,452	...
*1908	114	...	*1908	1,297	...
1909	113	117	1909	1,305	1,368
1910	103	...	1910	1,120	...
1911	115	...	1911	1,137	...
1912	110	...	1912	1,041	...
1913	101	...	1913	983	...
1914	110	108	1914	1,138	1,084
1915	132	...	1915	1,279	...
1916	100	...	1916	910	...
†1917	123	...	†1917	1,150	...
1918	94	...	1918	816	...
‡1919	117	113	‡1919	1,091	1,049
1920	89	...	1920	877	...
§1921	96	...	§1921	1,283	...
1922	91	...	1922	1,290	...
1923	82	...	1923	1,136	...
1924	89	89	1924	1,239	1,165
1925	96	...	1925	1,234	...
1926	80	...	1926	903	...
1927	80	...	1927	943	...
1928	75	...	1928	844	...
1929	80	82	1929	868	958
1930	82	...	1930	932	...
1931	69	...	1931	694	...
1932	73	...	1932	755	...
1933	66	...	1933	657	...
1934	62	70	1934	610	730

\* Voluntary visiting in Homes.

† Child Welfare Dept. formed—May, 1917.

‡ Reflection world influenza epidemic—1918-1919.

§ City Boundaries extended.

TABLE 28.—INFANTILE MORTALITY.

Ages at Death and Percentage of same to Total Deaths under One Year.

AGE PERIODS.	1912		1917		1935	
	No. of Deaths.	Rate Per Cent.	No. of Deaths.	Rate Per Cent.	No. of Deaths.	Rate Per Cent.
Under 1 Week . . . . .	188	26.8	133	22.0	154	31.4
1-2 Weeks . . . . .	27	3.8	29	4.8	33	6.7
2-3 Weeks . . . . .	44	6.3	21	3.5	35	7.1
3-4 Weeks . . . . .	26	3.7	21	3.5	20	4.1
4 Weeks and under 3 Months . . . . .	127	18.1	92	15.2	97	19.8
3-6 Months . . . . .	105	15.0	109	18.1	64	13.1
6-9 Months . . . . .	91	13.0	95	15.7	48	9.8
9-12 Months . . . . .	94	13.3	104	17.2	39	8.0
TOTALS . . . . .	702		604		490	



TABLE 29.—INFANTILE MORTALITY.  
Contributory Causes of Infantile Mortality.

CAUSE OF DEATH.	1912		1917		1935	
	No. of Deaths.	Rate Per Cent.	No. of Deaths.	Rate Per Cent.	No. of Deaths.	Rate Per Cent.
Whooping Cough . . . . .	38	5.4	56	9.2	19	3.9
Measles . . . . .	44	6.2	52	8.6	3	.6
Other Infectious Diseases . . . . .	44	6.2	6	.9	7	1.4
Tuberculous Diseases . . . . .	24	3.4	17	2.8	8	1.6
Meningitis and Convulsions . . . . .	45	6.4	43	7.1	10	2.0
Bronchitis and Pneumonia . . . . .	138	19.6	125	20.6	111	22.7
Diarrhœa and Enteritis . . . . .	38	5.4	41	6.7	47	9.6
Other Digestive Diseases . . . . .	18	2.5	13	2.1	10	2.0
Premature Birth, Malformations, Atelectasis, Injury at Birth . . . . .	195	27.7	207	34.2	229	46.7
Overlaying . . . . .	8	1.1	3	.4	6	1.2
Syphilis . . . . .	24	3.4	12	1.9	...	...
All other Causes . . . . .	130	18.5	29	4.8	40	8.2
TOTALS . . . . .	702	...	604	...	490	...

TABLE 30.—DEATHS FROM RESPIRATORY DISEASES.

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
Pneumonia (under 4 weeks) . . . . .	13	11	7	8	10	2	16	8	8	9	20
Pneumonia (total under 1 year) . . . . .	115	104	99	88	111	99	109	88	57	54	95
Pneumonia (total under 5 years) . . . . .	187	169	183	147	214	173	186	139	114	83	135
Bronchitis (under 4 weeks) . . . . .	2	6	4	6	4	3	3	2	1	3	5
Bronchitis (total under 1 year) . . . . .	21	46	32	26	22	23	27	27	8	13	16
Bronchitis (total under 5 years) . . . . .	30	52	43	37	32	29	29	29	12	17	17
Laryngitis (under 4 weeks) . . . . .	...	...	...	...	...	...	...	...	...	...	...
Laryngitis (total under 1 year) . . . . .	1	2	1	1	1	...	...	...	1	...	...
Laryngitis (total under 5 years) . . . . .	3	3	3	1	1	1	1	1	3	...	...

TABLE 31.—PREVENTIVE CLINICS.

CENTRE.	Number of Clinics held.	NEW CASES.			TOTAL ATTENDANCES.		
		Under 1 year.	Over 1 year.	TOTAL.	Under 1 year.	Over 1 year.	TOTAL.
Gorgie . . . . .	99	256	100	356	2,768	1,482	4,250
Torphichen Street . . . . .	101	275	49	324	3,240	1,879	5,119
High Street . . . . .	102	113	36	149	1,760	2,025	3,785
Pleasance . . . . .	151	304	84	388	4,418	2,563	6,981
Windsor Street . . . . .	116	289	92	381	2,932	1,294	4,226
Stockbridge . . . . .	103	264	105	369	2,861	1,425	4,286
Marshall Street . . . . .	48	95	89	184	1,011	694	1,705
Elsie Inglis Memorial Hospital . . . . .	52	185	84	269	1,363	859	2,222
Prestonfield . . . . .	52	58	26	84	1,044	800	1,844
Niddrie . . . . .	51	198	92	290	1,377	487	1,864
Lochend . . . . .	33	140	83	223	1,170	432	1,602
Stenhouse . . . . .	11	36	16	52	215	101	316
Royal Maternity Hospital . . . . .	52	428	...	428	2,062	...	2,062
TOTALS . . . . .	971	2,641	856	3,497	26,221	14,041	40,262
Figures for 1934 . . . . .	857	2,079	785	2,864	21,037	12,971	34,008



TABLE 32.—CURATIVE CLINICS.

CENTRE.	Number of Clinics held.	ATTENDANCES.		
		Old Cases.	New Cases.	TOTAL.
*Cowgate . . . . .	98	3,156	282	3,428
Gorgie . . . . .	47	532	95	627
*Torphichen Street . . . . .	51	649	336	985
High Street . . . . .	42	1,293	59	1,352
*Marshall Street . . . . .	47	1,137	121	1,258
Portobello . . . . .	98	2,920	255	3,175
Leith . . . . .	139	5,256	985	6,241
*Elsie Inglis Memorial Hospital . . . . .	50	1,048	667	1,715
Windsor Street . . . . .	44	455	67	522
Niddrie . . . . .	52	789	238	1,027
TOTALS . . . . .	668	17,235	3,105	20,340
Figures for 1934 . . . . .	683	14,732	3,284	18,016

\* These Dispensaries are subsidised by the Corporation, the clinics being conducted by doctors on the regular staffs of the Dispensaries.

TABLE 33.—ULTRA VIOLET RAY CLINICS.

CENTRE.	Number of Cases.	Number of Exposures given.	
		M.V. Lamp.	C.A. Lamp.
Leith . . . . .	77	1,268	...
Pleasance . . . . .	97	519	1,753
TOTALS . . . . .	174	1,787	1,753

TABLE 34.—ANALYSIS OF NEW CASES SEEN AT RHEUMATIC CLINIC.

	1931	1932	1933	1934	1935
New Cases—					
Rheumatic . . . . .	107	59	42	50	43
Non-Rheumatic . . . . .	37	16	23	15	7
Total . . . . .	144	75	65	65	50
*Prodromal Symptoms . . . . .	24	15	10	6	14
Carditis only . . . . .	42	19	15	14	11
Chorea only . . . . .	20	12	9	16	6
Carditis with Chorea . . . . .	8	5	6	9	12
†Arthritis . . . . .	13	8	2	5	...

\* This includes growing pains and arthritis associated with malnutrition and rheumatic sore throat.  
 † Not always present at time of examination.



TABLE 35.—MOTHERCRAFT CLASSES.

Year.	Number attending classes.	Number taking part in the Shield Competition.	WINNER OF SHIELD.	
			Name.	Centre.
1924	35	13	Mrs Alcock	Leith
1925	150	54	Mrs H Davidson	Gorgie
1926	120	69	Mrs L. Nimmo	Leith
1927	181	114	Mrs M. C. Renwick	High Street
1928	207	98	Mrs Anderson	Torphichen Street
1929	200	78	Mrs E. Gannie	Leith
1930	240	98	Mrs Paterson	Windsor Street
1931	242	134	Mrs Mark Reid	Stockbridge
1932	212	102	Mrs John Stevenson	Leith
1933	266	131	Mrs John Anderson	Torphichen Street
1934	303	164	Mrs Richardson	Elsie Inglis
1935	300	176	Mrs Robert Noble	Pleasance

TABLE 36.—MILK AND DINNERS.

The distribution of **Milk and Dinners** during the year was as follows:—

Milk—Assisted	. . . . .	114,514½ pints
Free	. . . . .	207½ ..
Dinners—Assisted	. . . . .	18,361
Free	. . . . .	...

TABLE 37.—DAY NURSERIES.

Day Nursery.	Attendances— Infants.	Attendances— Children.	Total. Attendances.
Henderson Row . . . . .	1,468	3,839	5,307
Dumbiedykes Road . . . . .	1,596	4,485	6,081
Viewforth Terrace . . . . .	712	2,929	3,641
South Fort Street, Leith . . . . .	1,938	5,365	7,303
TOTALS . . . . .	5,714	16,618	22,332
Figures for 1934 . . . . .	4,907	14,613	19,520



TABLE 38.—TODDLER PLAYGROUNDS.

CENTRE	Number on roll	Daily attendances.	CENTRE.	Number on roll.	Daily attendances.
Abbeyhill . . . . .	25	20	Stockbridge . . . . .	40	33
Barony Place . . . . .	48	37	Tollcross . . . . .	65	30
Chessel's Court . . . . .	20	15	Tron Square . . . . .	43	30
Cowgate . . . . .	40	20	Leith—Junction Street . . . . .	36	25
Fountainbridge . . . . .	30	20	Keddie Park . . . . .	70	52
High School Yards . . . . .	30	22	Links Place . . . . .	30	25
High Street . . . . .	35	30	Yardheads . . . . .	76	65
Jamaica Street . . . . .	25	18	Granton . . . . .	36	29
Pleasance . . . . .	40	32			
Portobello . . . . .	24	18	TOTALS . . . . .	713	521

TABLE 39.—CHILD GARDENS AND NURSERY SCHOOLS.

Name.	Address.	Head Teacher.
Blind Asylum Nursery School . . . . .	Craigmillar Park	Mr Anderson
Cameron House Nursery School . . . . .	Prestonfield	Miss Russell
Deaf and Dumb Nursery School . . . . .	7 and 8 Saxe-Coburg Place	Mr Sutcliffe
East Adam Street Nursery School . . . . .	12 East Adam Street	Miss Hamilton
Grassmarket Child Garden . . . . .	The Vennel	Miss Lowson
Hope Cottage Child Garden . . . . .	East Crosscauseway	Mrs Baxter
Lochrin Nursery School . . . . .	Ponton Street	Miss Hair
Moray House Nursery School . . . . .	174 Canongate	Miss Murray
Portobello Nursery School . . . . .	Ramsay Lane	Miss Henderson
Reid's Court Child Garden . . . . .	3 Reid's Court, 95 Canongate	Miss Fairley
St Saviour's Child Garden . . . . .	8 Chessel's Court, 240 Canongate	Miss Herdman
Tynecastle Nursery School . . . . .	McLeod Street	Miss Black



## VENEREAL DISEASES.

REPORT BY CLINICAL MEDICAL OFFICER.

During the year under review the facilities offered by the Venereal Diseases Department have been fully utilised for the benefit of patients and for the protection of the community. With the passing of the years, the work tends more and more towards the preventive aspect. In line with the development of preventive medicine in general, the trend has been towards the endeavour to diminish the incidence of venereal disease by measures designed to secure its early recognition and prompt treatment. Such measures are of vital importance in checking the spread of infection by rendering the patient non-infectious as soon as possible in the early infectious stages of the disease. Every effort is made to get in touch with all consorts and contacts with a view to eliminating the source of infection and preventing the infection being transferred.

If congenital syphilis is detected in one member of a family, probably from one-fifth to one-quarter of the other members of the family are also infected, and the tactful interviewing and examining of such cases is an essential part of the work.

It is also necessary to emphasise the value of teaching and of propaganda in general in reducing the incidence of these diseases. The teaching of students and nurses results in securing the prompt recognition and efficient treatment which play so important a part in reducing the possibility of spread of infection.

The influence of these measures in this area is reflected in the fact that the vast majority of patients now report in the early stages of the disease when the condition is readily amenable to treatment, the duration of treatment is lessened, and the liability to spread is greatly diminished. Those who suspect the possibility of venereal infection, and who, after careful examination and testing, are found not to be infected, continue to account for a large proportion of the total number of new patients.

No change has taken place in the accommodation provided for in-patients, viz., 34 beds in the Royal Infirmary ; 24 beds and cots in the Northern General Hospital ; 14 beds and cots in Bruntsfield Hospital and Elsie Inglis Memorial Maternity Hospital ; and 14 beds and cots in the Royal Maternity and Simpson Memorial Hospital—a total of 86 beds and cots for in-patients. Under the Agreement ratified between the Corporation and the Directors of the Royal Maternity and Simpson Memorial Hospital the payment made by the Corporation for each occupied bed and cot was reduced by sixpence per day in each case, and this Agreement came into operation on the 31st October, 1935. A similar Agreement was made between the Corporation and the Committee of Management of the Edinburgh Hospital and Dispensary for Women and Children and the Elsie Inglis Memorial Maternity Hospital, also reducing the cost per occupied bed and cot by sixpence in each case, but this Agreement does not come into operation until 9th January, 1936.



**New Patients.**—During 1935, 3,839 new patients reported for examination at the various centres, the great majority of these, viz., 2,322, being dealt with in the Out-patient Clinics at the Royal Infirmary. At the beginning of the year 3,507 patients who were still under treatment at the end of 1934 were carried forward and included in the total number of patients under treatment during the year in all centres, viz., 7,346. These numbers include not only patients from the City of Edinburgh itself, but also from districts in the East and South East of Scotland which are included in the Corporation Venereal Diseases Scheme. Edinburgh, Mid., East and West Lothian supplied the majority of the cases.

Of the total number of new patients, 2,550 were found to be suffering from venereal infections, and the incidence of the various forms of disease was as follows :—

Syphilis . . . . .	647	...	25.3 per cent.
Gonorrhœa . . . . .	1,246	...	49.0 ..
Chancroid . . . . .	44	...	1.7 ..
Non-Specific Venereal Disease . . . . .	613	...	24.0 ..

The remainder of the new patients had conditions of the genital organs or other parts of the body which did not fall to be classified under the above headings, and in every case the more serious infections were thoroughly tested for and all those falling into this group were kept under observation for a sufficient period of time to exclude the possibility of syphilitic infection supervening. Many patients avail themselves of the facilities offered by the clinics in order to undergo a thorough testing prior to marriage, this precaution being encouraged in every possible way as being calculated to reduce greatly the incidence of congenital syphilis and ophthalmia neonatorum.

**In-Patients.**—There was little change in the number of patients in whom the severity of their condition or the presence of complications necessitated in-patient bed treatment. The total number of in-patients for the year was 1,065, and this number included 241 pregnant women who were admitted to the various Maternity Hospitals for confinement. The admissions to hospital were distributed among the various institutions as follows :—

	Men.	Women and Children.	Total.
Royal Infirmary . . . . .	306	119	425
Municipal Hospital . . . . .	...	159	159
Bruntsfield Hospital . . . . .	...	54	54
Elsie Inglis Memorial Hospital . . . . .	...	*188	188
Royal Maternity Hospital . . . . .	...	*239	239
	<hr/> 306	<hr/> 759	<hr/> 1,065

\* Included in these figures are the number of children born to mothers under treatment.

#### NUMBER OF BIRTHS.

Elsie Inglis Memorial Hospital . . . . .	78
The Royal Maternity Hospital . . . . .	108

It is noteworthy that the number of infected expectant mothers admitted to the Maternity Hospitals has considerably decreased, 241 as against 376 in 1934. Less venereal infection in pregnancy means fewer cases of congenital syphilis and ophthalmia neonatorum.



**Out-Patient Attendances.**—The total out-patient attendances for the year numbered 137,582, of which 104,732 attendances were made by male patients and 32,850 by women and children. The detailed attendances at the various out-patient clinics were as follows :—

Royal Infirmary, Male Department . . . . .	84,745
Royal Infirmary, Female Department . . . . .	14,786
Municipal Clinics . . . . .	3,231
Bruntsfield Hospital and Dispensaries . . . . .	11,170
Royal Maternity Hospital . . . . .	3,663
Seamen's Dispensary, Leith . . . . .	19,987

As compared with previous years, the treatment of early syphilis is being intensified with a view to shortening its duration and enabling the patient to be discharged in a much shorter period. This change in procedure means, in effect, that the number of attendances made by the cases of early syphilis is reduced, and this is reflected in the total number of attendances. There can be no doubt that from the patient's point of view the shorter duration of his period of treatment is a great advantage, and the saving of time is greatly appreciated by the patient himself.

**Syphilis.**—The percentage of patients suffering from syphilis was 25·3 per cent. as compared with 26·1 per cent. in 1934. The total number of cases of congenital syphilis in 1934 was 144 as against 143 for this year, so that this figure has undergone little change. The energetic investigation of familial syphilis is fruitful in the discovery of latent disease in members of these families who may appear to be healthy. The treatment of congenital syphilis involves long continued attendances, and while the results of treatment are gratifying in improved health and the reduction of such complications as blindness and deafness, it is important to realise that congenital syphilis should be prevented from occurring, and that this can be achieved by concentrating on the antenatal examination and care of the expectant mother.

The number of parents who fail to bring their children regularly for treatment is very small, and continuity and regularity of treatment is secured by the efficient follow-up work of the Nurse Almoner attached to the department. There remains a minimal number of defaulters who defy all efforts to induce them to bring their children regularly to the clinics, but, fortunately, the number of these persistent defaulters is extremely small. Even if legislation were introduced to deal with these cases by compulsion, a few would still contrive to avoid treatment, and it is doubtful if the small number remaining untreated constitutes a complete justification for the introduction of such legislation.

The most hopeful line of attack in congenital syphilis is unquestionably the early recognition of the disease in the pregnant mother, and the continuation of treatment throughout the duration of her pregnancy will result in the vast majority of cases, in preventing the birth of congenital syphilitic offspring.

The importance of the prophylactic aspect of this work has been recognised in the continuation, throughout the year, of efforts to disseminate throughout the community a knowledge of the manifestations and implications of syphilitic infection



especially in regard to its threat to the next generation. The necessity for the prevention of congenital syphilis by such precautions as the examination by means of the Wassermann reaction of the blood of the expectant mother early in pregnancy, and repetition of this examination towards the middle and the end of pregnancy is clearly recognised, and these procedures are now routine in our antenatal clinics.

**Gonorrhœa.**—The cases of gonorrhœal infection constitute 49 per cent. of the total number of new patients found to be suffering from venereal infection. The new gonorrhœal cases total 1,246 this year as against 1,310 for 1934. It is evident therefore that this form of venereal infection is still extremely prevalent, the figures showing that we get an average of between three and four new patients suffering from gonorrhœa every day of the year.

There are still many young men and women who do not realise the far-reaching effects of gonorrhœa, and who are ignorant of the possibilities which it introduces of such complications as inflammation of the joints, and acute or chronic pelvic inflammation, which entail an enormous loss of working time and efficiency, and hold out a threat of prolonged ill-health and suffering.

One of the most disastrous and one of the most frequent late complications of gonorrhœal infection in the male is stricture of the urethra. This sequel usually demands regular attendances for instrumental treatment. If treatment be neglected, serious consequences are inevitable. Attention should be drawn to the fact that this disastrous condition requires practically continuous treatment throughout the life-time of the patient, and gives rise, therefore, to very serious economic loss, and its treatment involves a heavy expenditure by the community. This calamity is preventible and its prevention can be achieved by treatment of the disease in its early stages by the expert medical attention provided in the clinics. At present cases of urethral stricture still account for a considerable proportion of the total attendances.

If neglected, gonorrhœal infection, either in the male or female, may cause sterility, and therefore may exert an adverse influence on the birth rate.

**Chancroid.**—As compared with 56 cases of chancroid in 1934, the number in 1935 was 44, constituting only 1·7 per cent. of the total. This infection is becoming rarer in this country and is relatively seldom encountered. Those who contract it are usually sea-faring men who report in the first instance at the Seamen's Clinic near the Docks. Riensterna's intradermal test, using a suspension of the causal organism (Ducrey's Bacillus) in the form of Dmelcos Vaccine is used in the diagnosis of these cases, and observation is prolonged in order to exclude the possibility of superadded syphilitic infection which commonly follows or accompanies this more quickly incubating condition.

**Non-Specific Venereal Infection.**—The number of new cases classified under this heading was 613, corresponding to 24 per cent. of the total. This group includes non-syphilitic ulceration, balanitis, non-gonorrhœal urethritis and venereal warts.



It is of interest to record the discovery of two cases of Climatic Bubo, both diagnosed by means of Frei's intradermal reaction. In the treatment of these cases, fever therapy induced with intravenous T.A.B. Vaccine or Dmelcos Vaccine was followed by injections of Fouadin (Neo-Antimosan) or Tartar Emetic. Intradermal and intravenous injections of Frei's Antigen also gave gratifying results in treatment.

All these cases were carefully observed and tested for syphilis and gonorrhœa.

**Ophthalmia Neonatorum.**—During the year, 47 infections were notified. Of these cases 10 (21 per cent.) were due to gonococcal infection.

I regret to have to record that there were three cases with partial loss of vision.

In one of the cases the young unmarried mother had had only ten days treatment for an acute gonorrhœal infection before she went into labour, which was protracted and difficult, and the eyes of the child were probably infected *in utero*. One eye was considerably involved, but an improvement may be effected by operation.

In the second case, the partial loss of vision was conducted to by the failure of the attendant to notify the case immediately, and in consequence the transference of the mother and child to the special hospital accommodation provided in the Northern General Hospital was delayed.

In the third case, the young unmarried mother did not report to a clinic or antenatal centre for treatment of her gonorrhœal infection during pregnancy. Although she had previously experienced the benefit of clinic treatment for a syphilitic infection, she deliberately neglected to present herself for examination.

In the investigation of these most unfortunate cases, particulars were obtained of the type of antiseptic used in the eyes of the child at birth. Those most frequently employed are a solution of Proflavine in Castor Oil or a solution of Silver Nitrate. In the teaching of nurses studying for the Central Midwives Board certificate, stress is laid on the importance of washing out the Silver Nitrate solution after use. If this precaution be omitted, an irritation of the child's eyes simulating ophthalmia is likely to occur, and damage to the cornea may ensue.

In addition to the 47 cases notified in the Edinburgh area, 22 cases of suspected ophthalmia neonatorum coming from areas outside Edinburgh were investigated. Of these cases 14 were treated in hospital, and 4 (18 per cent.) gave positive tests for gonococcal infection. There was no loss of vision in any of these cases, the prompt hospitalisation of both mother and child being immediately followed by the application of intensive treatment. The Medical Officers of Health of those areas which share the special facilities provided for the treatment of these cases are keenly alive to the importance of having cases quickly removed to hospital, and the machinery which they have introduced for this purpose has worked very smoothly during the year.



**Vulvo-Vaginitis.**—The cases of vulvo-vaginitis for the year numbered 43, and therefore show little change as compared with the 41 cases treated during 1934. As in previous years all these cases are subjected to repeated bacteriological tests, and a considerable number of them are proved to be due to causes other than gonorrhœal infection, of these other causes one of the most frequent being thread worms. If positive tests for gonococcal infection are obtained, every effort is made to trace the source of the infection by the examination of other members of the household, and to minimise the risk of its spread by the investigation of contacts. Epidemic outbreaks of this condition in institutions receiving young female children are now of less frequent occurrence owing to the careful prophylactic measures employed.

**Incidence of Venereal Disease in the Last 10 Years.**—The following table shows the number of new cases reporting each year during the last 10 years, and also the number of new cases of syphilis and gonorrhœa. It is evident that there has been a steady diminution in the amount of syphilis since 1931, and the amount of gonorrhœa has diminished steadily during the 10 years under review. This reduction in the incidence of venereal disease would seem to constitute a justification of the clinic system of free treatment, and to hold out a real hope that the complete eradication of venereal disease may eventually be attained.

Year.	Total No. of New Cases.	No. of New Cases of Syphilis.	No. of New Cases of Gonorrhœa.
1926	5,086	1,222	2,261
1927	5,542	1,231	2,099
1928	6,069	1,353	2,095
1929	5,913	1,423	2,000
1930	5,503	1,153	1,740
1931	5,266	1,266	1,604
1932	4,800	930	1,397
1933	4,365	762	1,303
1934	4,242	732	1,310
1935	3,839	647	1,246

**Laboratory Work.**—The number of specimens examined during the year was 47,701, of which 40,514 came from the Venereal Diseases Departments of the City, 4,935 from wards of the Royal Infirmary, and 2,252 from other Institutions and General Practitioners.

The high standard of efficiency set by Dr. Logan and his staff in the Bacteriology Department of the Royal Infirmary has been fully and uniformly maintained throughout the year, and the value of their accurate work is gratefully acknowledged by all the clinical staff.

The serological and bacteriological tests of cases in the Corporation Hospitals, and control Flocculation tests, have been carried out in the University Bacteriological Department under the direction of Professor Mackie, and the clinical staff record with pleasure their appreciation of the excellence of this work.

**Treatment.**—The duration of the treatment of early syphilis has been shortened through the adoption of the plans of treatment advocated by the Health Organisation of the League of Nations and published in the quarterly bulletin of that Organisation



in March, 1935. By the introduction of those intensified methods of treatment, the time occupied by the active treatment of early syphilis varies from 60 to 90 weeks according to the stage of the disease. The application and assessment of treatment has been simplified by the adoption of the Unit Course outlined as follows :—

Week.	Neo Salvarsan (" 914 ")	Suspension of Metallic Bismuth.
1st	0.75 gram (in two doses of 0.3 and 0.45 gram)	0.2 gram.
2nd	0.6 gram (in one or two doses)	0.3 ..
3rd	0.6 .. ..	0.3 ..
4th	0.6 .. ..	0.3 ..
5th	0.6 .. ..	0.3 ..
6th	0.6 .. ..	0.3 ..
7th	0.6 .. ..	0.3 ..
8th	0.6 .. ..	0.3 ..
9th	0.6 .. ..	0.3 ..
10th	0.6 .. ..	0.3 ..
Total	6.15 grams.	2.9 grams.

Sero-negative and sero-positive primary cases are given four such courses, early secondary cases, four courses, and late secondary cases, five courses. Intervals of 4 or 5 weeks are allowed between the courses, the blood Wassermann reaction being taken at the end of the 3rd or 4th week of the interval.

Selected cases are given continuous treatment using courses of " 914 " and Bismuth Metal alternately. If suitable conditions can be secured, Liposoluble Bismuth is given twice weekly instead of the more slowly absorbed Bismuth Metal.

These methods result in reducing the duration of active treatment in early Syphilis from the 104 to 120 weeks formerly occupied to from 60 to 90 weeks.

In the treatment of neurosyphilis, especially early general paralysis of the insane and locomotor ataxia, malarial infection has been used in suitable cases, *i.e.*, those not suffering from such cardio-vascular or other complications as to contra-indicate the production of high temperatures. Monkey malaria (*Plasmodium Knowlesii*) has been employed in a few cases, and its effect has been compared with that of the Benign Tertian type. Pyrotherapy by means of Ultra Short Wave Diathermy has also been tried in a small number of cases. The subsequent treatment of these cases has consisted of intravenous injections of Tryparsamide along with intramuscular injections of Bismuth, and some patients have received with benefit over 500 grams of Tryparsamide.

There can be no doubt that induced malarial therapy and Tryparsamide have effected a remarkable improvement in the prognosis of general paralysis of the insane. Only a few years ago, this sequel of syphilis was considered incurable. The prospect looming before its victims was gloomy indeed, their lot being a progressive mental and physical decline through bed-ridden helpless imbecility to inevitable and early death. The present position is happily very different. Many treated patients, who have been under observation now for considerable periods, have been enabled to resume their places in society, and to continue in their occupations, enjoying good health.



The report of the General Board of Control for Scotland recently published states that in Asylums in recent years there has been a decrease in the number of patients suffering from general paralysis of the insane, and indicates that this decrease has been due to "the active and effective measures which are now applied in the treatment of syphilitic and venereal conditions and also to the fact that malarial treatment is now being given in general hospitals to patients in the early stages of general paralysis."

During the year an effort was made to shorten the duration of treatment of gonorrhœa in order to effect a saving of time similar to that attained in the treatment of syphilis. With this object in view an investigation was carried out of the results obtainable with different types of gonococcal vaccine injected either subcutaneously or intradermally, and a table is appended showing that the attempt to shorten the duration of treatment met with considerable success.

Type of Vaccine and Method of Administration.	Number of Cases.	Duration of Treatment in Days.
Detoxicated Subcutaneous Male Cases	100	140
Detoxicated Subcutaneous Female Cases	90	147
Detoxicated Intradermal Male Cases	50	133
Dissolved (Stock) Intradermal	62	126
Dissolved (Edinburgh strains of Gonococci) Intradermal	116	103

In the treatment of cases involving special organs or areas of the body, such as the eye, ear, nose and throat, skin, or cardio-vascular system, the opinion of other members of the medical and surgical staffs and the staffs of the Special Departments has been sought frequently, and these consultations have proved invaluable in the full elucidation of difficult cases and in the application of special methods of treatment. Cases showing mental abnormalities have been referred, as in previous years, to the Neurological Clinic conducted by Professor D. K. Henderson and his staff, and their assistance has been of great value in enabling us to make satisfactory arrangements for the treatment and disposal of such cases.

**Results of Treatment.**—During the year 2,722 patients were discharged as cured, 660 were transferred to other Centres and 3,451 were still under treatment at the end of the year.

The results of treatment are governed to a considerable extent by the time which has elapsed before patients present themselves at the clinics. In the early stages these diseases respond well to treatment, and practically all patients reporting with early infections are assured of complete and permanent cure. Fortunately the modern treatment of venereal diseases is sufficient for the control of the vast majority of cases.



**Percentage Continuing at Treatment Until Considered Cured.**—The number of patients who defaulted from treatment during the year was 513 as compared with 521 for the previous year. This number of defaulters is less than half the figure for 1925, which was 1,062, and the efforts to achieve continuous treatment are meeting with success. In particular, the number of parents of children suffering from congenital specific infection who fail to bring their children regularly for treatment is very small, and active co-operation between this Department, the Child Welfare Department and the School Medical Service has resulted in ensuring continuity of treatment in nearly every case.

Every new patient reporting is given a leaflet impressing upon him or her the necessity of continuing to attend regularly until completion of treatment; similar notices are displayed in the clinics; and the medical staff lose no opportunity of impressing the necessity and wisdom of continuous attendance upon all patients.

Popular lectures, sometimes accompanied by the display of films, have formed an effective means of disseminating information regarding venereal diseases. Areas included in the Venereal Diseases Scheme have also received attention.

**Follow-up Work.**—The successful attainment of continuity of treatment in all except a remarkably small percentage has been due in no small measure to the energetic follow-up work performed by the Nurse Almoner attached to the Department, and also by the Nurse attached to the Bruntsfield Hospital and its Subsidiary Centres. In the course of this important work the nurses paid 2,852 visits during the year, dealing with 982 cases and resulting in the return for treatment of 871 (88·6 per cent.).

In dealing with female cases and children, especially, this work is invaluable in securing the willing and effective co-operation of patients. The mother of a large family often has difficulty in leaving her home, or frequently is beset by financial and domestic worries and is confronted by numerous problems which the nurse can assist in solving. The Nurse Almoner is at the service of any patient attending the department to give advice and help in family difficulties and differences. The "follow-up" of expectant mothers obviously plays a most important part in reducing the incidence of congenital syphilis and ophthalmia neonatorum.

It is difficult for anyone not closely in touch with it to realise the enormous sociological importance of this work, or to visualise the success it achieves. Slight degrees of mental deficiency or moral irresponsibility often produce the conditions which lead to infection. Our problem is closely related to the wider problem of mental insufficiency in general. There are many adolescents and young women who require to be protected, sheltered, and prevented from becoming a danger to the community. If a Hostel for their reception were provided, it might be made self-supporting. Congenital syphilitics who are mentally deficient may require prolonged treatment and observation throughout life.

As in previous years the follow-up work has been greatly facilitated by continuous co-operation with the other social service organisations in the City such as the Council of Social Service, the Society for the Prevention of Cruelty to Children, the Public



Assistance Department, and the Almoners of the Royal Infirmary. It is a pleasure to acknowledge the valuable help so willingly given by these bodies.

**Seamen's Dispensary, Leith.**—The new patients reporting to this Centre number 293 as against 321 for the previous year, and the total attendances were 19,987 as against 19,080 in 1934.

The considerable number of patients receiving treatment at this clinic constitutes a justification of the plan of providing treatment centres near the docks and therefore easy of access to seamen. This provision of accessible clinics also fulfils the important function of preventing spread of infection. Through notices in public conveniences and through the distribution of leaflets, those carrying venereal infection are directed and encouraged to seek advice immediately. The importance of this station in checking infectious venereal conditions is readily realised.

Lympho-Granuloma Inguinale, which is described under a variety of names, the most popular being Climatic Bubo, seems to be on the increase. It is acquired by sexual contact, has an insidious onset, and, if unrecognised or neglected, may result in wide-spread destruction of lymphatic gland tissue, and in disastrous sequelæ, such as intractable stricture of the rectum.

**Statistical Tables.**—A series of tables appended to this report show in tabular form the work of the department during the year.

**Medical, Nursing and Clerical Staff.**—It is a pleasure to acknowledge the high standard of efficiency maintained throughout the year by all members of the medical, nursing and clerical staffs, and to thank them individually and collectively for loyal, consistent and energetic co-operation.

In a short time now the Department will move into the new building prepared for its reception and the work will be continued under greatly-improved conditions of accommodation, lighting, ventilation and equipment.



# EDINBURGH CORPORATION VENEREAL DISEASES SCHEME.

## ROYAL INFIRMARY CLINIC.

REPORT FOR THE YEAR ENDING 31ST DECEMBER, 1935.

Number of New Cases Attending :—

	EDINBURGH.		OTHER AREAS IN SCHEME.		OTHER AREAS OUTSIDE SCHEME.		AREAS OUTSIDE SCOTLAND.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
January . . . . .	97	39	39	13	29	5	2	...
February . . . . .	102	45	15	6	13	7	10	1
March . . . . .	99	27	20	5	15	6	2	...
April . . . . .	112	20	21	10	7	5	1	1
May . . . . .	104	49	12	14	13	13	2	...
June . . . . .	87	20	20	7	19	7	5	...
July . . . . .	99	35	17	10	19	6	...	1
August . . . . .	126	39	24	11	18	3	3	...
September . . . . .	122	53	23	10	14	5	3	...
October . . . . .	105	29	29	7	28	11	2	...
November . . . . .	116	44	16	7	14	7	...	...
December . . . . .	67	22	9	5	11	6	...	...
Totals . . . . .	1,236	422	245	105	200	81	30	3

EDINBURGH . . . . .	1,658
Other Areas in Scheme . . . . .	350
Other Areas outside Scheme . . . . .	281
Areas outside Scotland . . . . .	33
Grand Total . . . . .	2,322

Of the New Cases Attending there were :—

### EDINBURGH.

	MALES.					FEMALES.			
	Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.	Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.
January . . . . .	12	49	2	11	23	4	7	18	10
February . . . . .	13	40	1	22	26	10	10	11	14
March . . . . .	11	46	...	25	17	2	8	9	8
April . . . . .	20	41	...	22	29	6	1	12	1
May . . . . .	19	43	2	19	21	19	9	13	8
June . . . . .	10	38	4	20	15	5	1	14	...
July . . . . .	11	49	3	16	20	8	8	7	12
August . . . . .	16	72	2	14	22	12	7	11	9
September . . . . .	13	60	1	25	23	15	8	6	24
October . . . . .	12	43	3	17	30	11	6	2	10
November . . . . .	10	47	2	29	28	15	14	1	14
December . . . . .	11	28	...	12	16	8	10	1	3
Totals	158	556	20	232	270	115	89	105	113



## OTHER AREAS IN SCHEME.

	MALES.					FEMALES.			
	Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.	Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.
January .	7	18	...	8	6	6	2	1	4
February .	3	5	1	2	4	2	1	1	2
March .	1	9	...	4	6	...	1	2	2
April .	2	7	1	5	6	4	1	4	1
May .	1	4	...	6	1	7	1	5	1
June .	2	12	...	1	5	...	...	4	3
July .	...	9	...	3	5	2	1	3	4
August .	4	7	...	6	7	4	2	1	4
September	5	8	...	7	3	5	...	2	3
October .	4	9	...	8	8	4	2	...	1
November	6	4	...	1	5	2	3	1	1
December	1	4	...	4	...	...	2	1	2
Totals	36	96	2	55	56	36	16	25	28

## OTHER AREAS OUTSIDE SCHEME.

	MALES.					FEMALES.			
	Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.	Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.
January .	9	10	1	3	6	1	...	1	3
February .	1	2	1	...	9	2	...	1	4
March .	3	3	...	7	2	2	...	2	2
April .	1	3	...	1	2	...	...	2	3
May .	5	5	...	3	...	2	1	7	3
June .	8	8	...	2	1	...	1	4	2
July .	6	4	...	5	4	2	...	3	1
August .	4	9	...	1	4	1	...	1	1
September	4	8	...	1	1	1	2	1	1
October .	7	12	1	4	4	4	1	1	5
November	4	5	...	1	4	1	4	...	2
December	5	4	...	1	1	3	...	...	3
Totals	57	73	3	29	38	19	9	23	30

## AREAS OUTSIDE SCOTLAND.

	MALES.					FEMALES.			
	Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.	Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.
January .	...	1	...	1	...	...	...	...	...
February .	1	9	...	...	...	1	...	...	...
March .	...	1	...	...	1	...	...	...	...
April .	...	...	...	...	1	...	1	...	...
May .	1	1	...	...	...	...	...	...	...
June .	2	1	...	2	...	...	...	...	...
July .	...	...	...	...	...	...	1	...	...
August .	1	2	...	...	...	...	...	...	...
September	...	3	...	...	...	...	...	...	...
October .	...	1	...	...	1	...	...	...	...
November	...	...	...	...	...	...	...	...	...
December	...	...	...	...	...	...	...	...	...
Totals	5	19	...	3	3	1	2	...	...
Grand Totals	256	744	25	319	367	171	116	153	171

1,711

611

2,322



## AGE PERIODS.

	MALES.					FEMALES.			
	Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.	Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.
Under 1 yr. . . . .	...	...	...	...	...	4	2	...	6
1-4 yrs. . . . .	...	...	...	...	...	3	1	...	13
5-14 yrs. . . . .	2	...	...	1	2	14	3	8	36
15-24 yrs. . . . .	29	215	9	78	82	36	61	77	34
25 yrs. up . . . . .	225	529	16	240	283	114	49	68	82
Totals	256	744	25	319	367	171	116	153	171

## Admissions to Hospital :—

	MALES.					FEMALES.			
	Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.	Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.
Edinburgh	56	90	7	34	1	40	20	5	5
Other Areas in Scheme	15	42	2	13	...	17	1	2	3
Areas outside Scheme .	15	16	...	10	1	13	7	2	3
Areas outside Scotland	2	1	...	1	...	...	1	...	...
Totals	88	149	9	58	2	70	29	9	11
	<u>306</u>					<u>119</u>			

## Discharges from Hospital :—

	MALES.					FEMALES.			
	Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.	Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.
Edinburgh .	53	99	4	37	1	35	21	6	5
Other Areas in Scheme	14	42	1	11	...	12	...	...	2
Areas outside Scheme .	13	16	1	8	1	14	3	2	4
Areas outside Scotland	2	1	...	1	...	...	1	...	...
Totals	82	158	6	57	2	61	25	8	11
	<u>305</u>					<u>105</u>			



## SPECIAL TREATMENT ADMINISTERED.

Number of Intravenous and Intramuscular Injections given :—

	Neokharsivan.	Kharsulphan.	Bismuth.	Other Drugs.	Total.
January . . . . .	288	271	1,289	706	2,554
February . . . . .	278	247	1,382	746	2,653
March . . . . .	252	198	1,546	717	2,713
April . . . . .	288	210	1,585	687	2,770
May . . . . .	327	210	1,595	725	2,857
June . . . . .	314	212	1,325	827	2,678
July . . . . .	288	224	1,234	773	2,519
August . . . . .	307	248	1,262	870	2,687
September . . . . .	322	278	1,281	984	2,865
October . . . . .	294	336	1,447	754	2,831
November . . . . .	339	349	1,613	831	3,132
December . . . . .	310	249	1,280	702	2,541
Totals . . . . .	3,607	3,032	16,839	9,322	32,800

## PATHOLOGICAL WORK.

Number of Specimens examined :—

	Wass.	C.S.F.	G.C.F.T.	D.Gs.	Smears.	Others.	Total
January . . . . .	999	108	477	40	1,057	52	2,733
February . . . . .	749	88	320	18	843	49	2,067
March . . . . .	819	92	400	12	1,015	60	2,398
April . . . . .	749	120	327	10	983	104	2,293
May . . . . .	731	92	233	8	958	93	2,115
June . . . . .	737	128	285	20	854	105	2,129
July . . . . .	787	72	276	20	958	94	2,207
August . . . . .	937	76	479	18	1,048	75	2,633
September . . . . .	836	116	452	6	836	65	2,311
October . . . . .	810	120	419	20	956	101	2,426
November . . . . .	601	60	359	20	775	102	1,917
December . . . . .	571	88	293	15	797	46	1,810
Totals . . . . .	9,326	1,160	4,320	207	11,080	946	27,039

Total Attendances at the Clinic for Routine Dressings, etc. :—

	Males.	Females.	Total.
January . . . . .	7,795	1,184	8,979
February . . . . .	7,164	1,092	8,256
March . . . . .	7,778	1,215	8,993
April . . . . .	7,655	1,187	8,842
May . . . . .	6,980	1,321	8,301
June . . . . .	6,222	1,087	7,309
July . . . . .	5,811	1,123	6,934
August . . . . .	6,905	1,328	8,233
September . . . . .	7,037	1,365	8,402
October . . . . .	8,077	1,273	9,350
November . . . . .	7,183	1,320	8,503
December . . . . .	6,138	1,291	7,429
Totals . . . . .	84,745	14,786	99,531



## OTHER TREATMENT CENTRES IN EDINBURGH.

## 1. Subsidiary Centres for Royal Infirmary.

Number of New Cases . . . . .					286
Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.		
69	112	7	98 =	286	
Number of Patients treated in Hospital . . . . .					159
Total Attendances of Out-patients . . . . .					3,231
Pathological Work—Number of specimens examined . . . . .					1,747
Special Treatment administered—Number of Injections given . . . . .					3,291

## 2. Hospital for Women and Children and Subsidiary Centres.

Number of New Cases . . . . .					528
Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.		
63	74	111	280 =	528	
Number of Patients treated in Hospital . . . . .					242
Total Attendances of Out-patients . . . . .					11,170
Pathological Work—Number of specimens examined . . . . .					6,175
Special Treatment administered—Number of Injections given . . . . .					2,149

## 3. Royal Maternity Hospital.

Number of New Cases . . . . .					410
Syphilis.	Gonorrhœa.	N.S.D.	No. V.D.		
41	66	...	303 =	410	
Number of Patients treated in Hospital . . . . .					239
Total Attendances of Out-patients . . . . .					3,663
Pathological Work—Number of Specimens examined . . . . .					3,291
Special Treatment administered—Number of Injections given . . . . .					367

## 4. Seamen's Dispensary, Leith.

Number of New Cases . . . . .					293
Syphilis.	Gonorrhœa.	Soft Sore.	N.S.D.	No. V.D.	
47	134	19	23	70 =	293
Total Attendances of Out-patients . . . . .					19,987
Pathological Work—Number of Specimens examined . . . . .					1,722
Special Treatment administered—Number of Injections given . . . . .					1,838



## MUNICIPAL GENERAL HOSPITALS.

REPORT BY MEDICAL SUPERINTENDENT OF HOSPITALS.

The following is a report of the work carried out in the Municipal General Hospitals for the year 1935.

The number of patients treated in these hospitals increases year by year. The total for 1933 was 5,280 and for 1935 it was 6,425, an increase of 1,145 in two years. The small and private wards are still very much appreciated and are too few in number to meet the demand. The patients' beds at the Northern General Hospital have in late years been increased in number from 100 to 260. The accommodation at the Eastern General Hospital has been so taxed that day rooms have been regularly used as wards for the past two years and, at the Western General Hospital, the existing block of buildings, reconditioned in 1928 to contain 256 beds for patients and a nursing staff of about 50, now houses 300 patients' beds and accommodates a nursing staff of 86.

The totals of patients treated in the three hospitals for the past three years were as follows :—

	<i>Western.</i>	<i>Northern.</i>	<i>Eastern.</i>
1933	2,183	450	2,647
1934	2,673	595	2,650
1935	3,080	669	2,676

The total deaths in the hospitals was 756 in 1933 and in 1935 the total was 922. This points to more acute types of illness as well as to a greater number of patients treated. About 100 fewer patients were nursed in the sick wards of Craiglockhart Institution during the year, but more out-patients were treated. There have been no epidemics to give a higher incidence of sickness for the period.

In the Western General Hospital, which was reserved for the treatment of surgical, maternity, acute medical or special-dieted medical cases, and for children, of the total number of patients treated, 34 per cent. were children. These children were mostly admitted for diseases of the skin. Respiratory disorders or diseases affecting nutrition made up the next most numerous groups of cases. Almost one-third of the children admitted were again, as last year, more or less healthy.

On the surgical side, the greatest number of patients sought treatment for diseases or conditions of the abdominal organs. Next in number were cases with diseases or conditions of the genito-urinary system, and the third most numerous group were cases with affections of bones and joints. Medical cases were chiefly diseases of the respira-



tory, circulatory and nervous systems. The patients treated in the Eastern General Hospital and in the Northern General Hospital were chiefly chronic medical cases, many indeed only requiring supervision and nursing.

The highest number of healthy children resident in Craighleith Children's Home was 115, and the lowest number 53, the average being 76. During the year, 71 children were boarded out.

The Bacteriological Services carried out by the Bacteriology Department of the University have allowed of several thousand examinations being made for the Municipal General Hospitals. These examinations of discharges, secretions, excretions or other material have, along with the qualitative and quantitative chemical examinations of stomach contents and other fluids made by the Biochemist in the Municipal Section of the Edinburgh University Biochemical Laboratory, been of very great value to enable efficient treatment of patients in the hospitals. Details will be seen under Bacteriological and Biochemical Services. Pathological investigations have been carried out at the hospitals and in the University laboratory. In the Western General Hospital 92 post-mortem examinations were made. Sixty examinations were carried out at the Eastern General Hospital and 20 examinations were made at the Northern General Hospital. This gives an autopsy rate of 28 per cent. at the Western, 13.5 per cent. at the Eastern, and 12.5 per cent. at the Northern General Hospital. Arrangements have been made for these Pathology Services to be carried out in future by the Professor of Pathology of Edinburgh University or his assistants at the University.

As in previous years, the work of the hospitals is set out in the form of statistical tables which deal in detail with the results of treatment of patients during the year.

The scheme for the training of medical students is still proving a success. More undergraduates would take up residence at the hospital if quarters were available.

The Western General Hospital was recognised as a complete training school for nurses in February, 1933. The course is for four years. Sufficient time has not elapsed to allow of passes in the final State examinations but 21 have passed the first professional examination. As well as tuition in the subjects of the syllabus arranged by the General Nursing Council for Scotland given by the Sister Tutor, lectures are given to the nurses by the visiting physicians and surgeons on special subjects.

The sickness rate among probationer nurses and maids has been higher than in previous years, about 30 per cent. requiring hospital treatment.

At the Western General Hospital, a library service has been organised by Mrs Bruce Dick. A weekly visit is made and the service is greatly appreciated by the patients.

Our thanks are due to all members of the hospital staffs for zealous and efficient service. In the Northern and Eastern General Hospitals especially, where the training of nurses for State registration has been discontinued, many and frequent changes take place among the junior nurses and this state of affairs adds to the difficulties of giving an efficient service.



## WESTERN GENERAL HOSPITAL.

There were no structural alterations during the year.

STATISTICS FOR THE YEAR 1ST JANUARY TO 31ST DECEMBER, 1935.

		Remaining 1st January.	Admitted.	Discharged.	Died.	Remaining 31st December.
Adults	{ Males . . . . .	69	806	663	155	57
	{ Females . . . . .	63	1,099	987	102	73
Children	{ Males . . . . .	50	496	452	31	63
	{ Females . . . . .	57	440	405	34	58
Totals . . . . .		239	2,841	2,507	322	251

Number of Cases treated . . . . . 3,080.

TABLE TO SHOW THE RESULTS OF TREATMENT OR TERMINATION OF ILLNESS.

Cured . . . . .	1,482	Not Improved . . . . .	479
Improved . . . . .	546	Died . . . . .	322
Remaining under treatment . . . . .			251

## CAUSES OF DEATH.

	Adults.		Children.	
	Males.	Females.	Boys.	Girls.
1. Infectious and Parasitic Diseases . . . . .	3	1	3	1
2. Cancer and Other Tumours . . . . .	36	22	...	...
3. Rheumatism, Diseases of Nutrition and other General Diseases . . . . .	5	6	1	4
4. Diseases of the Blood and Blood-forming Organs	6	4	1	...
5. Chronic Poisoning . . . . .	2	2	...	...
6. Diseases of Nervous System and Sense Organs	9	5	2	4
7. Diseases of Circulatory System . . . . .	29	17	1	2
8. Diseases of Respiratory System . . . . .	19	13	4	6
9. Diseases of Digestive System . . . . .	20	13	11	5
10. Non-Venereal Diseases of Genito-Urinary System	21	7	3	2
11. Diseases of Pregnancy and Childbirth . . . . .	...	6	...	...
12. Diseases of Skin and Cellular Tissue . . . . .	3	1	...	...
13. Diseases of Bones and Organs of Locomotion . . . . .	1	3	...	...
14. Congenital Malformations . . . . .	...	...	...	2
15. Diseases of Early Infancy . . . . .	...	...	5	7
16. Senility . . . . .	...	2	...	...
17. Deaths from Violence . . . . .	1	...	...	1
	<u>155</u>	<u>102</u>	<u>31</u>	<u>34</u>

Total Beds . . . . .	300
Average number of occupied beds . . . . .	246
Average length of stay, in days, per patient	32
Highest daily number of patients . . . . .	282 on 1.3.35
Lowest „ „ „ . . . . .	203 on 21.9.35



## SPECIAL DEPARTMENTS.

## SURGERY.

During the year 901 operations were performed ; 550 of these were major operations and 351 minor operations. A general anæsthetic was administered in 755 operations, 27 operations were carried out with a spinal anæsthetic, and 119 operations were performed under local anæsthesia, or without an anæsthetic.

## CLASSIFICATION OF OPERATIONS.

1.	Operation on brain, spinal cord, and peripheral nerves	15
2.	„ lymph glands	25
3.	„ upper air and food passages	137
4.	„ breast and thorax	54
5.	„ abdomen	310
6.	„ genito-urinary organs	126
7.	„ bones and joints (including amputation)	107
8.	Various unclassified operations	127
		<hr/>
		901
		<hr/>

## UROLOGICAL DEPARTMENT.

Examinations and Operations	121
(which number includes Cystoscopy, Pyelography and Endoscopic operations.)	

## CLASSIFICATION OF SURGICAL CASES TREATED ON ADMISSION.

1.	Diseases of brain, spinal cord and peripheral nerves	25
2.	„ lymph glands	24
3.	„ blood vessels (including gangrene)	59
4.	„ tongue and jaws, upper air and food passages	54
5.	„ breast	22
6.	„ thorax	28
7.	„ abdominal organs	378
8.	„ urinary and genital organs	135
9.	„ female pelvic organs	43
10.	„ bones and joints	129
11.	„ skin and cellular tissue	48
12.	Primary cardiac failure and surgical trauma	1
13.	Various unclassified diseases	60
		<hr/>
	(Included in above are 72 children.)	1,006
		<hr/>

## EAR, NOSE AND THROAT DEPARTMENT.

Total number of operations	136
Operations on tonsils and adenoids	127
„ for mastoid	2
„ on nose and throat	7
	136

124 operations required general anæsthesia, and 12 required a local anæsthetic; 38 patients were examined, without operation.



## EYE DEPARTMENT.

Eye Operations (under local anæsthetic)	1
Eye Examinations	12

## DENTAL DEPARTMENT.

Number of patients treated, adults 97 ; children 61	158
„ treatments requiring a general anæsthetic	149
„ treatments requiring a local anæsthetic	1
„ extractions	150
Other dental work (no anæsthetic)	8

The above includes cases from Craighleith Children's Home and Craiglockhart Institution.

## X-RAY DEPARTMENT.

The total patients examined during the year was 1,853, entailing sometimes more than one examination per patient.

Barium meals and enemata	212
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## MATERNITY DEPARTMENT.

Number of cases treated	521
„ „ admitted (includes 14 babies with mothers)	299
„ „ discharged	284
„ „ delivered (186 normal, 19 abnormal)	205
„ post-partum puerperal admissions	20
„ deaths—Mothers 8, Infants 8	16
„ babies born (includes twins)	206

Maternal deaths appear high, but three cases were moribund on admission, two died of tuberculosis and other two died in our hospital after being confined outside. One case was admitted suffering from hyperemesis gravidarum, already septic.

There have been 196 ante-natal cases examined during the year. Of these, 180 were admitted. Abortion cases totalled 36, and 24 other cases of complicated pregnancy were not confined. The abnormal deliveries included 16 by forceps and 3 cæsarian section. There was one case of puerperal sepsis which was septic on admission.

## SPECIAL DIET DEPARTMENT.

Cases treated by Special Diet during the year	98
Remaining at 1st January, 1935	10
Number of cases admitted	80
„ „ discharged	76
„ „ died	14
„ „ remaining at 31st December, 1935	8

The disabilities treated included the following :—

Diabetes	22 per cent. of cases.
Stomach disorders	44 „ „
Kidney disorders	14 „ „
Blood diseases	4 „ „
Obesity	9 „ „
Gall-bladder disease	3 „ „
Disseminated sclerosis	4 „ „



Of the patients treated by special diet, 12 per cent. were cured; 52 per cent. improved; in 22 per cent. of the cases the condition remained stationary and 14 per cent. died.

### MEDICAL WARDS.

#### CLASSIFICATION OF CASES TREATED ON ADMISSION.

1. Infectious and parasitic diseases . . . . .	6
2. Cancer and other tumours . . . . .	31
3. Rheumatism, diseases of nutrition and other general diseases . . . . .	89
4. Diseases of the blood and blood-forming organs . . . . .	23
5. Diseases of nervous system and sense organs . . . . .	116
6. Diseases of circulatory system . . . . .	135
7. Diseases of respiratory system . . . . .	153
8. Diseases of digestive system . . . . .	127
9. Non-venereal diseases of genito-urinary system . . . . .	75
10. Diseases of skin and cellular tissue . . . . .	10
11. Diseases of bones and organs of locomotion . . . . .	47
12. Congenital malformations . . . . .	1
13. Senility . . . . .	...
14. Endocrine disorders . . . . .	5
	<hr/>
	818
	<hr/>

### CHILDREN'S WARDS.

#### CLASSIFICATION OF CASES TREATED ON ADMISSION.

1. Infectious diseases (convalescent) . . . . .	45
2. Premature babies . . . . .	5
3. Rheumatism, diseases of nutrition and other general diseases . . . . .	40
4. Diseases of the blood and blood-forming organs . . . . .	3
5. Diseases of the nervous system and sense organs . . . . .	19
6. Diseases of circulatory system . . . . .	6
7. Diseases of respiratory system . . . . .	83
8. Diseases of digestive system . . . . .	38
9. Non-venereal diseases of genito-urinary system . . . . .	22
10. Diseases of skin and cellular tissue . . . . .	140
11. Diseases of bones and organs of locomotion . . . . .	4
12. Congenital malformations . . . . .	4
13. Mental deficiency . . . . .	10
14. Convenience cases (healthy) . . . . .	140
15. Tonsillectomy cases . . . . .	90
	<hr/>
	649
	<hr/>

*Note.*—72 additional surgical cases were treated by operation in surgical wards.



MASSAGE AND ELECTRO-THERAPY DEPARTMENT.

The total number of patients treated during the year was 281, of which 90 were cured and improved, 36 not improved, leaving 155 still under treatment at the end of the year. During the year 2,689 treatments were given, as follows :—

Massage . . . . .	1,151	Ultra Violet Artificial Sun-	
Galvanism and Faradism . . . . .	248	light . . . . .	331
Diathermy . . . . .	190	Re-Educational Exercises . . . . .	524
Radiant Heat . . . . .	245		

**NORTHERN GENERAL HOSPITAL.**

No structural alterations have been carried out during the year.

STATISTICS FOR THE YEAR 1ST JANUARY TO 31ST DECEMBER, 1935.

	Remaining 1st January.	Admitted.	Discharged.	Died.	Remaining 31st December.
Adults . . . . .	218	425	242	160	241
Children . . . . .	5	21	22	...	4
<b>Totals . . . . .</b>	<b>223</b>	<b>446</b>	<b>264</b>	<b>160</b>	<b>245</b>

Number of cases treated . . . . . 669.

TABLE TO SHOW THE RESULTS OF TREATMENT OR TERMINATION OF ILLNESS.

Cured . . . . .	51	Not Improved . . . . .	118
Improved . . . . .	95	Died . . . . .	160
Remaining under treatment . . . . .			245.

Causes of death were in the following order of numerical incidence :—Senility, diseases of brain and nerves, diseases of the respiratory system, cancer and other tumours, diseases of the circulatory system and all other diseases.

Total Beds . . . . .	260
Average number of occupied beds . . . . .	228
Average length of stay, in days, per patient . . . . .	190
Highest daily number of patients . . . . .	252 on 3.4.35
Lowest daily number of patients . . . . .	209 on 21.10.35

Dental treatment was given to 21 patients and 20 minor operations were performed during treatment.



CLASSIFICATION OF ADMISSIONS TREATED, FOR YEAR ENDING  
31ST DECEMBER, 1935.

1. Infectious and Parasitic Diseases . . . . .	17
2. Cancer and other Tumours . . . . .	6
3. Rheumatism, Diseases of Nutrition and Other General Diseases . . . . .	32
4. Diseases of the Blood and Blood-forming Organs . . . . .	4
5. Chronic Poisoning . . . . .	...
6. Diseases of Nervous System and Sense Organs . . . . .	74
7. Diseases of Circulatory System . . . . .	61
8. Diseases of Respiratory System . . . . .	71
9. Diseases of Digestive System . . . . .	16
10. Non-Venereal Diseases of Genito-Urinary System . . . . .	10
11. Diseases of Pregnancy and Childbirth . . . . .	...
12. Diseases of Skin and Cellular Tissue . . . . .	5
13. Diseases of Bones and Organs of Locomotion . . . . .	6
14. Congenital Malformations . . . . .	...
15. Diseases of Early Infancy . . . . .	4
16. Senility . . . . .	140
17. Violence . . . . .	...
	446

**EASTERN GENERAL HOSPITAL.**

No important structural alterations have been carried out during the year.

STATISTICS FOR THE YEAR FROM 1ST JANUARY TO 31ST DECEMBER, 1935.

		Remaining 1st January.	Admitted.	Discharged.	Died.	Remaining 31st December.	
Adults	{	Males . . . . .	204	1,411	1,153	253	209
	Females . . . . .	161	900	692	187	182	
Totals . . . . .		365	2,311	1,845	440	391	

Number of Cases treated . . . . . 2,676

TABLE TO SHOW THE RESULTS OF TREATMENT OR TERMINATION OF ILLNESS.

Cured . . . . .	265	Not Improved . . . . .	367
Improved . . . . .	1,213	Died . . . . .	440
Remaining Under Treatment . . . . .		391	



## CAUSES OF DEATH.

	<i>Males.</i>	<i>Females.</i>
1. Infectious and Parasitic Diseases . . . . .	19	4
2. Cancer and Other Tumours . . . . .	40	22
3. Rheumatism, Diseases of Nutrition and other General Diseases . . . . .	2	6
4. Diseases of the Blood and Blood-forming Organs . . . . .	2	1
5. Chronic Poisoning . . . . .	1	...
6. Diseases of Nervous System and Sense Organs . . . . .	45	48
7. Diseases of Circulatory System . . . . .	55	30
8. Diseases of Respiratory System . . . . .	28	17
9. Diseases of Digestive System . . . . .	2	1
10. Non-Venereal Diseases of Genito-Urinary System . . . . .	19	4
11. Diseases of Pregnancy and Childbirth . . . . .	...	...
12. Diseases of Skin and Cellular Tissue . . . . .	...	...
13. Diseases of Bones and Organs of Locomotion . . . . .	3	2
14. Congenital Malformations . . . . .	...	...
15. Diseases of Early Infancy . . . . .	...	1
16. Senility . . . . .	37	50
17. Deaths from Violence . . . . .	...	1
	<u>253</u>	<u>187</u>

Total . . . . . 440

Number of Post-Mortem examinations . . . . . 60

Total Beds . . . . . 400

Average number of occupied beds . . . . . 364

Average length of stay, in days, per patient . . . . . 58

Highest daily number of patients . . . . . 393 on 23.12.35

Lowest „ „ „ „ . . . . . 329 on 16.8.35



CLASSIFICATION OF ADMISSIONS TREATED, FOR YEAR ENDING  
31ST DECEMBER, 1935.

	<i>Males.</i>	<i>Females.</i>
1. Infectious and Parasitic Diseases . . . . .	156	36
2. Cancer and other Tumours . . . . .	78	55
3. Rheumatism, Diseases of Nutrition and other General Diseases . . . . .	126	122
4. Diseases of the Blood and Blood-forming Organs . . . . .	6	6
5. Chronic Poisoning . . . . .	14	5
6. Diseases of Nervous System and Sense Organs . . . . .	244	190
7. Diseases of Circulatory System . . . . .	169	97
8. Diseases of Respiratory System . . . . .	182	93
9. Diseases of Digestive System . . . . .	103	42
10. Non-Venereal Diseases of Genito-Urinary System . . . . .	61	32
11. Diseases of Pregnancy and Childbirth . . . . .	...	2
12. Diseases of Skin and Cellular Tissue . . . . .	106	51
13. Diseases of Bones and Organs of Locomotion . . . . .	52	31
14. Congenital Malformations . . . . .	1	3
15. Diseases of Early Infancy . . . . .	...	1
16. Senility . . . . .	70	78
17. Violence . . . . .	43	56
	<hr/>	<hr/>
	1,411	900
	<hr/>	<hr/>
Total . . . . .	2,311	

These patients were medical or chronic surgical cases. In the course of treatment, 259 minor operations were performed and 73 dental treatments were given.

MASSAGE DEPARTMENT.

During the year, 1,043 treatments were given, as follows :—

Massage . . . . .	836	Ionization . . . . .	45
Galvanism . . . . .	20	Ultra Violet Rays . . . . .	18
Faradism . . . . .	4	Remedial Exercises . . . . .	120

About 25 per cent. of these patients were improved, the others were relieved.



## CRAIGLOCKHART INSTITUTION.

### SICK WARDS.

STATISTICS FOR THE YEAR 1ST JANUARY TO 31ST DECEMBER, 1935.

	Remaining 1st January.	Admitted.	Discharged.	Died.	Remaining 31st December.
Males . . . . .	4	402	401	2	3
Females . . . . .	2	167	164	...	5
Totals . . . . .	6	569	565	2	8

Of the patients discharged, 253 males and 113 females went back to the Main House part of the Institution.

Total number of cases treated in wards . . . . 575.

#### OUT-PATIENT DEPARTMENT.

Males . . . . .	5,352
Females . . . . .	1,437
Total . . . . .	6,789

#### CHIEF DISABILITIES.

Sore feet (corns and bunions).  
Dyspepsia.  
Chronic Ulcers.  
Otorrhœa.  
Conjunctivitis.  
Tonsillitis.

During the year, 176 patients were supplied with spectacles.

A medical examination of all inmates in the Institution was made every quarter.

There were 25 ante-natal cases in the Institution during the year.

The number of mental defectives (under guardianship) was 5 females.

There were no epidemics amongst the inmates during the year.

### CRAIGLEITH CHILDREN'S HOME.

During the year from 1st January to 31st December, 1935, on an average, 76 children were resident in the Children's Home.

The greatest number of children in the Home at one time was 115 on 28th January, 1935, and the lowest number was 53 on 9th April, 1935. The number of toddlers was about 50 per cent. of the total number of children admitted to the Home during the year.

Seventy-one children were sent to country board—27 more than the figure for the previous year.

Apart from slight epidemics of diphtheria and chicken-pox, the health of the children was good.



## MENTAL HEALTH SERVICES.

### BANGOUR MENTAL HOSPITAL.

REPORT BY MEDICAL SUPERINTENDENT.

I desire on this occasion to direct attention to certain aspects of mental disorder and its treatment which are worthy of further consideration.

#### Child Guidance.

There are good grounds for believing that the seeds of mental disorder manifesting itself in adult life are often sown in childhood. From the mental point of view the child is indeed father of the man. It is therefore of vital consequence that more attention be paid to mental development in child life. In the sphere of physical medicine the necessity for supervision has been increasingly recognised year by year, until now the child is under some degree of medical observation during the whole of the developmental phase. It is open to question whether the same amount of supervision has hitherto been provided for certain phases of mental development.

There has recently been formed in Scotland a National Child Guidance Council which aims at encouraging local authorities either singly or in suitable combinations to institute Child Guidance Clinics. The function of these clinics is to investigate and treat psychological abnormalities in children and to investigate and recommend treatment in cases of backwardness in isolated subjects. Generally speaking the teacher forms the first link in the chain that makes up the clinic. From his daily contact with them he is in a position to observe those children whose conduct deviates sufficiently from the normal to raise the question "Why does he behave so?" Such cases are referred to the School Medical Officer and may be referred to the clinic, where a systematic examination is made by a team of examiners, each specially qualified to deal with one aspect of the matter in hand. By pooling the results of these examinations it is possible to devise or recommend a course of treatment for the child designed to overcome his difficulties. Needless to say, the problems coming before the clinic are infinitely varied and the scope of the investigation in each case must be sufficiently wide to embrace every influence affecting the child's conduct. Hence the necessity for team-work by trained workers.

At present in the City there are the following clinics:—The University clinic under the direction of the Professor of Psychology; the Edinburgh child guidance clinic for Roman Catholics; and the Moray House clinic for young children. These clinics do excellent work. In practice, cases are referred to the clinics by the School Medical Officer for report.

The function of these clinics is two-fold; first, to investigate and treat psychological abnormalities in children, and second, to investigate and recommend treatment in cases of backwardness in isolated subjects, for instance, arithmetic.



### Defective Children.

These children are in a different category from those already referred to. The former group may have been lavishly endowed by nature whereas the defective suffers throughout life from a parsimonious endowment. In spite of all that proper training can do—and it can do much—the defective is always a defective, always inferior in intelligence and in social adaptability.

As things are now, the care of the defective is portioned out among three authorities—Education, Public Health and Public Assistance. The Education Committee is concerned with those defectives of school age who are deemed to be “educable” and adequate provision is made for them in the Special Schools. The number attending these schools is 489. One of the least enviable tasks confronting the School Medical Officer is the assessment of mental deficiency and the assignment to a Special School of a defective child. The number of such examinations in 1935 was 249. The difficulties in this respect are nowadays easier to circumvent than was formerly the case, thanks to the fact that the Special Schools are attractive in themselves and still more to the fact that parents appreciate how much happier a defective child can be when placed in a suitable environment.

On the Public Assistance Committee is laid the supervision of the “ineducable” defective of school age and for all others beyond school age who require care. Many remain at home where they lead harmless if not very useful lives, and are tended with such fidelity and care as only a parent will give. Others are placed under legal guardianship either at home or elsewhere, while still others, not suitable for being so dealt with, are placed under institutional care in Gogarburn Certified Institution. In this connection it is to be remembered that the Mental Deficiency Act never contemplated the segregation in certified institutions of nearly all defectives. Equal stress is laid on the alternative methods of disposal, and in fact stringent conditions are laid down—and justly so—for the certification and segregation of defectives.

Gogarburn Certified Institution with its 500 beds is a growing concern administered by the Public Health Department. It has now reached the maximum size authorised by the Corporation, and the necessity, or otherwise, for extension is at present under consideration. In this connection it is not improbable that in future the care of “institutional” defectives may be organised on a regional scale.

These exhaust the statutory functions of the Local Authority under the Deficiency Act. Reference must be made, however, to two schemes which in some measure supplement these functions. One is the Day Continuation Class for girls who have reached the school-leaving age (16 years), the other, the Occupational School for “ineducable” children of school age. These are both praiseworthy attempts to round off the scheme for dealing with the defective in the community and both deserve every encouragement at the hands of the City. In the future they may be supplemented by residential hostels for suitable cases, thus still further reducing the call for institutional care.

The success of the Occupational School is now beyond question. From very small beginnings it has grown till it has a roll of over 80 pupils. Incidentally it is



interesting to note that there are in attendance three children who had previously been certified and admitted to Gogarburn. This experiment is of a very promising character. Parents are grateful that systematic training in habits, in deportment, and in the use of such talents as the children have, is provided.

On the whole it may be said that the arrangements with regard to defectives leave no serious loop-hole, especially if it is borne in mind that it is only within the last few years that serious attention has been turned to this subject. One suggestion may, however, be ventured. Mental deficiency is a condition existing "from birth or an early age." Yet the Act makes no provision for defective children of pre-school age. Recently there have been brought to notice a number of such children who, being defective, constitute a real problem for their parents. Often their peculiarities of conduct are beyond parental control and until they reach school age they do not come within the purview of the Local Authority. To relieve the parents of their difficulties and to begin the proper training of these children at as early an age as possible, provision should be made for them in the form of an annexe to Gogarburn. Even if it were possible, it would not be a satisfactory arrangement to place these children in the Institution itself but there are obvious advantages from the administrative stand-point in having the annexe closely associated with Gogarburn. At the outset provision would not require to be made for more than 12 children.

#### **Out-Patient Treatment of Mental Disorders.**

Two out-patient clinics exist in Edinburgh, one at the Royal Infirmary and the other at the Spittal Street Municipal Dispensary. The former is only related to Bangour in the sense that cases requiring hospital treatment are not infrequently referred to Bangour from the clinic. The latter is part of the mental health service offered by the Corporation.

The work of an out-patient clinic is primarily that of diagnosing the nature of the patient's disorder and advising as to how and where appropriate treatment may be carried out. Treatment in mental disorders is usually a protracted business—only in rare instances do dramatic recoveries take place. Accordingly, only certain types of cases can be dealt with satisfactorily as out-patients and even this relatively small number make heavy demands on the physician's time. In the great majority of cases, in-patient treatment is advisable; in fact, the home situation may be an essential element in the faulty adjustment and may make hospital treatment a *sine qua non* to improvement. It is through the work of the out-patient clinic that contact is most readily established with the "neurotic," a class which have hitherto had less sympathy even from the medical profession than their unhappy plight warrants. The busy general practitioner has not the time to devote to neurotic or neurasthenic patients, and in any case he is seldom *au fait* with the newer methods of treatment. In the mental hospital these unfortunate patients are misfits, and their association with the frankly psychotic is often more harmful than helpful. Only a relatively small number can be successfully treated as it were on an ambulant basis. For the rest, hospital facilities are essential, and hospital facilities of a special type. The justification of such a project lies in the widespread prevalence of neurosis, its crippling effect on the individual sufferer and its serious social implications.



There are many suggestions as to how the machinery to deal with neurosis should be constructed. In one respect most, if not all, of these are agreed, viz., that teamwork offers a better chance of success than any other method. Neurosis, using the term in its widest connotation, requires all the resources of modern medicine, both physical and psychiatric, for its investigation and cure. Neurosis is not a "minor" malady, nor one which can be ignored with impunity.

Here let a plea be entered for these often misunderstood and neglected patients. The great general hospitals at present make no provision or at best quite inadequate provision for them. Special hospitals adapted to their needs are few and far between, and the expense of adequate staffing in such hospitals is an almost insuperable difficulty. The atmosphere of the mental hospital is uncongenial to them and they suffer more than most others from the cruel stigma it entails in the popular mind. The most satisfactory plan is to create a department for them either in or closely connected with the general hospital. Only in this way can the need be met at reasonable cost and only in this way can all the resources of modern medicine be effectively applied. Mental medicine can no longer be looked upon as a thing apart from the general trend of modern practice. That is in fact one of the justifications for the unification of control under the Public Health Department of mental and other forms of treatment. Of all mental sufferers the neurotic is the one who might reasonably anticipate some better provision from the new alignment of hospital resources. In time no general hospital will be complete which does not pay due regard to the so-called "minor" mental maladies.

Apart from these matters, the out-patient clinic forms a valuable adjunct to the Mental Hospital in other ways. Chief among these is that through the clinic it is possible to control in some measure the reinstatement of the discharged patient in his new surroundings by consultation and advice. The clinic has been found particularly useful in the case of patients liberated on probation without having been actually discharged. Formerly these patients simply disappeared from the Hospital's ken and nothing was done to help the patient over any difficulty that might supervene. Now patients on probation are encouraged to report at the clinic during the currency of the probationary period (up to 12 months), bring all their troubles with them and leave them behind in the clinic. Experience has shown that this plan functions most satisfactorily at the clinic, whereas at the hospital itself it must be ranked a failure.

Some five years have now elapsed since the Corporation superseded the old District Board of Control as the authority charged with the treatment and care of the insane and the defective. These five years have seen a distinct advance in the matter of hospital accommodation. At the beginning, Gogarburn, though projected on a large scale, was only in embryonic form. It now has accommodation for 500 patients. At Bangour, though the capacity of the Hospital has not been appreciably augmented, a large amount of reconstruction and reconditioning has been carried out to the advantage of both patients and staff. Amongst other things, a large extension to the Nurses' Home and the erection of twenty-four new houses for married staff have recently been completed. The net effect of these improvements has been to bring the material comfort of the patients up to a high standard and to better the conditions under which the staff carry out their responsible duties.



Detailed reference has been made in previous reports to these activities which in the bulk represent an imposing record. In passing, it is only right to acknowledge the readiness with which the Public Health Committee and the Mental Diseases Sub-Committee have furthered these various schemes.

I wish to record my gratitude to the whole staff of the Hospital for the efficient way they have performed their duties.

**General Statistics.**—The following table outlines in a general way the changes in the population of Bangour Hospital during the year under review :—

	M.	F.	Total.	M.	F.	Total.
In Hospital, 1st January, 1935 . . . . .	512	536	1,048			
Absent on Probation . . . . .	2	2	4			
Absent on Pass . . . . .	5	2	7			
<b>Total on Register (including 99 voluntary)</b> . . . . .				519	540	1,059
Cases admitted (including 88 voluntary) . . . . .	156	135	291			
				156	135	291
<b>Total cases under care</b> . . . . .				675	675	1,350
Cases discharged (including 88 voluntary)						
Recovered . . . . .	79	70	149			
Relieved . . . . .	48	14	62			
Not improved . . . . .	5	2	7			
Died . . . . .	43	44	87			
<b>Total cases discharged and died during the year</b> . . . . .				175	130	305
Remaining in the Hospital, 31st December, 1935 . . . . .				492	539	1,031
Absent on Probation . . . . .				2	5	7
Absent on Pass . . . . .				6	1	7
<b>Total on Register (including 99 voluntary)</b> . . . . .				500	545	1,045
<b>Average daily number on Register during the year</b> . . . . .				496	536	1,032

*Note :—*

1. For the first time on record the number of male admissions exceeded the number of female admissions.
2. As has been the case in recent years about one-third of the admissions have been voluntary.
3. The number of patients discharged was 218. Calculated on the number of admissions the percentage of recoveries was 51 as compared with 47, 45 and 42 for the preceding three years.

The average daily number on the Register—1,032—approximates closely to the average for the last five years and may be taken as a reliable indication of the actual hospital requirements of the City of Edinburgh under present day conditions. This figure represents a falling off as compared with the average for the previous five years. Part of the decrease may be attributed to the increased accommodation provided at Gogarburn Certified Institution for mental defectives and part to the development



of extra-hospital facilities for treatment in the early stages of suitable types of mental disease. There still remain in Bangour some fifty mental defectives, mostly old residenters, whose transfer to Gogarburn would be of doubtful advantage to them seeing that they have long since passed the age at which they might benefit from training. In any case they represent a steadily decreasing liability at Bangour which in the natural course of events will liquidate itself in a few years. What is of major importance in this respect is to ensure that defectives requiring institutional care are in future certified for admission to Gogarburn and not to Bangour. Instances not infrequently occur which show that the functions of these two hospitals are not so clearly differentiated as is desirable.

### Voluntary Patients.

Showing the Admissions, Discharges and Deaths during the year 1935.

	M.	F.	Total.	M.	F.	Total.
In the Hospital, 1st January, 1935 . . . . .	52	45	97			
Absent on Pass . . . . .	2	...	2			
<b>Total on Register . . . . .</b>				54	45	99
Cases Admitted . . . . .	58	30	88			
<b>Total Cases under care . . . . .</b>				112	75	187
Cases discharged . . . . .	56	24	80			
Cases died . . . . .	5	3	8			
<b>Total cases discharged and died during the year . . . . .</b>				61	27	88
Remaining in the Hospital on 31st December, 1935 . . . . .	49	48	97			
Absent on Pass . . . . .	2	...	2			
<b>Total on Register . . . . .</b>				51	48	99

### Medical Statistics.

#### Physical Condition on Admission.

	Male.	Female.	Total.
Average . . . . .	84	43	127
Poor . . . . .	62	68	130
Very Weak or Exhausted . . . . .	10	24	34
<b>Totals . . . . .</b>	156	135	291

#### Suicides.

	Male.	Female.	Total
Contemplated . . . . .	16	9	25
Attempted by :—			
Gas Poisoning . . . . .	7	6	13
Drinking poison . . . . .	1	1	2
Cut-throat or other self-injury . . . . .	3	1	4
Drowning . . . . .	1	1	2
Precipitation . . . . .	1	1	2
Swallowing foreign bodies . . . . .	...	1	1
<b>Totals . . . . .</b>	29	20	49



### Number of Cases Admitted with Previous Attacks.

	Male.	Female.	Total.
1 Previous Attack . . . . .	30	22	52
2 Previous Attacks . . . . .	11	7	18
3 " " . . . . .	6	3	9
4 " " . . . . .	6	3	9
5 " " . . . . .	2	1	3
6 " " . . . . .	...	1	1
7 " " . . . . .	2	...	2
8 " " . . . . .	...	1	1
9 " " . . . . .	1	1	2
10 " " . . . . .	1	...	1
More than 10 " . . . . .	...	1	1
<b>Totals . . . . .</b>	<b>59</b>	<b>40</b>	<b>99</b>

### CAUSES OF DEATHS DURING THE YEAR 1935.

#### General Diseases.

	Male.	Female.	Total.
Tuberculosis of Lungs . . . . .	2	2	4
Tuberculosis of Peritoneum . . . . .	1	...	1
General Tuberculosis . . . . .	...	1	1
Influenza . . . . .	...	1	1
Influenza with Acute Broncho Pneumonia . . . . .	...	2	2
Carcinoma of Pancreas . . . . .	...	1	1
Acute Parotitis . . . . .	1	...	1
Toxæmia from Acute Cellulitis . . . . .	...	1	1
Pneumonia . . . . .	1	3	4

#### Injuries.

	Male.	Female.	Total.
Fracture of Base of Skull . . . . .	1	...	1

#### Diseases of the Nervous System.

	Male.	Female.	Total.
General Paralysis . . . . .	3	1	4
Cerebral Hæmorrhage . . . . .	2	2	4
Cerebral Thrombosis . . . . .	1	3	4
Epilepsy and Status Epilepticus . . . . .	2	3	5
Encephalitis Lethargica . . . . .	...	1	1
Huntingdon's Chorea . . . . .	1	...	1
Exhaustion from Acute Mental Disease . . . . .	...	1	1

#### Diseases of the Cardio-Vascular System.

	Male.	Female.	Total.
Chronic Myocardial Degeneration . . . . .	12	8	20
Hypertrophy and Dilatation of Heart . . . . .	2	...	2
Valvular Disease of Heart . . . . .	1	4	5
Arterio-sclerosis . . . . .	10	9	19

#### Diseases of the Respiratory System.

	Male.	Female.	Total.
Acute Broncho-pneumonia . . . . .	1	1	2
Chronic Bronchitis . . . . .	1	...	1

#### Diseases of the Gastro-Intestinal System.

	Male.	Female.	Total.
Acute Intestinal Obstruction . . . . .	1	...	1
<b>Totals . . . . .</b>	<b>43</b>	<b>44</b>	<b>87</b>



PROBABLE CAUSES OF INSANITY IN THE PATIENTS  
ADMITTED DURING THE YEAR 1935.

	Male.	Female.
Heredity . . . . .	17	53
Previous Attacks . . . . .	59	50
Adolescence . . . . .	16	19
Climacteric . . . . .	...	24
Parturition and Puerperal State . . . . .	...	2
Syphilis and Venereal Disease . . . . .	17	3
Epilepsy . . . . .	10	9
Influenza . . . . .	...	2
Encephalitis Lethargica . . . . .	1	1
Arterio-sclerosis . . . . .	31	21
Other Bodily Diseases . . . . .	9	9
Alcohol . . . . .	16	9
Worry, Anxiety, Adverse Circumstances . . . . .	18	30
Unemployment . . . . .	8	1
Love Affair . . . . .	1	1
Congenital . . . . .	6	7
Unknown . . . . .	8	1

**GOGARBURN CERTIFIED INSTITUTION.**

(For Mental Defectives.)

REPORT BY MEDICAL SUPERINTENDENT.

**General Statistics.**—The following are the general statistics. The increase in the patient population during the year was due to two factors. The first and chief factor was the occupation in the early months of the year of the remaining accommodation available in the two high grade villas which had been completed and partly occupied by the end of 1934. The second was the fact that it was again found necessary to admit urgent female cases to already overcrowded female villas.

	Male.	Female.	Total.
Patients on register at 1st January, 1935 . . . . .	201	157	358
Cases admitted during the year . . . . .	57	5	62
Total number under treatment . . . . .	258	162	420
Cases discharged during the year . . . . .	6	...	6
Cases transferred to other institutions . . . . .	2	1	3
Cases died during the year . . . . .	4	1	5
Total cases removed during the year . . . . .	12	2	14
Patients on register at 31st December, 1935 . . . . .	246	160	406

The figures represent an increase of 45 male patients and 3 female patients, being a total increase of 48 in the patient population for the year.

The average daily number of patients on the register during the year was 400.



**Medical Statistics.**—Sixty-two patients were admitted to the Institution during the year. Of that number 57 were males and 5 were females. Of the 62 admissions, 17 males and 1 female were children under 16 years of age.

The place of origin of the patients admitted was as follows :—

	Male.	Female.	Total.
Admitted direct from their homes . . .	21	2	23
„ from Western General Hospital . . .	2	1	3
„ „ Eastern General Hospital . . .	1	...	1
„ „ Northern General Hospital . . .	1	...	1
„ „ Craiglockhart Institution . . .	8	1	9
„ „ Bangour Mental Hospital . . .	20	1	21
„ „ Edinburgh Prison . . .	2	...	2
„ „ Children's Home, Crewe Road . . .	1	...	1
„ „ Dr. Guthrie's Home . . .	1	...	1
	<u>57</u>	<u>5</u>	<u>62</u>

Of the admissions therefore, 37 per cent. were admitted direct from their homes, 33 per cent. were admitted from Bangour Mental Hospital, 14 per cent. from Craiglockhart Institution, 9 per cent. from Municipal General Hospitals, and the remaining 7 per cent. from prisons and other institutions.

The general physical condition of the patients admitted was as follows :—

	Male.	Female.	Total.
In fair or average health and condition . . .	17	1	18
In poor or indifferent health and condition . . .	17	2	19
In weak or very weak health and condition . . .	23	2	25
	<u>57</u>	<u>5</u>	<u>62</u>

Thus in 73 per cent. of the patients admitted the general standard of physical health was below the normal. It cannot be too clearly understood that mental defectives as a class, no matter whether the defect is induced by disease or injury or is due to inherent causes, are persons of lower vitality than their normal fellows. It is not surprising, therefore, to find that the general standard of health and degree of resistance to infection is correspondingly lowered. In their homes and in Institutions where specialised care is not available, the necessity for supervision and lack of understanding their difficulties and requirements, too often results in confinement and restriction of even normal activity. This enforced physical and mental idleness, much of it well intentioned and prompted by affection, is a very frequent cause of the physical ill-health exhibited by the patients on admission. The improvement shown by the great majority after a short residence in the Institution is most striking. The regulation of their lives on sound hygienic principles undoubtedly plays an important part in achieving this end, but equally important is the part played by the stimulation derived from active employment in both the educational and recreative sense. It is an interesting fact that despite the prevailing mental and physical inferiority of the population at Gogarburn as compared with the general community, the death-rate in the Institution is considerably less than that recorded during the corresponding period for the population of the country as a whole.



**Classification.**—The following table shows the mental level and age grouping of the patients admitted.

Classification	1-5		6-10		11-15		16-20		21-25		26-30		31-35		36-40		41-45		46-50		Over 50		Totals	
	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Idiot . . . . .	2	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	4	1	
Imbecile . . . . .	...	...	3	...	1	...	2	...	2	1	2	...	7	1	...	...	3	...	4	1	2	...	26	3
Feeble-minded . . . . .	...	...	4	...	6	...	5	...	4	...	2	1	...	...	2	...	...	...	2	...	2	...	27	1
Total Males . . . . .	2		7		7		7		6		4		8		2		3		6		5		57	
Total Females . . . . .		...		1	...		...			1		1		1		...		...		1		...		5

**Causation.**—So far as could be ascertained the causes of the incompleteness of mental development were as follows:—

*Primary Amentia. (Inherited and Transmissible).*

	Male.	Female.	Total.
Simple . . . . .	28	3	31
Microcephalic . . . . .	3	...	3
Mongolism . . . . .	1	...	1
Sclerotic . . . . .	1	...	1
	<u>33</u>	<u>3</u>	<u>36</u>

*Secondary Amentia.*

(Arrest of cerebral development due to environmental factors.)

	Male.	Female.	Total.
Traumatic . . . . .	6	...	6
Inflammatory . . . . .	6	...	6
Syphilitic . . . . .	2	...	2
Epileptic . . . . .	8	1	9
Nutritional . . . . .	1	1	2
Deprivation of Special Senses . . . . .	1	...	1
	<u>24</u>	<u>2</u>	<u>26</u>

Briefly summarised, this table shows that in 58 per cent. of the patients admitted the condition of mental defectiveness was due to inherited taint. In the remaining 42 per cent. the arrested mental development was directly attributable to disease or injury. The old fallacious assumption that all mental defect is due to the operation of adverse hereditary factors dies hard, but the importance of disease and injury in infancy and childhood as causal factors are gradually being recognised. This recognition is of importance in the study of the prevention of mental defect.



**Discharges.**—Nine patients were discharged from the Institution during the year. The method of their disposal is shown in the accompanying table.

	Male.	Female.	Total.
Discharged to their homes . . . . .	5	...	5
Transferred to Bangour Mental Hospital . . . . .	1	1	2
Transferred to Craiglockhart Institution . . . . .	2	...	2
	<hr/>	<hr/>	<hr/>
	8	1	9

**Deaths.**—Five deaths occurred during the year, four in the case of male patients and one in the case of a female patient. The principal cause of death was disease of the central nervous system which accounted for four deaths. Pulmonary tuberculosis accounted for one death. The average age at death was 24 years. Calculated on the average number of patients resident during the year, the percentage of deaths was 1.2.

**General Health.**—The general health of both patients and staff during the year has been most satisfactory. The policy of testing all patients admitted and all recruits to the nursing staff for susceptibility to diphtheria and scarlet fever, and where the tests reveal a person to be susceptible to either or both of these diseases, of immunising them against it, has been successfully continued. No single case of either diphtheria or scarlet fever occurred in the course of the year. In fact the only cases of infectious disease that did occur during the year were some six cases of chicken-pox affecting little boys in the children's ward.

I would again express my indebtedness to the Medical Superintendent of the Western General Hospital for the readiness with which specialist advice and treatment have been placed at our disposal when such have been required.

It is thankfully recorded that no serious accident affecting either patients or staff occurred during the year.

**Development of the Institution.**—The construction of the two new children's blocks proceeded steadily throughout the year, and will be available for occupation by patients early in 1936. In respect of male children, however, it should be remembered that one villa of fifty beds will not accommodate the numbers at present resident, and that a number of children will still require to be accommodated in the adult male section of the Institution.

In the course of the year the existing facilities for occupational training were extended in several directions. In the first place a beginning was made with the scheme for the development of poultry farming. Starting with a modest stock of 70 pullets, which were secured as day-old chicks in April, and commenced laying in September, over 6,000 eggs were obtained by the end of the year.

Thanks to the courtesy of the Medical Superintendent of Stoneyetts Certified Institution, Glasgow, we were enabled to send an attendant to that Institution for a course of instruction in making coir mats and also rubber mats from worn motor tyres.



As a result we now have a party of boys continually and successfully engaged in the manufacture of these useful articles.

An Instructor in basket-making was also engaged on a part-time basis during the year. Here also the results have been most successful, and a wide variety of useful articles such as cane chairs, soiled linen and waste paper baskets and laundry hampers have been produced. In view of the fact that we at present grow at Gogarburn a large proportion of the material required for the manufacture of these articles for which there is a demand in all the Corporation Institutions, the question of placing this industry on a whole time basis will require early consideration.

**The Staff.**—Two changes occurred in the staff during the year.

Miss Murray was appointed Teacher in Charge of the Institution School in place of Miss Herd, who left to be married.

Miss Thain was appointed to fill the vacancy on the School Teaching Staff occasioned by the death of Miss Scott.

**Training of Nurses.**—During the year the first fruits of the reorganised system of training were obtained. Eleven candidates (six nurses and five attendants) were presented for the final examinations of the General Nursing Council for Scotland, and ten (six nurses and four attendants) were successful in obtaining State Registration as mental nurses.

**Teaching and Research.**—During the year the first stage of the projected re-organisation of the medical curriculum at Edinburgh University was carried into effect. One of the changes consisted in the widening of the scope and extension of the period of study devoted to mental deficiency. This is a distinct advance, as it enables the student to keep abreast of increasing knowledge as to the factors capable of causing mental defect. It is on the foundation of a fuller understanding of such factors and the method of their operation that the methods of prevention will ultimately be built.

With the growth of the Institution, however, it is becoming increasingly difficult to obtain adequate and reliable case histories of the patients prior to their admission. A further difficulty is that of obtaining satisfactory progress reports of those patients who have improved under treatment and are allowed leave of absence from the Institution for a probationary period. These difficulties can only be solved by the appointment of a trained and experienced social service worker. Such an appointment would prove of inestimable value not only in guiding us in the selection of the type of educational or occupational training best suited to the needs of the patients admitted, and in affording some measure of support and guidance to patients leaving the Institution, but it would also do much to enhance the value of our existing records.

In addition to the compulsory course of study for medical under-graduates, it is also gratifying to record that the post-graduate course for doctors who intend to specialise in the practice of psychological medicine continues to attract students from all parts of Britain and also from other countries.



In collaboration with other workers attached to the Medical School of Edinburgh University, a series of researches was commenced during the year with a view of obtaining a method of treating epilepsy other than by the administration of depressant drugs. Although a great deal of work remains to be done, the results already obtained would appear to open up avenues that will eventually lead to a definite improvement of existing methods.

**Recreative Facilities.**—I have to thank those members of the public who so generously continue to bring concert parties to the Institution during the winter months. I have also to thank the Staff for the time and effort expended by them in the entertainment of the patients. The success obtained by the Scout Troop in winning the McIlwrick Shield for the best troop of Rover Scouts in the County of Midlothian has already been reported by H.M. Commissioner. The Institution football team has also been very successful. They are at present undefeated leaders of the second division of the Lothian Amateur League. The Girl Guide Troop, however, has suffered a slight set back during the year owing to the fact that the nurse who formerly captained the troop left Gogarburn on obtaining a senior post in an English Institution, and we have not so far succeeded in obtaining a trained successor.

**Acknowledgments.**—It is with pleasure that I again acknowledge my indebtedness to Dr. Slater, the Matron, Assistant Matrons, and Staff generally for their loyal and efficient help throughout the year.

I would also express my most sincere appreciation of the encouragement and help so willingly afforded by Mrs E. Morison Millar during the period of her Convenership of the Mental Diseases Committee. I hope that the vigorous growth of the Institution during the years from 1932 to 1935, and its widened sphere of usefulness, will have afforded some recompense for the time and effort she so generously expended on its behalf.



## SCHOOL MEDICAL SERVICE.

The following is a report on the work of the School Medical Service for the year ending 31st July, 1935.

### Number of Schools.

The number of Schools and Special Classes under the Scheme of Medical Inspection is 107 :—

Elementary Schools . . . . .	71
Intermediate and Secondary Schools . . . . .	18
Special Schools and Classes . . . . .	14
Merchant Company Schools . . . . .	4
	107

The average number of pupils on the roll was 63,592, with an average daily attendance of 58,403 :—

	Average Roll.	Average Attendance.
Elementary Schools . . . . .	39,495	36,264
Intermediate and Secondary Schools . . . . .	12,310	11,389
Special Schools . . . . .	1,163	1,018
Episcopal Schools . . . . .	744	681
Roman Catholic Schools . . . . .	6,023	5,500
Merchant Company Schools . . . . .	3,857	3,551
	63,592	58,403

### Number of Examinations.

The number of cases seen during the year again shows an increase ; the totals for the last six years are as follows :—

Year Ended July.	Systematic Examinations.	Special Cases.	Totals.	Including Inspected in Class-Rooms.
1930 . . . . .	19,354	31,213	50,567	...
1931 . . . . .	19,175	32,173	51,348	...
1932 . . . . .	20,334	32,658	52,992	...
1933 . . . . .	15,810	60,429	76,239	25,189
1934 . . . . .	15,896	61,560	77,456	21,426
1935 . . . . .	14,785	69,839	84,624	27,098

Last year's diminution in "Systematic Examinations" occurred in Merchant Company, Royal High and Special schools ; actually, in the Municipal schools there was a slight increase.

Other increases occurred in : class-room inspections, Special Cases in schools and clinics, employed children, free milk cases and diphtheria immunisation.



## Defect Notices.

Notices of "defects" were issued to parents as follows:—

At Systematic examinations . . . . .	2,931
At Class-room inspections . . . . .	5,351
At Vision and hearing tests of 7-year-olds . . . . .	510
	8,792

It is of interest to note that defect notices were issued in the proportion of 1 in 5 at systematic examinations ; 1 in 4·9 at class-room inspections and 1 in 8·6 at vision and hearing tests of 7-year-olds.

While 690 of the notices referred to dirty and verminous conditions, it must be remembered that our standards have risen materially of recent years and that in only 40 of these cases was it necessary to resort to statutory warning notices.

### "Running Ears."

There would appear to be no diminution of otorrhœa among infants entering school for the first time. In 1925, 0·7 per cent. had this defect. Since then the percentage has been about 0·8 except in 1926 when it was 1·6 and in 1933 when it was 1·2. No direct relation between the incidence of this condition and the prevalence of its commonest cause—scarlet fever—can be traced. But parents cannot be too strongly urged to persist with treatment in pre-school years because the condition militates severely against a child's educational advancement.

It is of interest to note that the condition seems more prevalent in the Leith area. Since amalgamation the proportion of otorrhœa cases to all others seen by the Aural Specialists has always been higher in Leith than in Edinburgh. Whether this is due to fewer facilities for hospital advice or to failure of parents to seek such advice it is difficult to say.

### Dental Care.

It is pleasing to record the steady increase among school children of dentally "clean mouths"—that is, mouths without sepsis or dental decay.

Among children inspected by the Dental Surgeons in schools in the Edinburgh area the percentage "clean" in 1915 was 12 ; in 1925, 15·3 ; and in 1935, 27·8. In Leith the figures are more erratic—in 1914, 10·3 ; in 1925, 13·4 ; in 1931, 21·2 ; in 1935, 17·5.

Still, Edinburgh children lose over 20,000 teeth, by extraction, each year at the School Dental Clinics.

It is to be regretted that more 12-year-olds do not accept treatment. Apparently, at this age they dictate to their parents, ignoring the fact that one or two small stoppings would preserve an almost perfect set of teeth for years to come.



## Medical Inspection.

The method of medical inspection in Edinburgh consists of (1) routine examination of all new entrants; (2) routine examination of children in their 13th year; (3) (a) inspection of other children in their class-rooms, and (b) full examination of doubtful cases "selected" at class-room inspections.

### Class-Room Inspections.

There were inspected in class-rooms 27,098 children (boys, 13,805; girls, 13,293) of varying ages. For these, 5,351 notices (19.7 per cent.) to parents of defects were given at once—(boys, 1,573 or 29.4 per cent.; girls, 3,778 or 70.6 per cent.).

In addition, 529 (boys, 276; girls, 253) were selected for further examination; so far, 233 (boys, 107; girls, 126) of these have been examined and 111 further notices (47.6 per cent.) were given; a total of 5,462. Further, 75 (boys, 33; girls, 42) were placed under medical supervision.

### Vision and Hearing in 7-Year-Olds.

Under the present scheme, the first routine testing of vision and hearing is held at age 7 instead of age 9 as formerly was the case. The statistics of these tests are as follow :—

Total numbered examined . . . . .	4,434 (boys, 2,174; girls, 2,260)
No. found defective . . . . .	815 or 18.4 per cent.
Vision . . . . .	758 (boys, 47.5 per cent.; girls, 52.5 per cent.)
Hearing . . . . .	57 (boys, 45.6 per cent.; girls, 54.4 per cent.)
No. referred to the Medical Officer . . . . .	220
Vision . . . . .	191 (boys, 50 per cent.; girls, 50 per cent.)
Hearing . . . . .	29 (boys, 44.8 per cent.; girls, 55.2 per cent.)
No. of Cards issued . . . . .	510
Vision . . . . .	489 (boys, 46.4 per cent.; girls, 53.6 per cent.)
Hearing . . . . .	21 (boys, 42.9 per cent.; girls, 57.1 per cent.)

### Diphtheria Immunisation.

There was continued, during the year, voluntary immunisation of infant entrants against diphtheria. 2,088 children were inoculated—1,018 with 3 injections of Formol Toxoid and 1,070 with 1 injection of Alum Precipitated Toxoid.

### Organisation and Administration.

System of medical inspection. The following groups of pupils are examined :—

#### *In Primary Schools—*

- (a) Newly enrolled infants.
- (b) Sub-leavers (in 13th year).
- (c) Remainder inspected in class-rooms.

#### *In Intermediate and Secondary Schools—*

- (a) Twelve-year-old pupils.
- (b) Sixteen-year-old pupils.



Schools are visited at regular intervals during the session by the same doctor and the same nurse. The larger schools are visited once a fortnight, small schools every three or four weeks.

### **Number of Visits to Schools for Systematic Examination in accordance with Scheme of Inspection.**

The total number of visits paid to schools in connection with routine examinations was 1,439.

At each visit to schools for routine inspection, a certain time is devoted to the examination of any pupils presented by the Head Master or sent by Attendance Officers; these pupils constitute the "special" cases mentioned in the report. In addition, Monday forenoons and Wednesday afternoons are devoted to the examination at Lauriston Place Treatment Centre of cases sent up by the Chief Attendance Officer, and to cases requiring more detailed examination. Similar cases are examined at Links Place Treatment Centre on Wednesday afternoons.

All the Special Schools are visited at regular intervals.

**Nurses.**—The total number of nurses employed on school work is sixteen. Six assist at school inspection, four are attached to Special Schools, and six to the Treatment Centres.

*Duties in Schools.*—In addition to assisting at routine inspections, where 1,359 visits were paid to schools, 4,745 special examinations were made in schools by the nurses in connection with neglect cases; the testing of vision and hearing of 4,434 children was also carried out by the nurses.

*Home Visitation.*—The nurses paid 944 visits to homes.

**Arrangements for "Following Up."**—In connection with dirty and verminous conditions, 609 notices were issued from schools. These cases are visited by the nurses, usually with satisfactory results, but it was found necessary to serve statutory warning notices on 30 parents.

*Insufficient Food, Boots, or Clothing.*—Warning notices are sent from schools regarding these conditions, and when application is made by parents for assistance, either for food or clothing, a full inquiry is made into the case by a committee, which decides whether the case is one of poverty and deserving relief, or one of neglect to be dealt with by statutory notice, etc.

*Education Committee's Feeding Scheme.*—Details regarding this scheme are given later in the report.

*Clothing of Necessitous Children.*—Requirements as regards clothing and boots for necessitous children continue to be met by the operations of the Police-Aided clothing scheme and other charitable agencies. Details are given later in the Report.

The following table shows the number of warning notices under section 6 of the 1908 Act served upon parents for the various forms of neglect:—



Form of Neglect.	Number of Notices served.
Insufficient Boots and Clothing . . . . .	8
Dirt and Vermin . . . . .	30
Neglect of Medical Treatment . . . . .	6
	44
	—

### Humbie Holiday Home.

During the year, the arrangement for accommodating delicate and convalescent children at Stichill Holiday Home was terminated, and temporary arrangements were made for their residence in Humbie Holiday Home. The Education Committee meets the cost of maintenance, a contribution being made towards this by the parents according to their circumstances. The Education Committee is also responsible for the educational provision at the Home, and two teachers are in residence there. The question of making alternative arrangements for convalescent children is still under consideration.

*Hard of Hearing.*—The question of the Committee themselves making provision for deaf-mute children is still in abeyance, pending consideration of proposals by the Educational Endowments Commission. Arrangements, however, have been made to provide facilities for children who are hard-of-hearing. The teacher-in-charge will inaugurate classes in lip-reading and initiate instruction for other teachers.

*Stammering.*—The Committee's scheme for stammering children was inaugurated in January, 1935. A full-time teacher conducts classes in five centres. Each class meets twice weekly for two hours and has seven pupils in average attendance. The co-operation of teachers and parents, and the progress made by the pupils have been highly encouraging. At December, 1935, 65 children were in attendance and there was a waiting list of 38. During the year 5 children were discharged completely cured and 9 sufficiently improved to resume ordinary school work under the supervision of their class-teachers.

**Infectious Diseases.**—The following table gives the total number of children absent during the session owing to various infectious diseases, showing actual cases and contacts. In the table the monthly totals are shown.

### Absence Due to Infectious Disease.

	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Totals.	Per cent. of Totals.	Actual Cases.	Contacts.
Scarlet Fever . . . . .	198	221	235	140	121	105	129	67	178	108	53	1,555	15.7	867	688
Diphtheria . . . . .	87	78	91	97	78	75	77	35	99	45	14	776	7.8	353	423
Measles . . . . .	21	27	19	12	10	24	73	92	87	127	112	604	6.0	496	108
Whooping Cough . . . . .	66	28	63	71	222	229	319	216	305	197	151	1,867	18.9	1,822	45
Chickenpox . . . . .	18	50	150	116	170	163	223	120	272	495	291	2,068	20.9	1,796	272
Mumps . . . . .	53	114	271	113	132	142	145	97	86	74	25	1,252	12.7	968	284
Skin Diseases . . . . .	66	165	253	95	126	127	143	61	164	100	72	1,372	13.9	1,372	...
Ringworm . . . . .	7	11	11	6	5	9	11	11	21	11	15	118	1.2	118	...
Itch . . . . .	74	28	30	14	6	22	24	6	4	22	12	242	2.5	242	...
Eye Diseases . . . . .	4	5	6	2	6	4	2	2	7	3	2	43	0.4	43	...
Totals . . . . .	594	727	1,129	666	876	900	1,146	707	1,223	1,182	747	9,897	100.0	8,077	1,820



**Presence of Parents at Inspection.**—The number of parents present at the routine inspection was 6,063 for the 11,679 pupils examined—51·9 per cent.

## THE PHYSICAL CONDITION OF THE SCHOOL CHILDREN.

### Total Number of Children Examined.

#### (a) At Systematic Examinations.

		No. of Examinations.
Infants . . .	Boys, 2,944 ; Girls, 2,977 = 5,921	
12-year-olds . . .	„ 2,561 ; „ 2,863 = 5,424	
16-year-olds . . .	„ 171 ; „ 163 = 334	
	—	11,679
<i>Nursery Schools—</i>		
Lochrin . . .	Boys, 16 ; Girls, 29 = 45	
Tynecastle . . .	„ 17 ; „ 5 = 22	
	—	67
Merchant Company Schools . . . . .		1,302
Royal High . . . . .		127
Royal High (Preparatory) . . . . .		106
Special Schools : Examinations and Re-examinations . . . . .		1,504
	—	14,785

#### (b) Special Cases.

Psychological Examinations . . . . .	249
Special Cases at Schools . . . . .	11,624
Special Cases at Clinics . . . . .	10,262
Neglect Cases . . . . .	4,745
Children, aged 7, examined <i>re</i> Vision and Hearing . . . . .	4,434
Class Inspections . . . . .	27,098
Re-examinations . . . . .	3,202
Examinations in connection with Employment Act . . . . .	*2,461
Children for Stichill and Humbie . . . . .	291
Children at Stichill and Humbie . . . . .	600
In connection with Milk Scheme . . . . .	†2,785
Children immunised against Diphtheria . . . . .	2,085
	—
	69,839
Total Number of Examinations . . . . .	84,624

\* Of this number, 17 were found to be medically unfit, and were dismissed from their employment.

† Of this number, 1,200 were recommended for Free Milk.

### Number of Children Notified to Parents as Suffering from Defects.

At systematic examinations, 2,931 notices were issued. Of these, 848 or 28·9 per cent. were in connection with defective vision ; 586 or 20·0 per cent. for tonsils and adenoids, otorrhœa, etc. ; 709 or 24·2 per cent. for teeth ; 609 or 20·8 per cent. for dirty or verminous condition of head ; 179 or 6·1 per cent. for other conditions. If the number of notices given at class-room inspections and hearing and vision tests be added, the total is 8,792.

### Supervision.

Of the 11,624 special cases seen at schools, 229 were re-examined, and 121 or 52·4 per cent. were cured or improved.



At routine examinations, 1,795 cases were placed under medical supervision. For these, there were 2,740 re-examinations and 1,693 or 61·7 per cent. were cured or improved.

### Insufficiency of Clothing and Footgear.

The Committee of the Police-Aided Scheme supplied boots and clothing to 6,200 children. Through the kindness of the Leith Provident Society, 95 pairs of boots were supplied to necessitous children; 111 children were supplied with boots by the Education Committee on condition that they were paid for by the parents; boots and clothing were supplied to 42 necessitous children under Section 6 of the 1908 Act; from the Flora Stevenson Fund, 121 pairs of boots were distributed.

### Heights and Weights

	Number Examined.	Average Height in Inches.	Average Weight in Pounds.
<i>Boys—</i>			
Infants . . . . .	2,874	42·2	41·1
12-year-olds . . . . .	2,319	56·6	78·5
16-year-olds . . . . .	115	64·9	118·2
<i>Girls—</i>			
Infants . . . . .	2,864	42·0	39·7
12-year-olds . . . . .	2,633	57·2	80·0
16-year-olds . . . . .	160	63·6	111·7

### Cleanliness of Head.

	Number Examined.	Nits.		Verminous.		Dirty.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Boys—</i>							
Infants . . . . .	2,944	69	2·3	7	0·2	3	0·1
12-Year-Olds . . . . .	2,561	19	0·7	1	0·04	1	0·04
16-Year-Olds . . . . .	171	...	...	...	...	...	...
<i>Girls—</i>							
Infants . . . . .	2,977	294	9·8	14	0·4	12	0·4
12-Year-Olds . . . . .	2,863	324	11·3	6	0·2	3	0·1
16-Year-Olds . . . . .	163	...	...	...	...	...	...
<b>Total . . . . .</b>	<b>11,679</b>	<b>706</b>	<b>6·0</b>	<b>28</b>	<b>0·2</b>	<b>19</b>	<b>0·1</b>

### Cleanliness of Body.

	Number Examined.	Dirty.		Verminous.	
		Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>					
Boys . . . . .	2,944	5	0·2	2	0·06
Girls . . . . .	2,977	1	0·03	...	...
<i>12-Year-Olds—</i>					
Boys . . . . .	2,561	2	0·07	1	0·03
Girls . . . . .	2,863	2	0·06	...	...
<i>16-Year-Olds—</i>					
Boys . . . . .	171	...	...	...	...
Girls . . . . .	163	...	...	...	...
<b>Total . . . . .</b>	<b>11,679</b>	<b>10</b>	<b>0·09</b>	<b>3</b>	<b>0·02</b>



## Condition of Skin.

## (a) Head.

	Number Examined.	Ringworm.		Impetigo.		Others.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>							
Boys . . . . .	2,944	1	0.03	9	0.3	12	0.4
Girls . . . . .	2,977	4	0.1	15	0.5	5	0.1
<i>12-Year-Olds—</i>							
Boys . . . . .	2,561	...	...	3	0.1	7	0.2
Girls . . . . .	2,863	...	...	22	0.8	12	0.4
<i>16-Year-Olds—</i>							
Boys . . . . .	171	...	...	...	...	...	...
Girls . . . . .	163	...	...	...	...	1	0.6
Total . . . . .	11,679	5	0.04	49	0.4	37	0.3

## (b) Body.

	Number Examined.	Ringworm.		Impetigo.		Others.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>							
Boys . . . . .	2,944	...	...	...	...	33	1.1
Girls . . . . .	2,977	1	0.03	1	0.03	24	0.8
<i>12-Year-Olds—</i>							
Boys . . . . .	2,561	...	...	...	...	52	2.0
Girls . . . . .	2,863	...	...	...	...	28	1.0
<i>16-Year-Olds—</i>							
Boys . . . . .	171	...	...	...	...	5	2.9
Girls . . . . .	163	...	...	...	...	3	1.8
Total . . . . .	11,679	1	0.01	1	0.01	145	1.2

## Nutrition.

	Number examined.	Above Average.		Average.		Below Average.		Bad Nutrition.	
		Number.	Per Cent.	Number.	Per Cent.	Number	Per Cent.	Number.	Per Cent.
<i>Infants—</i>									
Boys . . . . .	2,944	753	25.5	1,897	64.5	292	9.9	2	0.06
Girls . . . . .	2,977	585	19.7	1,980	66.5	411	13.8	1	0.03
<i>12-Year-Olds—</i>									
Boys . . . . .	2,561	608	23.7	1,692	66.1	259	10.1	2	0.1
Girls . . . . .	2,863	756	26.4	1,848	64.5	257	9.0	2	0.06
<i>16-Year-Olds—</i>									
Boys . . . . .	171	81	47.3	87	50.9	3	1.8	...	...
Girls . . . . .	163	68	41.7	92	56.5	3	1.8	...	...
Total	11,679	2,851	24.4	7,596	65.0	1,225	10.5	7	0.06



## Teeth.

	Number examined.	Sound.		1-4 Decayed.		5 or more Decayed.		Oral Sepsis.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>									
Boys .	2,944	789	26.8	1,887	64.1	268	9.1	13	0.4
Girls .	2,977	823	27.7	1,881	63.2	273	9.1	46	1.5
<i>12-Year-Olds—</i>									
Boys .	2,561	1,071	41.8	1,398	54.6	92	3.6	12	0.4
Girls .	2,863	1,146	40.0	1,625	56.8	92	3.2	9	0.3
<i>16-Year-Olds—</i>									
Boys .	171	91	53.2	71	41.5	9	5.2	3	1.7
Girls .	163	58	35.6	95	58.3	10	6.1	2	1.2
<b>Total</b>	<b>11,679</b>	<b>3,978</b>	<b>34.0</b>	<b>6,957</b>	<b>59.5</b>	<b>744</b>	<b>6.4</b>	<b>85</b>	<b>0.7</b>

## Nose, Throat and Glands.

## (a) Nose.

	Number Examined.	Catarrh.		Obstruction.		Other Diseases.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>							
Boys .	2,944	206	7.0	18	0.6	...	...
Girls .	2,977	152	5.1	13	0.4	...	...
<i>12-Year-Olds—</i>							
Boys .	2,561	31	1.2	10	0.4	3	0.1
Girls .	2,863	27	0.9	5	0.2	4	0.1
<i>16-Year-Olds—</i>							
Boys .	171	1	0.4	...	...	...	...
Girls .	163	1	0.6	...	...	...	...
<b>Total . . . . .</b>	<b>11,679</b>	<b>418</b>	<b>3.5</b>	<b>46</b>	<b>0.4</b>	<b>7</b>	<b>0.06</b>

## (b) Throat.

	Number examined.	Tonsils.				Adenoids.				Other Diseases.	
		Slightly Enlarged.		Markedly Enlarged.		Probably Present.		Present.			
		No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.
<i>Infants—</i>											
Boys .	2,944	643	21.8	205	6.9	175	5.9	35	1.1	...	...
Girls .	2,977	592	19.8	210	7.0	161	5.4	44	1.5	...	...
<i>12-Year-Olds—</i>											
Boys .	2,561	296	11.5	48	1.8	29	1.1	5	0.1	...	...
Girls .	2,863	370	12.9	76	2.7	28	1.0	3	0.1	...	...
<i>16-Year-Olds—</i>											
Boys .	171	13	7.6	...	...	...	...	...	...	...	...
Girls .	163	16	9.8	...	0.6	...	0.6	...	...	...	...
<b>Total . . . . .</b>	<b>11,679</b>	<b>1,930</b>	<b>16.4</b>	<b>540</b>	<b>4.6</b>	<b>394</b>	<b>3.4</b>	<b>87</b>	<b>0.7</b>	<b>...</b>	<b>...</b>



(c) *Lymphatic Glands.*(1) *Submaxillary Glands.*

	Number Examined.	Palpably Enlarged.		Markedly Enlarged.		Cicatrices.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>							
Boys . . . . .	2,944	95	3·2	2	...	2	0·06
Girls . . . . .	2,977	90	3·0	...	0·06	1	0·03
<i>12-Year-Olds—</i>							
Boys . . . . .	2,561	36	1·4	1	0·04	3	0·1
Girls . . . . .	2,863	28	1·0	1	0·03	3	0·09
<i>16-Year-Olds—</i>							
Boys . . . . .	171	...	...	...	...	...	...
Girls . . . . .	163	...	...	...	...	...	...
Total . . . . .	11,679	249	2·1	4	0·03	9	0·07

(2) *Cervical Glands.*

	Number examined.	Palpably Enlarged.		Markedly Enlarged.		Suppurating.		Cicatrices.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>									
Boys . . . . .	2,944	245	8·3	7	0·2	...	...	3	0·1
Girls . . . . .	2,977	217	7·2	6	0·2	...	...	5	0·1
<i>12-Year-Olds—</i>									
Boys . . . . .	2,561	85	3·3	4	0·1	...	...	17	0·6
Girls . . . . .	2,863	58	2·0	2	0·06	...	...	11	0·4
<i>16-Year-Olds—</i>									
Boys . . . . .	171	3	1·8	...	...	...	...	3	1·8
Girls . . . . .	163	2	1·2	...	...	...	...	3	1·8
Total	11,679	610	5·2	19	0·1	...	...	42	0·3

**External Eye Diseases.**

	Number examined.	Blepharitis.		Conjunctivitis.		Corneal Opacities.		Strabismus.		Other Diseases.	
		No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.
<i>Infants—</i>											
Boys . . . . .	2,944	10	0·3	4	0·1	1	0·03	99	3·3	9	0·3
Girls . . . . .	2,977	10	0·3	11	0·3	1	0·03	115	3·8	8	0·2
<i>12-Year-Olds—</i>											
Boys . . . . .	2,561	8	0·3	4	0·1	...	...	55	2·1	8	0·3
Girls . . . . .	2,863	4	0·1	6	0·2	5	0·2	56	1·9	3	0·1
<i>16-Year-Olds—</i>											
Boys . . . . .	171	...	...	...	...	...	...	3	1·8	...	...
Girls . . . . .	163	...	...	...	...	1	0·6	4	2·4	...	...
Total . . . . .	11,679	32	0·3	25	0·2	8	0·07	332	2·8	28	0·2



## Visual Acuity.

	Number Examined.	Good—6/6.		Fair—6/9 and 6/12.		Bad—6/18 and worse	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>12-Year-Olds—</i>							
Boys . . . . .	2,561	1,974	77·1	353	13·8	234	9·1
Girls . . . . .	2,863	2,190	76·5	428	14·9	245	8·5
<i>16-Year-Olds—</i>							
Boys . . . . .	171	129	75·4	28	16·4	14	8·2
Girls . . . . .	163	122	74·9	25	15·3	16	9·8
Total . . . . .	5,758	4,415	76·7	834	14·5	509	8·8

## Ears.

	Number Examined.	Otorrhœa.		Wax.		Other Diseases.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>							
Boys . . . . .	2,944	26	0·8	16	0·5	7	0·2
Girls . . . . .	2,977	22	0·7	15	0·5	...	...
<i>12-Year-Olds—</i>							
Boys . . . . .	2,561	18	0·7	8	0·3	1	0·04
Girls . . . . .	2,863	15	0·5	6	0·2	8	0·2
<i>16-Year-Olds—</i>							
Boys . . . . .	171	...	...	...	...	...	...
Girls . . . . .	163	...	...	...	...	...	...
Total . . . . .	11,679	81	0·7	45	0·4	16	0·1

## Hearing.

	Number Examined.	Slightly Deaf.		Markedly Deaf.	
		Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>					
Boys . . . . .	2,944	11	0·3	...	...
Girls . . . . .	2,977	8	0·2	...	...
<i>12-Year-Olds—</i>					
Boys . . . . .	2,561	15	0·5	1	0·04
Girls . . . . .	2,863	6	0·2	...	...
<i>16-Year-Olds—</i>					
Boys . . . . .	171	1	0·4	...	...
Girls . . . . .	163	...	...	...	...
Total . . . . .	11,679	41	0·3	1	0·009

## Speech.

	Number Examined.	Defective Speech.		Stammering.	
		Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>					
Boys . . . . .	2,944	18	0·6	6	0·2
Girls . . . . .	2,977	11	0·3	...	...
<i>12-Year-Olds—</i>					
Boys . . . . .	2,561	5	0·1	8	0·3
Girls . . . . .	2,863	1	0·03	3	0·1
<i>16-Year-Olds—</i>					
Boys . . . . .	171	...	...	1	0·4
Girls . . . . .	163	...	...	...	...
Total . . . . .	11,679	35	0·3	18	0·1



## Mental Condition.

	Number Examined.	Dull or Backward.	
		Number.	Per Cent.
<i>Infants—</i>			
Boys . . . . .	2,944	5	0.1
Girls . . . . .	2,977	5	0.1
<i>12-Year-Olds—</i>			
Boys . . . . .	2,561	5	0.1
Girls . . . . .	2,863	2	0.06
<i>16-Year-Olds—</i>			
Boys . . . . .	171	...	...
Girls . . . . .	163	...	...
Total . . . . .	11,679	17	0.1

## Heart and Circulation.

	Number examined.	Organic Heart Disease.				Functional Disorder.		Anæmia.	
		Congenital.		Acquired.		Number.	Per Cent.	Number.	Per Cent.
		Number.	Per Cent.	Number.	Per Cent.				
<i>Infants—</i>									
Boys . . . . .	2,944	6	0.2	23	0.7	21	0.7	48	1.6
Girls . . . . .	2,977	8	0.2	15	0.5	25	0.8	37	1.2
<i>12-Year-Olds—</i>									
Boys . . . . .	2,561	3	0.1	38	1.4	8	0.3	33	1.2
Girls . . . . .	2,863	2	0.06	45	1.5	21	0.7	38	1.3
<i>16-Year-Olds—</i>									
Boys . . . . .	171	...	...	3	1.8	...	...	...	...
Girls . . . . .	163	1	0.6	...	...	...	...	1	0.6
Total	11,679	20	0.1	124	1.0	75	0.6	157	1.3

## Lungs.

	Number examined.	Chronic Bronchitis.		Tuberculosis.		Suspected Tuberculosis.		Other Diseases.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>									
Boys . . . . .	2,944	43	1.4	1	0.03	4	0.1	83	2.8
Girls . . . . .	2,977	18	0.6	...	...	2	0.06	67	2.2
<i>12-Year-Olds—</i>									
Boys . . . . .	2,561	10	0.4	...	...	5	0.1	38	1.4
Girls . . . . .	2,863	2	0.06	1	0.03	1	0.03	27	0.9
<i>16-Year-Olds—</i>									
Boys . . . . .	171	...	...	...	...	...	...	...	...
Girls . . . . .	163	1	0.6	...	...	...	...	...	...
Total	11,679	74	0.6	2	0.01	12	0.1	215	1.8



## Nervous System.

	Number examined.	Epilepsy.		Chorea.		Infantile Paralysis.		Other Diseases.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>									
Boys .	2,944	1	0.03	...	...	1	0.03	3	0.1
Girls .	2,977	3	0.1	1	0.03	2	0.06	12	0.4
<i>12-Year-Olds—</i>									
Boys .	2,561	2	0.07	...	...	1	0.04	1	0.04
Girls .	2,863	...	...	2	0.06	2	0.06	6	0.2
<i>16-Year-Olds—</i>									
Boys .	171	...	...	...	...	...	...	...	...
Girls .	163	...	...	...	...	...	...	...	...
Total	11,679	6	0.05	3	0.02	6	0.05	22	0.2

## Tuberculosis.

	Number examined.	Glands.		Bones and Joints.		Abdominal.		Other Forms.	
		Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>									
Boys .	2,944	...	...	6	0.2	2	0.06	...	...
Girls .	2,977	4	0.1	1	0.03	1	0.03	...	...
<i>12-Year-Olds—</i>									
Boys .	2,561	1	0.04	4	0.1	...	...	...	...
Girls .	2,863	2	0.06	1	0.03	...	0.03	...	...
<i>16-Year-Olds—</i>									
Boys .	171	...	...	...	...	...	...	...	...
Girls .	163	...	...	1	0.6	1	0.6	...	...
Total	11,679	7	0.06	13	0.1	5	0.04	...	...

## Rickets.

	Number Examined.	Slight.		Marked.	
		Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>					
Boys . . . .	2,944	65	2.2	3	0.1
Girls . . . .	2,977	30	1.0	7	0.2
<i>12-Year-Olds—</i>					
Boys . . . .	2,561	19	0.7	3	0.1
Girls . . . .	2,863	3	0.1	3	0.1
<i>16-Year-Olds—</i>					
Boys . . . .	171	...	...	...	...
Girls . . . .	163	...	...	...	...
Total	11,679	117	1.0	16	0.1



## Deformities.

	Number Examined.	Congenital.		Acquired.	
		Number.	Per Cent.	Number.	Per Cent.
<i>Infants—</i>					
Boys . . . . .	2,944	10	0·3	23	0·7
Girls . . . . .	2,977	14	0·4	16	0·5
<i>12-Year-Olds—</i>					
Boys . . . . .	2,561	14	0·5	21	0·8
Girls . . . . .	2,863	5	0·2	5	0·2
<i>16-Year-Olds—</i>					
Boys . . . . .	171	...	...	3	1·8
Girls . . . . .	163	...	...	...	...
Total . . . . .	11,679	43	0·3	68	0·5

## Infectious or Contagious Diseases.

(These are given under Skin Diseases and Tuberculosis.)

## Vaccination.

	Number Examined.	No Mark.	
		Number.	Per Cent.
<i>Infants—</i>			
Boys . . . . .	2,944	630	21·3
Girls . . . . .	2,977	632	21·2
<i>12-Year-Olds—</i>			
Boys . . . . .	2,561	408	15·9
Girls . . . . .	2,863	415	14·4
<i>16-Year-Olds—</i>			
Boys . . . . .	171	23	13·4
Girls . . . . .	163	16	9·8
Total . . . . .	11,679	2,124	18·1

## SPECIAL SCHOOLS AND CLASSES.

*Special Schools.*—The following is a list of the Special Schools and Classes which were open during the session, and the number of pupils on the roll as at the close of the session :—

<i>For Mentally Defective Children—</i>		<i>For Physically Defective Children—</i>	
Balfour Place . . . . .	202	Clarebank . . . . .	144
Duncan Street . . . . .	95	Duncan Street . . . . .	71
St. Christopher's . . . . .	99	Gorgie . . . . .	136
St. Nicholas . . . . .	93	Willowbrae . . . . .	132
	489		483
<i>For Ineducable Children—</i>		<i>For Children Suffering from Ringworm—</i>	
Slateford Occupation Centre . . . . .	79	Lauriston Place . . . . .	14



<i>For Delicate Children—</i>		<i>For Cripple Children—</i>	
Humbie . . . . .	18	Challenger Lodge . . . . .	*23
	<u>    </u>	Douglas Home . . . . .	†24
<i>For Children Suffering from High Myopia—</i>		Taught at home by Visiting Teachers . . . . .	20
Myopia School . . . . .	60		<u>    </u>
	<u>    </u>		67
<i>For Children Suffering from Tuberculosis—</i>		<i>For Stammering Children—</i>	
Colinton Mains Hospital Class. . . . .	22	5 Centres . . . . .	54
	<u>    </u>		<u>    </u>

\* Of this number, the Education Committee paid for the maintenance of 2.

† „ „ „ „ „ „ „ 5.

### Physically Defective Children.

There were 483 pupils on the roll at the end of the session classed as physically defective. The following is a rough classification of the defects found :—

Paralysis of various types . . . . .	33
Tubercular diseases of—	
Bones . . . . .	8
Hip Joint . . . . .	9
Abdomen . . . . .	10
Glands . . . . .	16
Spinal Cases . . . . .	10
Rickets . . . . .	29
Accidents . . . . .	9
Heart Affections . . . . .	86
Speech defects . . . . .	11
Otorrhœa and Deafness . . . . .	16
Lung Disease (bronchitis and pre-tubercular cases) . . . . .	108
Defective vision . . . . .	6
Malnutrition . . . . .	8
Other conditions . . . . .	124
	<u>    </u>
	483
	<u>    </u>

One hundred and sixty-two pupils left during the session. The reasons for leaving were :—Returned to ordinary schools, 35 ; transferred to other special schools, 40 ; over age, 57 ; medically exempted, 20 ; left district, 4 ; sent to institutions, 4 ; granted exemption, 2.

### Mentally Defective Children.

*Investigation of Cases.*—Children are referred for investigation with regard to mental deficiency from many sources, including :—Head Teachers, Medical Officers, Hospitals, Police Courts, Clinics and outside Societies. A report from the Head Teacher is obtained on prescribed forms and the child then examined medically and tested psychologically. All the reports are considered and recommendations made to the Education Committee who decide as to the child's disposal—whether ineducable, for Institution, Special School, or otherwise.



The number of cases examined psychologically and reported on during the session was 249.

The disposal of these was as follows :—

Passed for Special Schools . . . . .	43
Passed for Special Schools (on probation) . . . . .	8
Considered dull . . . . .	*120
Considered backward . . . . .	†13
Continued for further consideration . . . . .	‡49
Considered ineducable . . . . .	§16
	<hr/>
	249
	<hr/>

\* 1 of this number was recommended for P.D. School.

† 3 of this number were recommended for P.D. School.

‡ 6 of this number were recommended for P.D. School.

§ 9 of this number were considered suitable for Occupation Centre.

There were 489 mentally defective pupils on the roll at the end of the session. These have been classed according to the progress made during the session :—

Good . . . . .	254 or 52.0 per cent.
Fair . . . . .	166 „ 33.9 „
Little progress . . . . .	69 „ 14.1 „

Ninety pupils left during the session. The reasons for leaving were as follows :— transferred to other special schools, 17 ; sent to Institution, 11 ; over age, 41 ; medically exempted, 8 ; left district, 6 ; granted temporary exemption before attaining 16 years, 2 ; ineducable, 4 ; returned to ordinary school, 1.

The temporary exemption granted is conditional upon satisfactory reports at specified intervals being received from the Medical and Attendance Departments ; the pupil's name is not removed from the school roll.

In the case of pupils leaving to go to work, inquiry is made by the teacher as to the nature of the work, and advice given as to the work for which the pupil is best suited.

The number of educable defective children maintained by the Education Committee in certified Institutions is as under :—

	Boys.	Girls.
Baldovan . . . . .	1	...
Larbert . . . . .	3	1
Waverley Park . . . . .	...	1
St. Joseph's R.C. . . . .	4	3
Gogarburn . . . . .	14	1
	<hr/>	<hr/>
	22	6
	} 28	
	—	



## Blind and Partially Blind Children and Deaf and Mute Children.

*Blind, Deaf-Mute and Epileptic Children.*—Blind and deaf-mute children are dealt with under the powers of the Education of Blind and Deaf-Mute Children (Scotland) Act, 1890, and epileptic children under the Education of Defective Children (Scotland) Act, 1906, as read with the Education Acts of 1908 and 1918. As the Education Committee have no schools under their management for the education of such children, they are sent to special institutions. The following shows the institutions to which children have been sent, and the number of children maintained there by the Education Committee as at the end of the session :—

	Boys.	Girls.
Royal Blind Asylum, Edinburgh . . . . .	8	7
Deaf and Dumb Institution, Edinburgh . . . . .	12	12
Donaldson's Hospital, Edinburgh . . . . .	5	6
St. Vincent's R.C. School, Glasgow . . . . .	1	1
Colony for Epileptics, Bridge of Weir . . . . .	2	1
	28	27
	} 55	
	—	

*Blind Persons' Act, 1920.*—The Education Committee are responsible for the technical training at the Royal Blind Asylum workshops of 8 adult blind persons (6 men and 2 women). The training consists of basket-making, brush-making, and mat-making for men, and machine-knitting for women; in the case of special men trainees instruction in piano-tuning is given, and in the case of special women trainees instruction in massage.

### Pupils Suffering from Ringworm and Favus.

*Lauriston Place Special School.*—This school has accommodation for 60 pupils, and during the session 52 pupils attended, 37 being sent out cured. Of the 37 cases cured, 7 had X-ray treatment, 3 drug treatment, and 15 thallium acetate treatment, and 12 had both X-ray and thallium treatment.

## Arrangements for Physical Education and Personal Hygiene of Children.

### PHYSICAL EDUCATION.

Physical education is included in the syllabus of all the Education Committee's schools. In the elementary schools, the instruction is given by class and visiting teachers in accordance with the Board of Education Syllabuses of Physical Exercises, and Physical Exercises for infant classes. In the intermediate and secondary schools



the instruction is given by specialist teachers of physical education. The staff consists of a Superintendent, Assistant Superintendent, and 29 assistant teachers (17 women and 12 men). The whole of the physical education, including swimming, in both day and evening schools, is under the direct supervision of the Superintendent. All exercises, as far as possible, are carried out in the open air.

## BATHS.

### *Swimming.*

There are six school baths and the staff for these consists of six teachers. In addition, six Corporation baths and the attendant instructors are extensively utilised.

## Arrangements for Feeding of Children.

### *Administration.*

Under the Education Committee's present arrangement, dinners are supplied to three groups of children :—(1) necessitous, supplied free ; (2) pupils whose parents pay at the rate of 1½d. per dinner ; (3) a special two-course dinner at a higher rate for special schools and some of the secondary schools.

*Supply of Milk to School Children.*—It has now been clearly demonstrated that the addition of milk to the diet of children has a striking effect in the improvement of physical and general health and increased mental alertness. The Education Committee's scheme for the supply of milk to school children continued to operate successfully during the year. A daily ration of milk was provided, free of charge, to 1,200 children on the free food roll at schools in congested districts and who were certified by the medical staff to be in need of additional nutriment, and to 23,711 children on the payment of cost. One hundred and one schools are now participating, and the total number of milk meals supplied during the year was 5,025,209, representing 209,386 gallons. The scheme is now limited to children in the infant and junior departments, except in the case of children receiving milk free of charge.

## Arrangements for Medical Treatment.

The medical treatment provided by the Education Committee is best described under two heads :—(1) work done at the treatment centres ; (2) arrangements made for the treatment of ringworm.

Clinics are held as under :—

1. Treatment Centres at 45 Lauriston Place, Edinburgh, and 5 Links Place, Leith.
2. Sub-Clinic at Niddrie : Medical Officer and Nurse once weekly.
3. Nurses' Sub-Clinics for minor ailments at Dalry School, St. John's School and Regent Road School twice weekly.
4. Nurses' Sub-Clinics at Special Schools (Balfour Place, Clarebank, Gorgie Special, St. Nicholas and St. Christopher's) twice weekly. A nurse attends daily at Duncan Street and Willowbrae Special Schools.
5. Occupation Centre : Nurse once weekly.



The following shows the number of cases and the number of attendances at these Clinics :—

	No. of Cases.	No. of Attendances.		No. of Cases.	No. of Attendances.
Lauriston . . . . .	4,045	17,021	St. John's . . . . .	392	1,155
Links Place . . . . .	3,639	13,188	Regent Road . . . . .	207	1,021
Niddrie . . . . .	803	1,718	Special Schools . . . . .	578	4,436
Dalry . . . . .	414	1,790	Occupation Centre . . . . .	184	563
	<u>8,901</u>	<u>33,717</u>		<u>1,361</u>	<u>7,175</u>

Totals : 10,262 Cases ; 40,892 Attendances.

The Staff at Lauriston Place Centre consists of :—(1) visiting medical officers ; (2) four dentists, one oculist, and one aurist (all part-time) ; (3) three whole-time nurses who assist the oculist, aurist and dentists, and, in addition, carry out treatment of minor ailments ; (4) one nurse for treatment of itch cases.

The Staff at Links Place Centre consists of :—(1) visiting medical officers ; (2) two dentists, one oculist, and one aurist (all part-time) ; (3) two whole-time nurses who assist oculist, aurist and dentists, and, in addition, carry out treatment of minor ailments ; (4) an attendant for treatment of itch cases.

Treatment is given free when the average weekly income of the family, after deducting house rent, does not exceed 10s. per head. In other cases, a charge of 2s. 6d. is made, this charge to cover any necessary treatment carried out at the Clinic for a period of a year. The amount received in payment for treatment during the session was £205 10s., representing 1,644 children.

Any necessary investigation is made by the Attendance Department.

*Ringworm.*—Children suffering from ringworm are by arrangement treated at the Royal Infirmary by X-rays or thallium acetate. A nurse attached to the special skin school carries out the after-treatment of these cases under the supervision of the Specialist in Diseases of the Skin.

*Treatment of Scabies.*—Provision is made at Lauriston Place and Links Place treatment centres for the treatment of scabies. Baths are fitted up, and a special nurse and attendant supervise the bathing and ointment treatment of the pupils. The pupils, their clothing, the house and bedding are disinfected when a cure is effected. The following are the results for the session, viz. :—*Lauriston Place Centre*—number cured :—Boys, 138 ; girls, 158—Total, 296. The number of attendances made was 2,226. *Links Place Centre*—number cured :—Boys, 87 ; girls, 105—Total, 192. The number of attendances made was 2,326. The number of children bathed and disinfected at the Public Disinfecting Station was :—Boys, 115 ; girls, 153—Total, 268 ; sets of clothing disinfected, 344 ; and beds, 14.

*Skin Diseases at Lauriston Treatment Centre.*—The number of children who were examined by the Skin Specialist was 146 (boys, 69 ; girls, 77), and the number of attendances was 337.



**Defective Vision and External Eye Diseases.**—The following are the oculists' reports on cases of defective vision, etc., detected by school doctors in the different schools and referred for further examination.

**Lauriston Place Treatment Centre.**—Altogether 2,104 children were examined for defective vision, of whom 1,424 were found to require glasses. The number of attendances was 2,896. In 113 cases lenses were not prescribed, either owing to the error of refraction being only of a slight degree or because, as some other disease of the eyes was present, little benefit would have been derived from glasses.

In addition to the children who attended for examination of their vision, a large number (417) were treated for external diseases of the eye, the total number of attendances for treatment being 3,060. The treatment is carried out by the school nurse, under the supervision of the oculist. In cases where the treatment could be carried out by the parents at home, they have been shown by the nurse how to apply it.

**Links Place Treatment Centre.**—In all, 909 cases were examined, making 1,063 attendances. A great proportion of these cases were pupils with defective vision. Lenses were not prescribed unless definite visual benefit or the relief of asthenopic symptoms was likely to result. Lenses were prescribed for 471 pupils.

In addition to the above, a large number of cases of external eye disease was seen. Treatment was carried out by the school nurse under the supervision of the oculist.

*Provision of Spectacles.*—1,175 pairs of spectacles were supplied during the year by the Education Committee; 320 pairs were given free, while 855 were paid for by the parents.

#### REPORTS BY AURISTS.

**Lauriston Place Treatment Centre.**—There were 689 examined—399 boys and 290 girls, the number of attendances for the session being 738.

The following conditions were found:—impacted cerumen, 161; chronic otitis media suppurativa, 175; enlarged tonsils and adenoids, 441.

Palliative remedies are employed at the clinic, such as syringing for discharge, wax, and foreign bodies, douching of nose, politzerisation, etc.

**Links Place Treatment Centre.**—There were 328 cases examined, making 461 attendances.

A record has been kept of the number of children seen at the school clinic and recommended for tonsil and adenoid operations, and who have been operated on at the Ear and Throat Department, Leith Hospital. The cases totalled 282.

It is interesting to note that, in future, children operated on for tonsils and adenoids will be supervised by their teachers in school, so that proper nose breathing after the operation will be assured.



## Defective Teeth.

The age-groups of pupils specially examined by the dentists are 6-year old, 9-year old, and 12-year old. The dentists visit the schools, examine all the children and note on charts the condition of the teeth. Where treatment is necessary, a card is sent to parents, and on their signing that they are unable otherwise to secure treatment, and that they consent to the necessary treatment being carried out, notices are issued telling them when to bring the child to the treatment centre.

The following is the record of work done at the dental clinics for the session :—

Ninety schools were visited. (Edinburgh, 77 ; Leith, 13.)

The total number of children who received dental treatment was 7,188. It is often difficult to get parents to realise the importance of preventive treatment. Most of the special cases have been sent by the medical staff :—here, the ill-health or pain arising from bad teeth makes parents resort at once to treatment. Included in the special cases are many children who refused treatment when examined as routine cases at 6 or 9 years.

The number examined was :—

A. *Lauriston Place Treatment Centre.*—Boys, 6,299 ; girls, 6,348—Total, 12,647.

There were also examined 592 children (boys, 320 ; girls, 272) attending special schools whose ages were other than 6, 9, and 12 years.

B. *Links Place Treatment Centre.*—Boys, 1,402 ; girls, 1,385—Total, 2,787.

*Condition of Teeth.*—The condition of the teeth is noted in every case, and also the treatment necessary, extraction, filling, etc.

### I. *Numbers with Clean Mouths and no evidence of Dental Caries.*

A. Boys, 1,789 ; Girls, 1,722—Total, 3,511 or 27·8 per cent. of number examined.

B. Boys, 234 ; Girls, 253—Total, 487 or 17·5 per cent. of number examined.

### II. *Numbers with Dental Caries.*

A. 6-year-olds—Boys, 1,356 ; Girls, 1,315—2,671	} 9,136 or 72·2 per cent. of number examined.
9-year-olds—Boys, 1,543 ; Girls, 1,598—3,141	
12-year-olds—Boys, 1,615 ; Girls, 1,709—3,324	

B. 6-year-olds—Boys, 398 ; Girls, 396—794	} 2,300 or 82·5 per cent. of number examined.
9-year-olds—Boys, 450 ; Girls, 425—875	
12-year-olds—Boys, 320 ; Girls, 311—631	



The following table gives the number of pupils in each age group, with carious teeth—(a) four or less ; (b) more than four :—

	(a) With four or less Carious Teeth.			(b) With more than four Carious Teeth.		
	6 Years.	9 Years.	12 Years.	6 Years.	9 Years.	12 Years.
A. Boys . . . . .	693	945	1,322	663	598	293
Girls . . . . .	683	993	1,345	632	605	364
Total . . . . .	1,376	1,938	2,667	1,295	1,203	657
B. Boys . . . . .	247	367	303	151	83	17
Girls . . . . .	240	345	293	156	80	18
Total . . . . .	487	712	596	307	163	35
Grand Total . . . . .	1,863	2,650	3,263	1,602	1,366	692

A. Of the 9,136 (plus 415 of other ages examined in Special Schools) requiring dental treatment, 2,780 or 30·4 per cent. accepted the services of the school clinic.

It should be noted that the dentists visited, for inspection purposes, most of the outlying schools, where the number of acceptances for treatment was very small.

In addition to the above, 2,360 pupils—1,097 boys, 1,263 girls—were treated as special cases, so that in all 5,140 pupils received dental treatment.

B. Of the 2,300 requiring dental treatment, 1,081 or 47 per cent. accepted the services of the school clinic. Of these, 860 were treated.

In addition, 1,188 pupils—571 boys, 617 girls—were treated as special cases, so that in all, 2,048 pupils received dental treatment, making 2,096 visits.

### Analysis of Dental Treatment.

#### (a) Conservation.

	Teeth Filled.		Teeth Conserved by Treatment.		Total Number of Teeth Conserved.
	Temporary.	Permanent.	Temporary.	Permanent.	
A. Boys . . . . .	18	1,012	12	27	1,069
Girls . . . . .	39	1,116	7	41	1,203
Total . . . . .	57	2,128	19	68	2,272
B. Boys . . . . .	...	33	34	52	119
Girls . . . . .	...	35	28	40	103
Total . . . . .	...	68	62	92	222
Grand Total . . . . .	57	2,196	81	160	2,494

#### (b) Extraction.

	Number of Teeth Extracted.		Total.	Anæsthetics.
	Temporary.	Permanent.		
A. Boys . . . . .	6,295	2,272	8,567	1,890
Girls . . . . .	6,289	2,536	8,825	2,005
Total . . . . .	12,584	4,808	17,392	3,895
B. Boys . . . . .	1,549	718	2,267	868
Girls . . . . .	1,639	914	2,553	944
Total . . . . .	3,188	1,632	4,820	1,812
Grand Total . . . . .	15,772	6,440	22,212	5,707

NOTE.—A. refers to Dental Treatment at 45 Lauriston Place.  
B. refers to Dental Treatment at 5 Links Place, Leith.







## PORT SANITARY ADMINISTRATION.

The arrangements made under the Port Sanitary Regulations (Scotland), 1933, continue to work smoothly.

During the year Declarations of Health were received from 534 ships arriving from foreign ports, including 29 from ports infected or believed to be infected, and were detained for examination by the medical officer. No infectious illness or suspicious circumstances were discovered, and all were granted their clearance. It was not found necessary to send any ship to the special mooring stations.

The great majority of the foreign shipping comes from continental ports, but there are also a number of arrivals from North and South American ports, from North African, Indian and Far Eastern ports.

The number of ships entering the Port Sanitary District was 10,842, representing a tonnage of 3,010,764, an increase of 342 vessels and 68,353 tons when compared with 1934.

### AMOUNT OF SHIPPING ENTERING THE PORT SANITARY DISTRICT DURING THE YEAR 1935.

	Number.	Tonnage	Number Inspected.	Number Reported to be Defective.	Number of Notices Issued.
Foreign	Steamers	1,332	1,210,521	734	15
	Motor	51	69,260	51	7
	Sailing	1	156	1	...
	Fishing	...	...	...	...
Total Foreign	1,384	1,279,937	786	15	7
Coastwise	Steamers	5,405	1,373,336	297	9
	Motor	17	2,067	21	4
	Sailing	...	...	...	...
	Fishing	4,036	355,424	298	...
Total Coastwise	9,458	1,730,827	616	9	4
Total Foreign and Coastwise	10,842	3,010,764	1,402	24	11

**Imports and Exports.**—The principal items of cargo imported at Leith consist of wheat, barley, oats, maize, rye, flour, meal, sugar, fruit, cement, timber, guano, manure, flax, hemp, fish (fresh and cured), butter, eggs, and esparto grass. Of these the chief import is grain. The exports are chiefly coal, iron, oil, liquor, and ammonia. Coal is the greatest export.



**Medical Inspection of Aliens.**—During the year, 888 alien passengers arrived at the Port. Of these, 250 were subjected to medical inspection at the request of H.M. Alien Immigration Officer. Permission to land was given to all of these passengers. In addition, 17 persons arrived at the Port and were refused leave to land, on non-medical grounds.

The alien passengers were classified as follows :—

CLASSIFICATION OF ALIEN PASSENGERS.

Resident Returning.	In Transit.	Visitors of Six Months or Less.		Diplomats and Persons on Foreign Government Missions.	Seamen.	Seamen under Contract to Join Ship in British Waters.	Ministry of Labour Permit.	Aliens Coming to Settle not Holding M.L. Permit.
		On Holiday, Tourists, etc.	On Business.					
14	51	614	119	11	4	20	38	17

**Ship Inspection and Fumigation.**—The routine inspection of all ships is carried out as soon as possible after docking, and details of nuisances and defects found are contained in the report of the Chief Sanitary Inspector.

The inspection of ships for rat infestation is carried out under the Port Sanitary Regulations (Scotland), 1933, and under Article 19 of this Order, 127 Deratisation Exemption Certificates and 26 Deratisation Certificates were granted during the year. Of the latter 5 refer to vessels which were fumigated after arrival from infected ports by reason of rat infestation, and since their previous certificates had expired. The number of exemption certificates indicated that ship-masters continue to appreciate the necessity for maintaining their vessels as free from rats as possible.

The fumigation of ships throughout the year was done by means of cyanogen chloride and proved highly satisfactory. Many owners have availed themselves of this method of fumigation of certain parts of their ships for the repression of vermin other than rats.

It has to be recorded that as in former years placards in connection with venereal disease are maintained in selected places in the docks. These are printed in English, Norwegian, Dutch, and German, and draw the attention of seamen and dockers to the existence and location of the Seamen's Dispensary at the Shore, where skilled treatment may be obtained.



## FACTORIES AND WORKSHOPS.

Section 132 of the Factory and Workshop Act of 1901 requires every Medical Officer of Health in his Annual Report specially to report on the administration of the Act, and tabulated statements were framed by the Home Secretary with a view to such reports being made upon uniform lines. This Statement is submitted below, and contains in addition other information which it is thought fit to incorporate.

### 1. INSPECTION.

Premises.	Number of		
	Inspections.	Written Notices.	Occupiers Prosecuted.
Factories . . . . .	437	29	Nil.
Workshops } . . . . .	1,388	54	Nil.
Workplaces } (Other than Outworkers' premises)			
Total . . . . .	1,825	83	Nil.

### 2. DEFECTS FOUND.

Particulars	Number of Defects.			
	Found	Remedied	Referred to H.M. Inspector.	Number of Prosecutions.
Want of Cleanliness . . . . .	127	127	...	...
Want of Ventilation . . . . .	4	4	...	...
Overcrowding . . . . .	...	...	...	...
Want of drainage of floors . . . . .	...	...	...	...
Other Nuisances . . . . .	104	104	...	...
Sanitary Accommodation {	Insufficient . . . . .	8	4	...
	Unsuitable or defective . . . . .	117	108	...
	Not separate for sexes . . . . .	7	6	...
Illegal Occupation of Underground Bakehouses (Sec. 101) . . . . .	2	2	...	...
Breach of provisions relating to Bakehouses— Scottish Board of Health (Factories and Workshops Transfer of Powers) Order, 1921 :	Sec. 97—Sanitary Regulations . . . . .	1	1	...
	Sec. 99—Limewashing, etc., of Bakehouses . . . . .	18	18	...
Other Offences :— (Excluding offences relating to outwork) . . . . .	8	...	8	...
Total . . . . .	396	374	8	Nil.



### 3. HOME WORK—OUTWORKERS' LISTS (sec. 107).

	Feb. 1935.	Aug. 1935.
Total number of lists received . . . . .	32	31
Number of Outworkers on lists ( <i>i.e.</i> , those residing in Edinburgh). ( <i>Note.</i> —These figures include outworkers who may be working for more than one firm and therefore appear on more than one list.)	72	73
Number of addresses of outworkers residing in other districts forwarded to other Local Authorities . . . . .	6	10
Number of addresses of outworkers received from other Local Authorities	7	5
Actual number of outworkers on Register, at date of last Returns . . . . .	67	66
( <i>Note.</i> —The majority of these are home-workers but a number of them actually do the work in ordinary factories and workshops.)		
Nature of Work :—		
(1) Making, altering, repairing, etc., of wearing apparel.		
(2) Making up, ornamenting, repairing, etc., of table linen.		
(3) Making of boxes or other receptacles made wholly or partially of paper, cardboard, chip, or similar material.		
(4) Manufacture of lamp-shades.		
Outwork in Unwholesome Premises (Sec. 108) . . . . .		Nil.
Outwork in Infected Premises (Secs. 109 and 110) . . . . .		Nil.

### 4. REGISTERED FACTORIES AND WORKSHOPS.

Premises on Registers at end of year.

	Number.
Workshops (various trades) . . . . .	978
Bakehouses { Factories . . . . .	143
{ Workshops . . . . .	54
{ Home Bakeries—premises not under the Factory Act . . . . .	36
Underground Bakehouses in use at end of year . . . . .	60

### 5. OTHER MATTERS.

Matters referred to H.M. Inspector of Factories :—

{ Failure to affix abstract of the Factory and Workshop Act (Sec. 133) . . . . .	8
{ Employment and Working Conditions . . . . .	2

Action taken in matters referred by H.M. Inspector of Factories :—

Matters remediable under the Public Health Act but not under the Factory Act . . . . .	3
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Sanitary Accommodation for Factories and Workshops :—

Intimations received by Local Authority in order that work might be carried out according to Local Regulations . . . . .	39
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Notices received for the information of Local Authority *re* Bakehouses :—

Scottish Board of Health (Factories and Workshops Transfer of Powers) Order, 1921, (Secs. 97-100 Factory Act) . . . . .	5
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Number of Notices of Occupation of Workshops received from H. M. District Inspector of Factories . . . . .	49
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Miscellaneous Complaints :—

Received from other Departments . . . . .	22
Anonymous . . . . .	1
Received from Public . . . . .	9



**Factory Legislation.**—It may be said that the object of factory legislation has been from first to last to secure wholesome working conditions and so to promote the safety, health and welfare of the industrial population. Much has been accomplished during the many years of factory and workshop inspection, and while regular and systematic inspection is still very necessary, it is safe to say that the general level of compliance by employers to-day is high and the steady and continuous improvement of conditions all tends towards efficiency in industry and the well-being of those employed.

The Factory Acts, however, are urgently in need of amendment and consolidation. Thirty-four years have passed since the last consolidation Act was made, and although that Act has been periodically amended by supplementary Acts and a multitude of Orders and Statutory Regulations brought into force, some of the provisions are no longer in consonance with modern practice and tendencies. New legislation has been contemplated by many Governments but, unfortunately, industrial depression, or some other cause, has prevented this from being accomplished. However, once more, the present Government has stated that it hopes and proposes to introduce a Bill in the second session for the revision and consolidation of the law relating to the safety, health and welfare of factory workers.

**Fire—Means of Escape.**—Although fatalities due to fire in industrial premises are relatively rare, yet there is the ever-present possibility of these occurring. Of all the requirements of the Factory Act those dealing with the safety of buildings in case of fire require great vigilance. The provisions in this respect in regard to all factories and workshops are administered by the Local Authority through the City Engineer's Department. At the same time the Workshops Inspector in this Department, when carrying out his inspections, makes the question of fire escapes a point for continuous observation. Conditions may change through expansion of trade, and top rooms previously used for storage purposes may be located wherein workers are employed. Even when suitable fire escapes are provided it is imperative that they be periodically examined and properly maintained. A few simple precautions to be observed are that, from time to time, locks and fastenings of doors leading to outside staircases should be inspected by occupiers to see that the locks and fastenings do not become rusted owing to inattention and infrequency of use thereby preventing easy and quick egress, that passageways leading to exit doors do not become blocked by machines or goods ; and that notices indicating the means of escape are conspicuously displayed. During 1935, 8 notices were issued in regard to means of escape.

**Cleanliness.**—In regard to cleanliness it should be stated that clean workrooms, well ventilated, and reasonably heated, will only become universal after many more years' work, supported by strong public opinion. Many employers carry out painting, limewashing and cleaning regularly, but others require to be constantly given instructions and caution regarding this matter. Where owners and occupiers expect a high standard of cleanliness the employees usually attain to the same, as the tendency is for the workers to fall into line and become in harmony with their environment.

**Sanitary Accommodation.**—The most common defects in regard to Sanitary Accommodation are inadequate separation from workrooms, defective apparatus,



structural defects and insufficient means of lighting (natural and artificial). One of the great difficulties experienced from time to time is in regard to finding a suitable place for a convenience and a position in which there will be complete compliance with the local requirements in respect of water-closets. This is particularly the case in relation to conveniences in basements and in the more over-crowded business and shopping portions of the City. Much time and care have been given to the requirements of the Sanitary Accommodation Order, 1903, which defines what is "suitable and sufficient," and considerable work has been carried out during the year. A few particulars bearing on this and other work effected may be quoted:—

Sanitary Accommodation introduced . . . . .	4
Separate Sanitary Accommodation for sexes provided . . . . .	6
Intervening Ventilated Space between convenience and workroom provided (15 of these were in Butchers' Premises) . . . . .	31
Intervening Spaces ventilated . . . . .	7
Water-closets replaced by modern apparatus . . . . .	8
Water-closets removed (in disuse or communicating direct with workshops) . . . . .	7
Water-closets removed to more sanitary situation—new apartments constructed . . . . .	2
W.C. apartments—ventilation provided or improved . . . . .	8
Artificial Lighting (Electric) provided for W.C. apartments . . . . .	17
Repairs effected to W.C. apparatus or apartments . . . . .	28
Sinks and Wash-hand basins introduced or substituted by modern appliances . . . . .	12
Provision of "Main" Water Supply . . . . .	12
Hot Water Systems introduced . . . . .	5
Roofs, Walls, Ceilings, Floors, Windows, and Courtyards—general repairs or improvements effected . . . . .	36

Good co-operation exists between this Department and the Inspector of Factories for the area in regard to insufficient and defective sanitary accommodation. This has proved to be of great value, as a copy of every notice issued by the Home Office is forwarded to this Department in order that any additional requirements of the Local Authorities may at the same time be enforced. Overlapping, and the removal of risks of misunderstanding between two public departments engaged on closely allied work are accordingly prevented. Comment must, however, be made regarding the care and maintenance of sanitary conveniences and the deplorably low standard so often found. The question resolves itself into one of strict supervision. One instance goes to show the satisfactory results accruing when the co-operation of the workers is obtained; an occupier stated to the Inspector that he was powerless to effect an improvement in the cleanliness of the accommodation and it was only after the Inspector interviewed the foreman and discussed the question with the men that an improvement was effected.

**Washing Accommodation.**—The importance of washing accommodation for both health and general welfare needs no emphasis. Washing accommodation is already required by law in certain occupations, but the need for such suitable accommodation is obvious even in premises where its provision is not compulsory. It is now quite customary for this provision to be made in new buildings and excellent examples could be quoted.



Probably all will agree that access to washing conveniences is almost as important as access to a pure drinking water and it is surely not too much to ask that every worker should have reasonable opportunities for becoming clean and presentable at meal times and when work is finished for the day. If the worker was once thoroughly convinced that his health and comfort may be menaced by a disregard of dirt, and that personal appearance counts for something and that the use of soap and water brings solid advantages, the difficulty would disappear.

**Welfare.**—A noticeable feature in the factory and workshop is the welfare movement. Apart from the requirements of specific orders for particular trades the movement for providing suitable messrooms and cloakrooms is growing steadily. Some employers have given careful thought to providing adjustable seats for the workers suitable for their work and thereby contributing towards and encouraging the new outlook on the fatigue-preventing and energy-conserving value of well-planned sitting facilities.

**Food Factories.**—Although factories dealing with articles of food are generally kept scrupulously clean, there are often unsatisfactory conditions found in the smaller premises; especially is this applicable to some underground bakehouses. The structural disadvantages of these places have been commented upon in previous reports. There is in bakehouses such a miscellaneous collection of materials that great care is required in maintaining cleanliness. Inadequate cleansing of floors, shelving, fittings and machines constantly give rise for complaint during inspection.

Proceedings had to be taken against an occupier of an underground bakehouse where such conditions occurred. This offence took place towards the end of the year and although the case was not dealt with in the Sheriff Court until early in 1936 it is thought fit to include this reference now. The occupier was fined £1 in respect of the offence. On the other hand it may be said, however, that some firms are paying more attention than formerly to the psychological value of bright bakehouses, having abandoned the old drab limewashed walls in favour of colour schemes by colouring walls and painting iron work, beams, pillars, girders and frames of machines. From the latter, old decayed paint, dirt or grease are scraped off and the surfaces repainted from time to time in cheerful colours of pleasant shades. This undoubtedly creates much tidier, brighter and hygienic conditions within the bakery.

**Outworkers.**—The class of work scheduled as wearing apparel accounts for the largest number of outworkers in the City, but as revealed by the lists received, the number of outworkers in the City during the last 10 years has been practically stationary, and when compared with the figures of 20 years ago are much less numerous, while the amount of work done in the homes is found to be very small in many cases. It would appear that this system of outwork is likely to decline further as mechanization of industry does not tend fostering its growth, but limits within very narrow bounds the processes which are able to be carried out in the homes.



SANITARY DEPARTMENT,  
PUBLIC HEALTH CHAMBERS,  
JOHNSTON TERRACE,  
EDINBURGH, *May, 1936.*

To

*The Department of Health for Scotland and  
The Right Honourable the Lord Provost,  
Magistrates and Council of the City of Edinburgh.*

MY LORD PROVOST, LADIES AND GENTLEMEN,

I have the honour to present the Annual Report of the Sanitary Department of the City of Edinburgh for the year 1935.

### HOUSING.

Further progress was made during the year with the programme of Slum Clearance, and it is interesting to note that since 1923 the Local Authority have dealt with 5,716 insanitary houses affecting a population of 18,936.

**Housing (Scotland) Acts, 1919-1930.**—The improvement schemes promoted by the Local Authority prior to the passing of the Housing (Scotland) Act, 1930, have now been completed with the exception of St. Leonard's (Second Section) Improvement Scheme. In the St. Leonard's Scheme, while some tenants have still to be removed, considerable changes have taken place. The new tenements in Richmond Place and East Richmond Street are now occupied and it is hoped that very soon the buildings in Pleasance will be demolished and new houses erected on the site, so completing the lay-out in that Area. In St. Leonard's Street and Gifford Park, new tenements are in course of erection, and in Buccleuch Street the new tenements are now in occupation. It is only when a visit is paid to those Areas that one realises the vast changes that have been effected, and it is extremely difficult now to visualise the old conditions. In some cases, the congested streets have been wiped away, and there is a marked sense of spaciousness and improved lighting.

The following tables show what has been done under the various Acts :—

#### Housing (Scotland) Acts, 1919-1925—

<i>Improvement Scheme.</i>	<i>No. of Houses dealt with.</i>	<i>Population.</i>
Cowgate-Grassmarket, 1923 . . . . .	630	1,429
Leith, 1924 . . . . .	678	2,444
Canongate-Corstorphine, 1927 . . . . .	293	556
St. Leonard's (1st section), 1927 . . . . .	752	2,619
St. Leonard's (2nd section), 1929-30 . . . . .	1,544	5,375
Totals . . . . .	3,897	12,423
Closing Orders . . . . .	272	979
Grand Totals . . . . .	4,169	13,402



**Housing (Scotland) Act, 1930—**

<i>Clearance Area.</i>	<i>No. of Houses dealt with.</i>	<i>Population.</i>
Ann Terrace, etc., 1934 . . . . .	87	301
Trafalgar Lane, Leith, 1934 . . . . .	152	571
Maryfield, etc., Portobello, 1935 . . . . .	78	253
New and Old Broughton, etc., 1935 . . . . .	108	225
Totals . . . . .	425	1,350
Demolition and Closing Orders . . . . .	1,122	4,184
Grand Totals . . . . .	1,547	5,534

**Clearance Areas.**—During the year confirmation was obtained from the Department of Health for the Clearance Areas at Maryfield, etc., Portobello, and for New and Old Broughton.

*Maryfield, etc., Portobello Clearance Areas.*—There were five areas in this Scheme comprising 78 houses with a population of 253 persons. Objections were lodged by several owners, and, in consequence, an Inquiry was held by the Department of Health.

The Department confirmed the Orders for Areas "A" and "F" without modifications, and Areas "B" and "D" were confirmed with slight modifications. Confirmation was given for Area "A" on 9th November, 1935; Area "B," 23rd August, 1935; Area "E," 28th August, 1935; and Area "F," 22nd August, 1935. As Area "D" was Corporation property no Order or Confirmation was necessary.

Many of the occupants in the houses in these Areas have been removed to the Re-housing Area at Craigentenny.

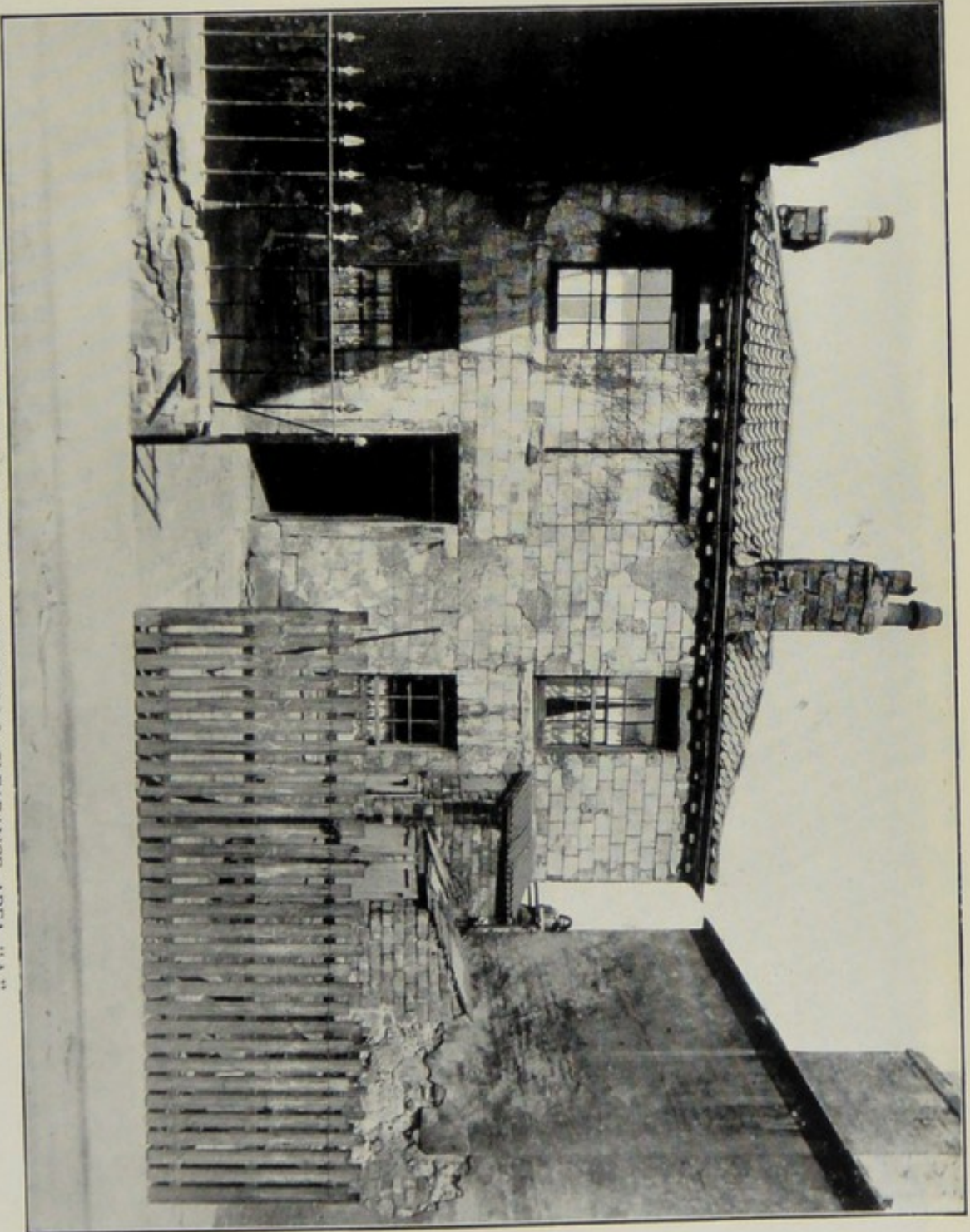
In these Areas, the conditions found differed from those usually associated with previous Clearance Areas, as most of the houses were either of the "cottage" type or consisted only of two storeys. The main defects found here were dampness, extreme disrepair due to the age of the properties, and a lack of sufficient water supply and water-closet accommodation.

*New and Old Broughton Clearance Areas.*—These Areas dealt with 108 houses (42 of which were vacant) and affected a population of 225. No objections were lodged by the owners of Area "A," but, as objections were lodged in connection with Area "B," an Inquiry was held by the Department of Health on 3rd October, 1935. The Orders for Area "A" were confirmed on 9th November, 1935, and the Orders for Area "B" on 13th December, 1935.

A few of the tenants have been removed, and it is hoped that the remainder will soon be re-housed.

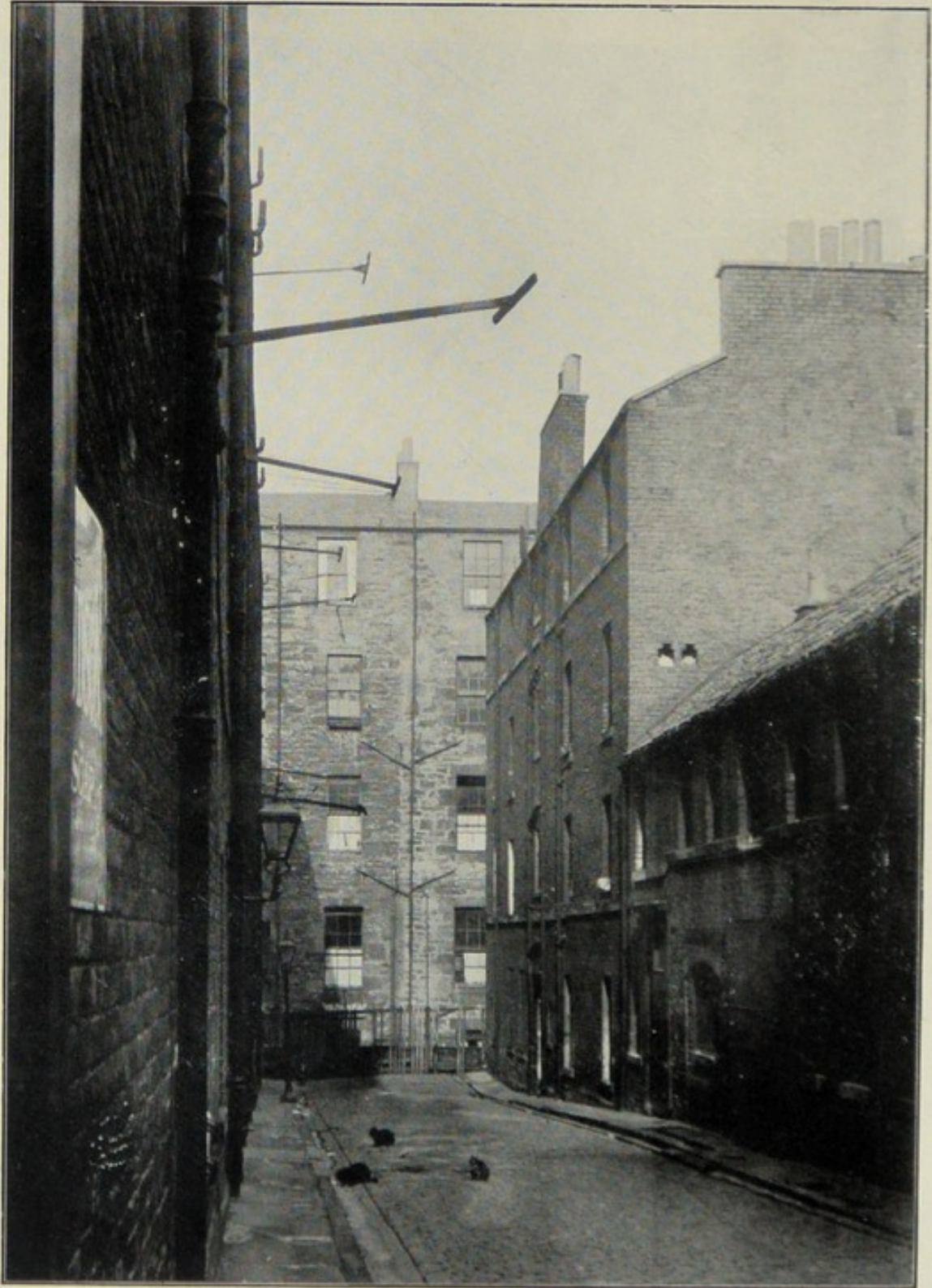
In these Clearance Areas, there was a direct contrast between Areas "A" and "B." Area "A" (New Broughton) consisted solely of tenemental properties, which suffered considerably from over-sub-division, resulting in long, dark common lobbies on each flat. In addition, owing to the narrowness of the street and the height of the buildings, there was considerable over-shadowing, and most of the houses suffered





BUILDING IN MARYFIELD, ETC., PORTOBELLO CLEARANCE AREA "A."





NEW BROUGHTON CLEARANCE AREA "A."



from extreme disrepair of structure, and many were badly bug-infested. Area "B" (Old Broughton) and Paterson's Court originally formed part of the Old Barony of Broughton. Here the houses were contained in tenements mostly of two storeys, and the buildings and the houses suffered considerably from old age, disrepair and inadequate water-closet accommodation.

**Individual Unfit Houses.**—In addition to the houses in Clearance Areas, 415 houses throughout the City were dealt with either by means of Demolition Orders or Closing Orders.

These "individual" houses were either isolated tenements or houses in buildings which were not listed for treatment in a Clearance Area. Many of these houses were basement or area houses and suffered mainly from poor lighting and dampness.

The following returns submitted to the Department of Health show the number of houses dealt with :—

REPORT for the year ended 31st December 1935, on proceedings taken as regards the Inspection, Improvement, and Demolition and Closure of Dwelling-Houses.

### HOUSING (INSPECTION OF DISTRICT) REGULATIONS (SCOTLAND), 1928.

1. Number of dwelling-houses* inspected :—		
(a) During the year	(a)	897
(b) Since 1st January, 1930	(b)	14,007
2. Number of dwelling-houses* which on inspection were considered to be in any respect unfit for human habitation :—		
(a) During the year	(a)	880
(b) Since 1st January, 1930	(b)	10,420

### HOUSING (SCOTLAND) ACT, 1925.

3. Number of cases where intimations were given under Section 20 (1) as to insufficient water-closet accommodation :—		
(a) Cases where requirements complied with by owners :—	(a)	} Nil.
(i) With assistance under the Housing (Rural Workers) Acts, 1926 and 1931	(i)	
(ii) Without such assistance	(ii)	
(b) Cases where works carried out by Local Authority after failure of owners to do so	(b)	} Nil.
(c) Cases still pending	(c)	
4. Number of cases where w.c. accommodation was provided at the instance of the Local Authority without an intimation under Section 20 (1)		Nil.
5. Number of houses of (a) one apartment, and (b) two apartments, for the erection of which the consent of the Local Authority has been given in terms of Section One hundred and eleven	(a) (b)	} Nil.



## HOUSING, TOWN PLANNING, ETC. (SCOTLAND) ACT, 1919.

6.	Number of cases where notices were served under Section 40 (1) to provide dwelling-houses with water supply :—		
	(a) Cases where requirements complied with by owners :—		
	(i) With assistance under the Housing (Rural Workers) Acts, 1926 and 1931	(a) (i)	Nil.
	(ii) Without such assistance	(ii)	
	(b) Cases where works carried out by Local Authority after failure of owners to do so	(b)	Nil.
	(c) Cases still pending	(c)	
7.	Number of cases where water supply was provided at the instance of the Local Authority without a notice under Section 40 (1)		Nil.

## HOUSING (SCOTLAND) ACT, 1930.

8.	Number of dwelling-houses in respect of which notices were served under Section 14 (1)		
9.	Number of dwelling-houses rendered fit for human habitation following on notices under Section 14 (1) :—		
	(a) With assistance under the Housing (Rural Workers) Acts, 1926 and 1931	(a)	Nil.
	(b) Without such assistance	(b)	
10.	Number of dwelling-houses in respect of which work has been done by the Local Authority under Section 15 (1)		Nil.
11.	Number of dwelling-houses which were rendered fit for human habitation at the instance of the Local Authority without a notice under Section 14 (1)		Nil.
12.	Number of dwelling-houses in respect of which in terms of Section 17 a demolition order or closing order under Section 16 (3) has been substituted for a notice under Section 14 (1)		Nil.
13.	Number of dwelling-houses in respect of which notices were served in terms of Section 16 (1)		462
14.	Number of dwelling-houses referred to in 13 :—		
	(a) Which have been rendered fit for human habitation :—		
	(i) With assistance under the Housing (Rural Workers) Acts, 1926 and 1931	(a) (i)	Nil.
	(ii) Without such assistance	(ii)	Nil.
	(b) In respect of which undertaking has been given that the house will not be used for human habitation until it has been rendered so fit	(b)	42
	(c) In respect of which demolition orders† have been made under Section 16 (3)	(c)	123
	(d) In respect of which closing orders have been made under Section 16 (3) and (4)	(d)	250
			415
15.	Number of dwelling-houses in respect of which closing orders have, in terms of Section 16 (3), been determined by the Local Authority, following upon the houses having been rendered fit for human habitation		Nil.
16.	Number of houses in respect of which advances have been made in terms of Section 34 towards cost of repairs and amount so advanced		Nil.

\*Houses inspected more than once should be entered only once.

†If permission to reconstruct a building has been granted, the number of houses existing prior to the reconstruction should be stated (see in this connection, sub-section (3) of Section 49 of the Housing (Scotland) Act, 1930).

*Note.*—Any general information or observations as to the character of defects usually found to exist, as to the extent to which overcrowding was found to prevail and the steps taken to remedy it, or as to the work of inspection generally, should be entered in the space below :—

The defects usually found, comprise :—

Site congestion, sub-division of houses, dampness, poor lighting, back-to-back houses, general disrepair, inadequate and insanitary water-closet and sink accommodation, and infestation by bugs and other vermin.



**HOUSING (SCOTLAND) ACT, 1930.  
UNHEALTHY AND INSANITARY AREAS.**

**Position at 31st December, 1935.**

(1)	Number of Dwelling Houses Demolished.		Number of Dwelling-Houses Closed.	Number of Dwelling-Houses Made Fit.	Number of Persons Displaced.		Number of Dwelling-Houses Vacated but not Demolished.		Number of Persons Displaced from Houses in Columns (8) and (9)
	Unfit Houses. (2)	Other Houses. (3)			From Houses in Columns (2), (3) and (4). (6)	To Abate Overcrowding. (7)	Unfit Houses. (8)	Other Houses. (9)	
Under Part I. of Act :									
(A) Clearance Areas.									
(i) Lands within the Area . . . . .	107	5	...	...	374	...	226	25	983
(ii) Lands acquired under Section 3 of Act . . . . .	...	Nil.	...	...	Nil.	...	...	Nil.	Nil.
(B) Improvement Areas									
(1)									
	Number of Dwelling Houses Demolished. (Section 16) (2)		Number of Dwelling-Houses Closed. (3)	Number of Persons Displaced from Houses in Columns (2) and (3). (4)	Number of Dwelling-Houses Made Fit. (Sections 14-16). (5)	Number of Dwelling-Houses Vacated, but not yet Demolished. (6)	Number of Persons Displaced from Houses in Column (6). (7)		
Under Part II. of Act :									
(C) Unfit houses not included in Clearance Areas or Improvement Areas . . . . .	237		719	3,569	...	166	615		



**Bug-Infestation of Houses.**—The method, adopted by the Local Authority, of fumigating the furniture and household effects from bug-infested houses before the tenants take occupation of the new houses is proving entirely satisfactory. During the year, the houses and household effects of 1908 prospective Corporation tenants were examined by the Inspectors of this Department and 515 or 27 per cent. of that number were found to be bug-infested. The furniture was removed to the Fumigation Chamber at Powderhall, and there subjected to Hydrocyanic Acid Gas. The total number of fumigations carried out during the year at Powderhall was 515. After fumigation, the articles were thoroughly aired before delivery to the new houses. Bedding and bed-clothes, however, were not treated in this way, but were taken to the City Disinfecting Station where they were treated in the Steam Disinfector. Altogether, 1,494 sets of beds were dealt with.

In an endeavour to prevent the transference of bugs by the sale of old furniture from these houses, the tenants were advised to allow all unwanted articles to go in the van. These articles, in the ordinary course of events, would have been thrown out or given away or sold, but, after fumigation, they were destroyed under supervision at the Destructor.

The bug problem in old houses has always been a difficult one. In previous years, assistance was given by this Department to house factors in an endeavour to eradicate these pests, but the extent of this work had become so great that it was felt that some other arrangements were necessary. A meeting was, therefore, held with some of the principal house factors in the City, and it was arranged that they could have the work done under supervision of this Department by an outside contractor.

Bug-infestations are very often caused by the purchase of second-hand furniture, and also by the purchase of firewood which has been broken up from wood obtained from derelict bug-infested properties. The sale of second-hand bug-infested furniture, however, is a problem which almost defies remedy, as it would mean the daily inspection of every article purchased by the second-hand dealer. The use of old wood from bug-infested buildings as firewood should be prohibited, and it is suggested that all contractors demolishing these buildings should be compelled to burn all woodwork on the site.

**Supervision of Re-housing Areas.**—With a view to having the houses in the re-housing areas kept clean and in proper order and also to prevent overcrowding and sub-letting, their regular visitation by Sanitary Inspectresses was continued with most gratifying results. Year by year further improvement in the conditions both within and outside the houses is observed, and the majority of the occupiers seem to appreciate their new opportunity of living in healthy conditions amidst pleasant surroundings. Altogether 15,133 visits were made during the year.

**“ Ticketed ” Houses.**—In addition to the inspections of the re-housing areas, visits were made regularly by the Sanitary Inspectresses to the “ ticketed ” houses within the City and to the “ non-ticketed ” houses in close proximity thereto. Altogether 7,274 visits were made during the year.

**Housing Repairs and Improvements.**—During 1935, no Notices were served under Section 14 of the Housing (Scotland) Act, 1930, as the difficulties associated with many properties would necessitate the provision of alternative accommodation.



for the tenants, and, as was mentioned last year, it is doubtful if much can be done under this Section until Local Authorities are empowered to provide this accommodation with the assistance of a Government grant. Many minor repairs, however, were executed on houses by owners at the request of the Department.

**Rural Housing Improvements.**—Under the Housing (Rural Workers') Acts, 1926 and 1931, applications for financial grants were made during the year by the owners of 12 farm and other rural cottages. All were granted and improvements were proceeded with immediately, including the provision of bathrooms, sculleries, drainage, improved lighting and repairs to floors, walls, roofs, etc.

Farm workers' houses in the suburban areas were visited by the sanitary inspectresses in order to ascertain the state of cleanliness in the dwellings. The conditions were usually found to be satisfactory and, in the few instances which were not up to standard, re-visits showed a marked improvement.

**Increase of Rent, Etc., Acts.**—An application was received from the tenant of a house for a certificate in terms of the Rent and Mortgage (Restrictions) Acts, 1920-33, that the house was not in all respects in a reasonable state of repair. The defects complained of, however, were not sufficient to warrant the granting of a certificate, and, on the owners' attention being drawn to the matter, all necessary repairs were carried out.

**Overcrowding.**—The Survey in terms of Section 1 (i) of the Housing (Scotland) Act, 1935, of houses of a rateable value not exceeding £45 was completed during the year. Altogether, 100,642 houses were surveyed, and it was found that there were 103,083 families residing therein.

Applying the standard defined in Table I. of the First Schedule of the Act, it was found that 19,746 houses or 19·82 per cent. were overcrowded and that 20,244 families or 19·64 per cent. were living in overcrowded conditions. Included in these numbers were 2,645 houses which were regarded as unfit for habitation and which will fall to be dealt with under the Act of 1930. The corrected figure for habitable houses, therefore, shows that 17,101 or 18·41 per cent. were overcrowded.

It was found that 14,441 houses were overcrowded by the number of persons in the occupying family. Sub-tenants were responsible for the overcrowding in 1,524 instances, and the keeping of lodgers either caused or aggravated overcrowding in 1,136 houses.

In order to abate the overcrowding in 17,101 houses, the provision of 17,423 houses would require to be made. The difference is due to multiple occupancy of houses by two or more sub-tenant families which are also overcrowded and require larger houses.

While the figure 17,423 is theoretically correct, adjustment requires to be made by the "stepping-up" or "filtration" of families from small houses to larger houses which are rendered vacant as a result of de-crowding operations. After making the necessary adjustment, therefore, it would appear that the number of houses required to meet the whole needs of the City, so far as this represents Slum Clearance and Overcrowding, may be put at 13,600.



This figure represents the ultimate needs of the City, and, after making deductions in the case of—

- (a) Lodgers causing overcrowding.
  - (b) Overcrowding taking place in houses which are owned and occupied by the owners.
  - (c) The utilisation of houses which can be reconstructed after they have been rendered vacant.
  - (d) The houses which the Local Authority are at present building, and
  - (e) Houses to be built by private enterprise,
- and other minor deductions, the immediate needs of the City would appear to be somewhere in the region of 7,000 houses including those being provided by the Local Authority as mentioned in “(d)” above.

During the year, 620 cases of reported overcrowding were abated. Of this number 250 were in one-apartment houses, 233 in two-apartment houses, 12 in three-apartment houses, and 125 were instances of sub-letting of rooms or keeping of lodgers.

Recommendations were made to the House-letting Department in 869 instances where overcrowding was serious and where there was a lack of proper sex-separation. A considerable number of tenants in overcrowded houses were provided with new Corporation houses as the result of these recommendations.

## GENERAL SANITATION.

**Nuisances and Sanitary Improvements.**—It will be observed from the figures given in the table in the Appendix that during the year the total number of structural defects and nuisances dealt with by the Department was 11,067. Of that number, 3,654 were intimated by citizens, 263 by other Corporation Departments and 7,150 were discovered and reported by the District Sanitary Inspectors. These nuisances involved the service of 9,544 notices for their removal.

Improvements effected in connection with drains and sanitary appliances totalled 1,049. Water-closets introduced and substituted for old appliances totalled 64, whilst 146 were improved or repaired. Sinks introduced, substituted and insanitary appliances abolished totalled 141. Drains cleared, repaired or renewed, including soil, sink waste and rain water pipes, totalled 438. Attention had also to be paid to the storage of water in cisterns, repairs to water pipes and the protection of water against contamination in 559 cases. Repairs to houses were effected in 359 cases, mostly in connection with floors, hearths, doors, walls, windows, grates, coal bunkers and plaster work, whilst nuisances removed in houses numbered 2,466, respecting obnoxious smells, smoke nuisances, dampness, overcrowding, dirty houses and the keeping of animals.

Complaints dealt with in respect of dirty stairs and passages, including the insanitary condition of walls of common staircases, totalled, 2,711. In all, 1,509 common staircases were re-painted. Miscellaneous nuisances dealt with totalled 3,923. These included the presence of rats and other vermin in houses, casting of garbage from windows, removal of accumulations of manure, cleaning of dirty cellars and noise nuisance.



**Pigeon Nuisance.**—From time to time complaints are made of nuisance arising from flocks of wild pigeons which take up their abode under railway bridges and other places which afford shelter. The cooing of the birds often causes annoyance to occupiers of neighbouring houses, whilst frequently the buildings are badly soiled.

In one case the nuisance was removed by undernetting a bridge. In another case, a considerable nuisance was created by a residenter who encouraged pigeons to collect, shelter or feed in the garden of the house which was described as a bird sanctuary. Several complaints were received from residenters in the neighbourhood, and upon investigation these were found to be justified. A neighbour alleged that on one occasion a flock of over 40 pigeons was observed feeding in the garden. The roof gutters of the neighbouring houses were found to be choked with the droppings and feathers of the birds, the windows, window sills and stone ledges were soiled, and the carcase of a bird was found decomposing on the roof of one of the houses. This house had been netted in parts for protection from the birds. The noise of the birds was also said to be disturbing the peace of the residenters.

It was pointed out to the author of the nuisance that the kindly thought of feeding and sheltering the birds in the garden was causing them to congregate in such large numbers in the neighbourhood as to be objectionable from a sanitary point of view. It became necessary, however, to serve a notice requesting removal of the nuisance and, finally, at the request of the owner, the shelters provided for the birds in the garden were gassed in the early morning when no less than 203 birds were painlessly destroyed. This number included 199 pigeons, 3 seagulls and 1 duck.

**Sub-Letting.**—The sub-letting of rooms of large houses to several families continues to give cause for complaint on account of overcrowding and the inadequate provision of sanitary conveniences and washing facilities. During the year several cases were reported to this Department. The assessed rentals in three of these cases were :—(1) £60, but the income in rent from sub-let occupiers was £231 8s. 0d. ; (2) £65 with a total income in rent of £244 8s. 0d. ; and (3) £113 with a total yield of £287 19s. 0d. The weekly rents charged for each apartment ranged from 5s. to 15s. 6d., equivalent to an annual rental of from £13 to £40 6s. 0d. for an unfurnished room ! All the cases were reported to the City Engineer and in one case the Dean of Guild Court imposed a fine of fifteen guineas and expenses.

Under the Edinburgh Corporation Order, 1926, it is necessary to present a petition to the Dean of Guild Court for warrant to alter the mode of occupancy—and that whether structural alteration be proposed or not—of any dwelling-house in such a manner as to alter the number of separate occupiers or to sub-divide any dwelling-house so as to convert the same into two or more dwellings.

**Sanitary Conveniences for Houses.**—With the object of increasing the provision of water-closets and indoor water supply for existing houses, a circular was issued by the Department of Health in 1925 urging that a survey should be undertaken and that thereafter full use should be made of statutory powers to require provision, where practicable, of sufficient sanitary conveniences.



At that time the survey revealed that there were 19,276 houses in the City without a separate water-closet for their own use, that 3,306 houses were without a separate sink, that 936 houses had neither the provision of water supply nor sink within the house, that 514 houses had not the use of a water-closet, but were served by dry-closets or privy middens, and that ashpits were still in existence for 228 houses.

The position now, as shown by the table on page 153, is that since 1925 the number of water-closets used in common has been reduced by 1,493 or 20 per cent., the number of sinks used in common by 380 or 35 per cent., the number of houses without sinks or water supply within the house and without the use of a common sink by 538 or 57 per cent., the number of dry-closets by 121 or 76 per cent., the number of ashpits used in common by 41 or 71 per cent., and that all the privy middens have been abolished.

In the Report of the Department of Health for Scotland for last year it was urged that there is a need for more active exercise of statutory powers in respect of these conditions. In Edinburgh, however, there are considerable difficulties in regard to existing properties which are not adequately furnished with sanitary conveniences. Many of these properties are scheduled for future Slum Clearance Areas and in other properties, not within these areas, the larger question of reconditioning arises, the problems of which are of considerable magnitude. The acute shortage of houses is delaying this work which necessitates certain structural alterations in the tenements for the introduction of adequate conveniences. Before extensive alterations can be effected, alternative accommodation in many cases would have to be provided and a number of rooms would require to be sacrificed or two houses combined into one. Again, where those houses belong to separate owners, the difficulty is obvious. Until some solution is found to the problem of reconditioning, the reduction in the number of sanitary conveniences used in common by families is more or less dependent upon the progress made in the clearance of slum areas.

**General Cleanliness.**—In addition to the general measures already referred to, the education of the public has played a most important part in furthering cleanliness, and, whilst the conditions of to-day compared with those of former years are greatly improved, much still requires to be done. It is gratifying to observe the progress that is being made in the application of the policy for making the public of this country litter-conscious. In this regard, the commendable efforts of the Inspector of Lighting and Cleansing in the City are worthy of mention and of much greater public support. His Department has placed excellent facilities at the public disposal by the provision of 30 bins and 2,000 baskets throughout the City for the deposit of litter. This excellent service has been most favourably commented upon by visitors, but the expedition of its complete success requires the whole-hearted co-operation of all sections of the community.

**Places of Public Entertainment.**—The theatres, picture houses and other places of public entertainment were visited frequently by the District Inspectors to see that they were kept in a reasonably hygienic condition. It was found generally that satisfactory attention was being paid to cleanliness and other matters and that the need for ventilation of buildings was being observed. In the majority of cases the atmospheric conditions were found to be satisfactory.

In the inspection of one of the picture houses, the sanitary appliances were found to be in a very insanitary and defective condition, whilst the passages, seats, carpets,







windows and radiators were very dusty. Difficulties with the staff were put forward as the cause of this neglect. An intimation under the Public Health (Scotland) Act, 1897, requesting the removal of the nuisance was served upon the owner and duly complied with.

**Offensive Trades.**—The offensive trades registered within the City comprised 3 tanners, 8 hide and skin factors, 1 gut scraper, 1 glue and size maker, 2 skinners, 1 soap boiler, 2 tripe cleaners, 6 manure manufacturers and 2 tallow melters, making a total of 26. Inspections showed that the provisions of the Bye-laws requiring the prevention of offensive effluvia, the inoffensive disposal of obnoxious waste, the lime-washing of walls, the cleansing of floors, utensils, etc., and the thorough flushing of the drains were being observed.

### VERMIN REPRESSION.

**Rat Destruction.**—In all 730 premises were dealt with for infestation by rats or other vermin. Of these premises 688 had been cleared by the end of the year.

Occasionally complaints which allege the presence of rats in premises are totally unrelated to this type of rodent. In one case where noise was attributed to rats in the roof of a house above a bedroom, the occupiers were much relieved to learn that the fears aroused were entirely due to the nesting of a few innocent sparrows!

At times rat infestation gives rise to justifiable alarm, but it must have been most disconcerting to those responsible for the management of a well-known picture house in the City to learn that their establishment had been made the subject of a riot of rumours for which this Department found there was not a vestige of evidence.

The authorship of these rumours could not be traced by the Management. The greater the search, the more elusive became that friend of a friend who, fascinated by the drama of a film, found herself stroking a huge rat nestling on her knee instead of the picture house cat! To mention only one other of the many rumours circulated, there was a lady who, on feeling her shoulder tapped, looked round to see who her friend could be and found herself staring into the bright, beady eyes of a rat perched on the shoulder of her fur coat!

Stories of rats are frequently as wide of the truth as their number is legion. The depredations of rats in the country, however, is great enough without irresponsible rumours needlessly adding to them.

The sudden appearance of numerous rat-holes in the ground of a plantation in the West End of the City pointed to some local source of infestation. The City Engineer who kindly co-operated in an effort to trace the origin of the infestation found that the roof of a neighbouring sewer had been undermined and had collapsed, allowing escape of rats. After the rats had been exterminated, the sewer was repaired and all cause for complaint removed.

*Rat Week.*—As in previous years, the Local Authority co-operated with the Department of Agriculture in an intensive campaign for rat destruction during Rat Week and very satisfactory results were obtained.



Publicity was given the matter by issuing explanatory leaflets to owners and occupiers of factories, warehouses, farms, etc., likely to be infested, and by advertisement in the local newspapers. The co-operation of the Leith Dock Commissioners, Railway Companies, the owners of shipbuilding yards and the various City Departments was also secured.

Although regularly engaged in rat extermination, the majority of those concerned undertook special efforts during the week to destroy the vermin, the means adopted including trapping, poisoning, gassing and organised hunts. Gassing operations were carried out and about 40,000 baits laid down on the banks of streams, etc., by the staff of this Department.

**Verminous Children, Bedding, Etc.**—During the year, 315 instances of verminous children were notified by the Education Committee, and in connection therewith 245 children were bathed and 309 sets of clothing and 15 beds disinfested.

### LODGING HOUSES.

**Common-Lodging Houses.**—There was no change in the number of common lodging-houses which, at the end of the year, was 15, with accommodation for 1,966 persons, as follows :—

Ward.	Address.	Accommodation.	
		Males.	Females.
	EDINBURGH—		
14	65 Grassmarket . . . . .	85	...
14	75 Grassmarket . . . . .	337	...
14	89 Grassmarket . . . . .	110	...
12	3 Guthrie Street . . . . .	331	...
12	1 Pleasance . . . . .	213	...
12	85 West Port . . . . .	78	...
14	32 West Port . . . . .	38	...
12	17 James Court . . . . .	...	34
12	1 Merchant Street (Margaret Tudor) . . . . .	...	43
12	3 Merchant Street . . . . .	...	80
14	5 and 7 Vennel . . . . .	...	118
	LEITH—		
18	10 Burgess Street . . . . .	81	...
18	5 Parliament Street . . . . .	180	...
18	57 Tolbooth Wynd . . . . .	127	...
18	2 Waters Close . . . . .	111	...
	Totals . . . . .	1,691	275

In two of the lodging-houses, improvements have been effected by tiling the dadoes and by laying cement floors in twenty-six apartments in which the water-closets, urinals, wash-hand basins and sinks are situated.

Eleven water-closets, 6 urinals, 6 wash-hand basins and 6 fire-clay white-enamelled sinks have been substituted for old ones.

To meet the demand for a more efficient hot water supply in one of the lodging-houses a new steam boiler has been introduced with a calorifier and additional circulating tank.

Lockers for the men's clothes have been introduced in sixteen of the cubicles in one of the houses.



**Farmed-Out Houses.**—The number of farmed-out houses on the register has been reduced from 57 to 33 and the accommodation from 205 to 111 persons, owing to the property at 34 Potterrow, consisting of 24 houses with accommodation for 94 persons, having been vacated under a clearance scheme.

Ward.	Address.	No. of Houses.	No. of Occupants.
12	18 Blackfriars Street . . . . .	14	46
14	112 West Port, (Left Stair) . . . . .	10	35
14	112 West Port (Right Stair . . . . .	9	30
Totals . . . . .		33	111

**Houses-Let-in-Lodgings.**—The number of houses-let-in-lodgings on the register is 7, with accommodation for 384 persons.

Ward.	Address.	No. of Houses.	No. of Occupants.
12	1 and 3 Blair Street . . . . .	1	114
10	38 Broughton Street . . . . .	1	23
13	72 Grove Street . . . . .	1	164
11	2 Leith Street Terrace . . . . .	1	15
11	5 Leith Street Terrace . . . . .	1	15
11	12 Leith Street Terrace . . . . .	1	37
14	31 Clerk Street . . . . .	1	16
Totals . . . . .		7	384

Inspections carried out by day and night showed that these houses were being conducted in accordance with the provisions of the respective bye-laws.

**Accommodation for Seasonal Workers.**—During the year 264 seasonal workers were employed on 12 farms situated in the Liberton, Colinton, Corstorphine and Cramond districts, and visits were paid both before and during occupation of the special accommodation provided in order to see that the Bye-laws were being observed. These provided for separate sleeping apartments for each sex, the prevention of overcrowding, the proper lighting and ventilation of the accommodation, the provision of water, adequate sanitary conveniences, ablution facilities, etc. Inspection showed that the various premises were kept in a clean and sanitary condition.

### SMOKE ABATEMENT.

Although the value of pure air and sunshine to human health is now fully recognised and the harmful effects of smoke in the atmosphere are undisputed, it is regretted that considerable apathy still prevails towards the smoke abatement campaign, and, accordingly, improvement in atmospheric conditions is greatly retarded.

**Measurement of Atmospheric Pollution.**—The Department continues to co-operate with the Atmospheric Pollution Research Committee of the Department of Scientific and Industrial Research in order to ascertain the extent of atmospheric pollution within the City.



SMOKE-BEGRIMED BUILDINGS.

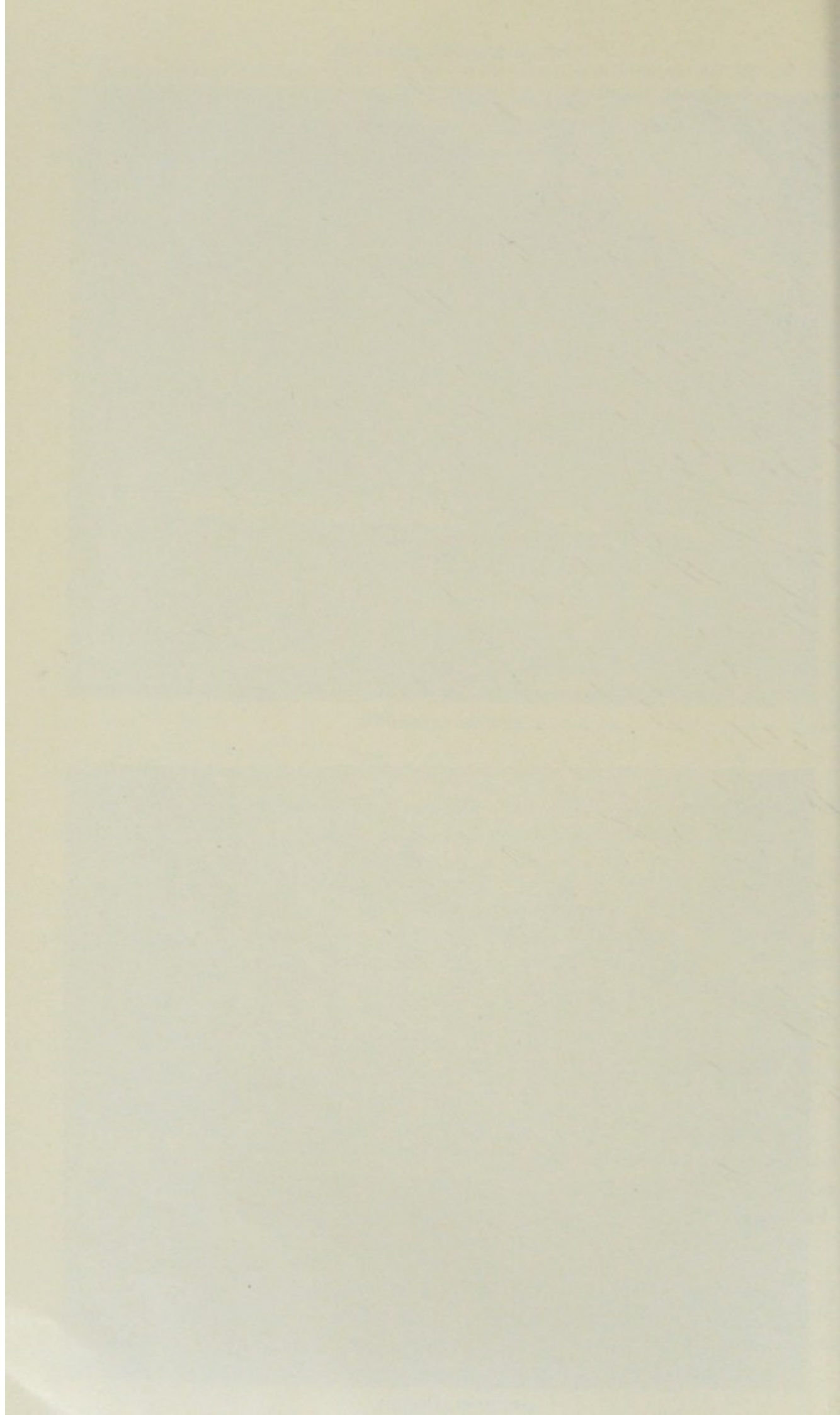


(BEFORE CLEANING.)



(AFTER CLEANING.)







On the suggestion of that Committee, the number of deposit gauges for this purpose has been increased from three to four. One gauge is situated at Leith Links, another at Bruntsfield House, and the gauge which was formerly stationed in West Princes Street Gardens has been removed to St. Andrew Square. The additional gauge has been placed at Glencorse Reservoir, in order to compare the condition of the atmosphere outside with that inside the city.

It is of interest to note that the gauge stationed at St. Andrew Square showed the greatest quantity of solids deposited, the mean monthly amount being 19·62 tons per square mile, whilst at Leith Links and Bruntsfield House, the mean monthly deposits were 13·45 and 13·87 tons per square mile respectively. The congested nature of the area around St. Andrew Square with smoke emitted from large business premises, offices, hotels, etc., would account for the higher amount of deposit there.

The following table shows the monthly records of deposits :—

### Monthly Records of Deposit.

Month.	Station.	Millimetres of Rainfall.	Total Insoluble Matter.	Total Soluble Matter.	Total Solids.	Total Solids.
			Metric Tons. per Sq. Kilometre.	Metric Tons per Sq. Kilometre.	Metric Tons per Sq. Kilometre.	English Tons per Sq. Mile.
January	Leith Links . . .	30·98	1·66	1·67	3·33	8·52
	Bruntsfield House	36·92	1·43	1·70	3·13	8·01
	St. Andrew Square	34·31	3·88	2·75	6·63	16·97
February	Leith Links . . .	30·85	6·75	1·54	8·29	21·22
	Bruntsfield House	41·72	6·55	1·50	8·05	20·61
	St. Andrew Square	34·57	9·05	1·73	10·78	27·60
March	Leith Links . . .	25·18	2·85	1·46	4·31	11·04
	Bruntsfield House	23·49	2·15	1·23	3·38	8·65
	St. Andrew Square	24·32	5·60	1·75	7·35	18·81
April	Leith Links . . .	62·18	2·77	2·39	5·16	13·21
	Bruntsfield House	75·47	3·31	1·96	5·27	13·49
	St. Andrew Square	74·11	6·10	3·11	9·21	22·58
May	Leith Links . . .	19·31	3·47	1·00	4·47	11·44
	Bruntsfield House	26·19	2·30	0·52	2·82	7·21
	St. Andrew Square	25·80	4·54	1·08	5·62	14·39
June	Leith Links . . .	57·92	4·43	1·85	6·28	15·08
	Bruntsfield House	50·09	5·53	2·22	7·75	19·84
	St. Andrew Square	52·25	5·07	1·59	6·66	17·05
July	Leith Links . . .	17·01	3·83	0·82	4·65	11·94
	Bruntsfield House	13·84	3·44	1·00	4·44	11·38
	St. Andrew Square	14·32	4·22	0·96	5·18	13·27
August	Leith Links . . .	64·80	3·94	2·46	6·40	16·38
	Bruntsfield House	74·43	3·55	2·19	5·74	14·70
	St. Andrew Square	68·76	4·64	2·24	6·88	17·61
September	Leith Links . . .	57·92	2·28	1·97	4·25	10·90
	Bruntsfield House	65·34	2·30	2·09	4·39	11·24
	St. Andrew Square	59·98	4·10	2·52	6·62	16·93
October	Leith Links . . .	131·90	2·70	3·70	6·40	16·38
	Bruntsfield House	162·41	3·39	5·52	8·91	22·81
	St. Andrew Square	151·06	5·15	5·43	10·58	27·08
November	Leith Links . . .	82·49	1·92	2·63	4·55	11·66
	Bruntsfield House	86·67	1·41	3·52	4·93	12·62
	St. Andrew Square	81·92	3·83	3·11	6·94	17·75
December	Leith Links . . .	22·07	3·21	2·12	5·33	13·64
	Bruntsfield House	32·40	3·05	3·19	6·24	15·97
	St. Andrew Square	24·90	7·37	2·59	9·96	25·50



**Owen's Air Filter Records.**—As in previous years, records have been kept of the hourly variations of the suspended impurities in the atmosphere.

The apparatus is installed at Public Health Chambers and, by its means, a record is made every twenty minutes, by aspirating a two-litre sample of air through a disc of filter paper; the suspended impurity is retained on the surface of the paper as a small greyish circle, one-eighth of an inch in diameter, the density of which is compared with a standard scale.

The records show that the "dirtiest" month was January, the clearest, July; the "dirtiest" day was 17th January, the clearest days, 3rd and 5th July. January was  $2\frac{1}{2}$  times worse than July and 17th January was about 18 times worse than 3rd and 5th July.

The records obtained during the year have been divided, for the purposes of this report, into two periods, viz. :—(1) January–March and October–December; (2) April to September, the periods being called "winter" and "summer" respectively. The figures have been averaged to show a representative day in each of the two periods.

The average pollution during a winter day was found to be about 81 per cent. higher than during a summer day. When allowance is made for this fact, the variation throughout the twenty-four hours of the average day corresponds approximately in both summer and winter. In other words, the clearest hours were from midnight to three a.m., in both cases. Thereafter the pollution gradually rose to the maximum at eight a.m. to nine a.m. (British Summer Time) in summer and at nine a.m. to eleven a.m. (Greenwich Mean Time) in winter. This was followed by a slight decrease and by a secondary, lesser maximum at eight p.m. in summer and six p.m. in winter. The pollution thereafter fell to the minimum at mid-night to three a.m. These maxima would appear to be more or less connected with the times of the stoking of domestic fires for the morning and evening meals.

**Determination of Sulphur Pollution by Lead Peroxide Method.**—Apparatus was installed in March, 1935, at Charlotte Square Gardens, for the purpose of recording the corrosive activity of the sulphur compounds, present in the atmosphere, in their attack on exposed surfaces.

The apparatus has been standardised by the Department of Scientific and Industrial Research and consists essentially of a small piece of fabric, which is coated with a chemical paste, being exposed to the atmosphere, the paste absorbing a very small proportion of the sulphur impurities. This paste is removed and analysed at the beginning of each month and a fresh surface exposed.

The results indicate the concentration of the sulphur impurities in the atmosphere and have been calculated to show the weight of sulphuric acid deposited per acre of surface per day.



## SULPHURIC ACID DEPOSIT.

Month.	Pounds of Sulphuric Acid (H <sub>2</sub> SO <sub>4</sub> ) deposited per day per acre.
March . . . . .	1.65
April . . . . .	0.62
May . . . . .	0.73
June . . . . .	0.54
July . . . . .	0.30
August . . . . .	0.50
September . . . . .	0.98
October . . . . .	1.02
November . . . . .	0.98
December . . . . .	0.68

**Smoke from Factories and Workshops.**—Daily observations of the chimneys of factories and workshops were continued in order to exercise control over the amount of smoke emitted. In most cases of dense emissions, a visit by the Smoke Abatement Inspector resulted in immediate improvement, but, in several instances, it was necessary to communicate with the owners to have a remedy of a permanent nature effected.

The improvements carried out during the year were as follows :—

New steam boilers installed, including replacement of old boilers . . . . .	7
Steam boiler replaced by electric power . . . . .	1
Secondary-air smoke-preventing apparatus fitted to steam boiler furnaces . . . . .	3
Mechanical stokers fitted to steam boiler furnaces . . . . .	16
Mechanical stokers fitted to central heating boilers . . . . .	11
New chimneys erected or existing ones heightened to increase their draught . . . . .	3
Furnaces in which anthracite, coke or non-bituminous fuel has been substituted for coal (This includes workshops, greenhouses, garages, and business premises.)	10
	<hr/>
	51
	<hr/>

Amongst the more important improvements effected was the installation at the Royal Infirmary of new boiler plant with mechanically stoked furnaces which are now being operated with excellent results.

Extensions to the premises of a large engineering firm included the replacement of the existing boiler by a more modern type of heating plant which will eliminate the production of smoke and terminate what has hitherto been a constant source of complaint.

At one of the largest industrial concerns in the City the process furnaces have presented difficulties in efforts to overcome excessive smoke emissions. The plant, however, is being gradually remodelled, and it is hoped that when this work has been completed a substantial improvement will result.

At other factories improvements of the steam generating plants are under consideration with a view to overcoming the existing smoke problems. It is being realised by factory owners that mechanical stoking is much more effective than hand-firing, not only in preventing smoke, but in maintaining steam requirements, and its development year by year provides a gratifying contribution to smoke abatement.



The present position in regard to factory and other furnaces within the City is as follows :—

Furnaces mechanically stoked . . . . .	138
Smoke-preventing appliances fitted to furnaces . . . . .	111
Steam boilers replaced by electric power within the last four years . . . . .	12
Coke substituted for coal in steam boilers, mostly of vertical types . . . . .	35
Furnaces provided with oil burners . . . . .	58

**Smoke Abatement Class.**—The class in Furnace Management for boiler attendants and firemen, conducted at the Heriot Watt College by the Smoke Abatement Inspector, was continued during the past winter. Altogether, seventy-six men have attended the lectures during the last three years.

**Public Complaints.**—Eighty-one complaints were received during the year, mostly regarding smoke nuisance from chimneys in the immediate vicinity of dwelling houses, such as those of workshops, garages, green-houses, etc. By the substitution of coke for coal or the heightening of chimneys the nuisances were abated.

**Smoke from Railways.**—The movement of trains within the City area contributes considerably towards the pollution of the atmosphere. While smoke from this cause, which both pollutes the air and spoils the amenity, is frequently observed in the centre of the City, the most serious problem in this respect occurs at depots where engines are housed for cleaning purposes and repairs. Visits were made regularly to these depots as well as to the larger railway stations to see that proper steps were taken to prevent, as far as possible, excessive smoke emissions. This source of pollution, however, will not be satisfactorily terminated until the railways are electrified.

**Steam Road Wagons.**—So many steam road wagons have recently been replaced by motor vehicles that the smoke nuisance from this source has become almost negligible. From observation of the few still in operation, it was found that care in stoking was being exercised.

**Domestic Smoke.**—The total volume of smoke emitted from domestic chimneys is vastly greater than that from the industrial source and by its content is of a more injurious nature. Improvement on the domestic side depends to a great extent upon the use of gas and electrical appliances and solid smokeless fuel. In this connection it is of interest to note that the percentage increase of appliances fitted by the Corporation Gas Department last year as compared with the previous year was as follows :—Cookers, 20 per cent. ; fires and radiators, 55 per cent. ; water heaters, 49 per cent.

The increase in the number of units of electricity supplied by the Corporation Electricity Department for domestic heating and cooking for the year ending 28th May, 1935, as compared with the same period for the previous year was 13·16 per cent.

Besides the Gasworks coke which is largely used in domestic heating, specially prepared smokeless fuels are now available within the City and their use appears to be becoming more popular. Unfortunately, these fuels are so far only made in England and the cost of transport adds considerably to the retail price.



## SHOPS ACTS, 1912-1934.

The administration of these Acts which was formerly undertaken by the Police was transferred to this Department in the month of June. This was due largely to the fact that the duty of enforcing certain sections of the 1934 Act relating to sanitary matters was placed upon the sanitary authority.

It became necessary to make a detailed inspection of every shop, including wholesale shops and warehouses, in order to ascertain to what extent they complied with the new requirements.

According to the available statistics, there are approximately 8,500 shops in the City, and between June and the end of the year, fully half of that number were inspected. While many were found to be well provided with sanitary conveniences, many others had inadequate facilities. By the end of the year a considerable number of sanitary improvements had been effected and many more were under arrangement.

Records of hours of employment, half-holidays, etc., were also examined at the time of inspection. It was found that, in most cases, the requisite forms and notices which required to be exhibited were lacking, and much of the Inspectors' time was spent in advising occupiers of the forms required and in re-visiting to see that these had been obtained and properly filled in.

In order to ascertain if the Closing Hours were being observed in the evenings and on half-holidays, the Inspectors were on duty on numerous evenings and on Saturdays and Sundays. Where flagrant offences were committed legal proceedings were taken and on each occasion a fine was imposed.

## FOOD PREMISES.

**Inspection of Shops and Restaurants.**—Visits were made to shops and restaurants in which foodstuffs were either sold or prepared as well as to the kitchens of hotels and restaurants to see that they were being kept in a satisfactory and hygienic condition. Attention was directed to the need for improvements in certain instances and these were duly given effect to. This included the cleansing and painting of premises and provision or proper maintenance of sanitary conveniences, the provision for the reception and removal of offal and refuse, the abatement of nuisance caused by smells and the extermination of rats, as well as structural alterations. At present far too many foodstuffs, especially those that do not require to be cooked before use, are openly exposed to contamination by dust, handling, etc. Although it would be a difficult matter to keep all foodstuffs exposed for sale under cover, it would be quite possible to exercise more care in exposure of many of those foodstuffs. Particularly is this the case with foodstuffs laid out on shop counters.

**Ice-Cream Shops.**—At the end of the year, there were 549 premises registered for the sale of ice-cream, and 532 persons registered for carrying on the business of manufacturer or vendor of or dealer in ice-cream.

Thirty-eight samples of ice-cream were forwarded to the City Analyst with the special purpose of determining the amount of milk fat present. The results were



interesting and not very creditable to a number of the manufacturers. While the average amount of fat in the total number of samples represented 3.39 per cent., there were 17 which contained less than 3 per cent., while 2 samples had less than 2 per cent. milk fat. The variations were so pronounced as to make the fixing of a prescribed minimum standard imperative.

**Milk Supply.**—The number of registered dairy-keepers, including hawkers, at 1st January, 1935, was 637. Applications for registration were received during the year in respect of 16 premises and 7 hawkers. Six of the premises were fully registered, 1 was provisionally registered and 9 were registered for the sale of bottled milk only. The hawkers were provisionally registered for the sale of bottled milk from vehicles. Certificates of registration were cancelled for 8 dairies and for 6 dealers selling sterilised milk in sealed bottles, the sale of milk having been discontinued. The total number of persons registered at the end of the year was 646.

The total approximate daily sale of milk of all classes was 27,350 gallons. Of this total, after deducting 4,088 gallons sold in bulk to Institutions, Hotels, etc., 21,977 gallons or 94 per cent. of the milk supplied in the City was sold in bottles. Milk sold over the counter or passed to the consumer other than in bottles accounted for 6 per cent.

*The Milk (Special Designations) Order (Scotland), 1930.*—The quantities of the specially designated milks now sold daily within the City are :—542 gallons of "Certified," 1,879 gallons of "Grade A" (Tuberculin Tested), and 90 gallons of "Grade A." In addition 17,274 gallons of milk are "Pasteurised" although only a small portion of this is sold under licence, making a total of 19,785 gallons or about 72 per cent. of the total daily sale of milk. This is an increase of 1 per cent. compared with last year.

The Local Authority has granted 254 licences to dealers for the sale of the various grades of milk under the Milk (Special Designations) Order (Scotland), 1930, 93 being for "Certified," 73 for "Grade A" (Tuberculin Tested), 10 for "Grade A" and 78 for "Pasteurised." This is an increase of 14 over the previous year.

The Sixth Annual Progress Report of the Education Committee states that under the national scheme for the supply of milk to school children at a reduced rate, 72 schools took part, comprising 23,711 children. An additional 1,200 children received a ration of milk free of charge, on the advice of the school doctor. The total number of milk meals supplied during the year was 5,025,209, representing 209,384 gallons of milk. The milk supplied is "Grade A" (Tuberculin Tested).

A recent development in the consumption of milk is the daily supply of graded milk to a number of factories, offices and other business establishments in the early forenoon.

#### SALE OF FOOD AND DRUGS ACTS, ETC.

During the year the number of samples submitted for chemical analysis was 1,796, consisting of 871 statutory and 925 informal samples, being at the rate of 3.90 per 1,000 of the population. The number of statutory samples represented 95 different articles of food and drugs.



In regard to the statutory samples, Dr. A. Scott Dodd, B.Sc., Ph.D., F.R.S.E., the City Analyst, reported 843 or 97 per cent. to be genuine and 28 or 3 per cent. as not being in compliance with the legal requirements.

**Milk.**—The nutrition of infants and children is so dependent upon a good milk supply that the number of samples taken is larger than any other article of food, showing a total of 213 statutory samples. In addition, 169 samples were procured, in course of delivery, for biological examination.

In regard to the 213 statutory samples, the City Analyst reported 201 as genuine and 12 as being adulterated, either by the abstraction of fat or by the addition of water, or both.

The average amount of milk fat, inclusive of adulterated samples, was 3·51 per cent. compared with the present presumptive standard of 3 per cent.

The cases of adulteration could not be termed very serious. It was necessary to take legal proceedings against one producer who was fined the sum of £3.

**The Milk (Special Designations) Order (Scotland), 1930.**—Following the precedent of former years, samples of graded milks sold in the City were regularly procured for chemical analysis.

Altogether, 223 samples were forwarded to the City Analyst, consisting of 92 "Certified," 64 "Grade A" (Tuberculin Tested), 33 "Grade A," and 34 "Pasteurised" milk.

A detailed statement is submitted showing the number of samples taken monthly under the different designations, along with the average amount of butter fat found present.

Date.	"Certified."		"Grade A" (T.T.).		"Grade A."		"Pasteurised."	
	No. of Samples.	Butter Fat. Per Cent.	No. of Samples.	Butter Fat. Per Cent.	No. of Samples.	Butter Fat. Per Cent.	No. of Samples.	Butter Fat. Per Cent.
January . . .	8	3·79	5	3·69	2	3·57	3	3·53
February . . .	8	3·87	7	3·70	3	3·53	3	3·42
March . . .	8	3·87	5	4·17	3	3·53	3	3·51
April . . .	8	3·78	7	3·95	3	3·66	3	3·47
May . . .	9	3·73	5	3·63	3	3·75	3	3·42
June . . .	8	3·94	7	3·90	3	4·10	3	3·40
July . . .	8	4·00	5	3·75	3	3·85	3	3·75
August . . .	4	3·99	...	...	1	3·50	2	3·42
September . . .	7	4·08	5	3·97	3	3·85	2	3·65
October . . .	8	4·11	7	3·81	3	4·25	3	3·48
November . . .	8	4·04	6	3·59	3	3·96	3	3·55
December . . .	8	3·76	5	3·59	3	3·54	3	3·52
Total . . .	92	...	64	...	33	...	34	...
Average . . .	...	3·91	...	3·80	...	3·76	...	3·51



The results of analysis are deserving of comment as the monthly average amount of butter fat under each designation, was above the standard. The principal grade, namely, "Certified" shows the highest figures, the lowest average amount of fat in any month being 3.73 per cent., whilst, for the months of July, September, October and November, the figure of 4 per cent., or over, was recorded.

**Mince.**—There has been a considerable improvement in the attitude of the butchers throughout the City towards the observance of the provisions of the Preservatives' Regulations. This applies not only to the number of infringements, but also to the quantities of preservative found present in samples.

In previous years, it was not unusual to find samples of mince containing sulphur dioxide varying from 1,000 to 2,000 parts per million by weight, but it is satisfactory to report that only 1 sample during the present year approximated these figures.

The number of samples purchased from the various shop-keepers was 53, and 13 of these were reported upon as contravening the Regulations. It was considered necessary to take legal action against 7 offenders, each of whom was convicted, and a total sum of £19 10s. was imposed in fines.

**Sausages.**—There is such an enormous demand for this popular article of diet that it has been the practice to take a considerable number of samples with a view to ascertaining the presence of preservatives. Accordingly, 84 samples of sausages were purchased and submitted for chemical analysis.

The results were highly creditable to the manufacturers, for not only did every sample comply with the Regulations, but a number were found to contain no form of preservative whatever. This is most exceptional. In former years, it was not uncommon to find samples containing sulphur dioxide much in excess of the standard, whilst, occasionally, they contained a prohibited preservative.

**Other Foods and Drugs.**—Other articles reported on adversely by the City Analyst were as follows:—One sample of baking powder contained only 1.63 per cent. carbon dioxide; one sample of beef dripping contained 15 per cent. of fat not beef; one sample of fresh butter contained 18.45 per cent. water; and one sample of honey contained 10 per cent. invert sugar.

In all cases, intimation was made to the vendors, who gave an assurance that steps would be taken to avoid a repetition of the offence.

**Imported Foodstuffs.**—Twenty-one samples of imported foodstuffs were taken at Leith Docks for chemical examination under the Preservatives' Regulations, comprising a variety of eight different foodstuffs. All were reported upon by the City Analyst as being free from preservatives.

**The Rag Flock Act, 1911.**—The samples of rag flock taken for the purpose of analysis during the year showed a high standard of cleanliness and, with one exception, were well within the limits prescribed by the 1912 Regulations.



The premises of various bedding manufacturers were visited and nine samples taken. The amount of chlorine found present was well below the standard, except in one sample where the amount reached the high figure of 120 parts, compared with the maximum of 30 parts chlorine per 100,000 parts of flock allowed under the Regulations.

This rag flock had been supplied by a firm in the West of Scotland and, on investigation, it transpired that, owing to a great shortage in the supplies in Scotland and England, the material in question had been procured from Holland. It was found to be much inferior in quality to the Scottish material and further supplies were immediately cancelled. The local firm had unfortunately neglected to safeguard themselves by demanding a written warranty for this flock and they were informed that any future contravention would probably result in a prosecution.

**The Poisons and Pharmacy Act, 1908.**—This Act which regulates the sale of poisonous substances used in agriculture and horticulture remained in force during the year as no date had been fixed for the coming into operation of the Pharmacy and Poisons Act, 1933.

The total number of applications received was 27, and these were exclusively for renewal of licences previously granted. The various premises were inspected and it was found that the licence holders were duly complying with the terms of the Act.

It was necessary, however, to direct attention to certain irregularities in the details entered in the Poisons Books and subsequent visits proved that these had been rectified.

**The Fertilisers and Feeding Stuffs Act, 1926.**—When this Act came into operation, it was anticipated that there would be an increased demand for the services of the Official Sampling Officer and the Agricultural Analyst. This has not yet materialised although the facilities afforded are a marked advance on those contained in the previous Act.

There have been no applications received by the Local Authority from purchasers of either fertilisers or feeding stuffs. In pursuance of the powers granted under the Act, however, a number of premises were visited where fertilisers and feeding stuffs were manufactured or were on sale, and samples were taken in the manner prescribed in the Regulations and forwarded to the Agricultural Analyst for examination.

The number of samples taken was greater than in any previous year, and consisted of 15 samples of feeding stuffs and 1 sample of fertiliser. In every instance, these were certified to conform to the statutory requirements, whilst several contained an amount of oil or albumenoids considerably higher than the percentage guaranteed.

**The Merchandise Marks Act, 1926.**—The imported foodstuffs which must bear an indication of the place of origin as specified in the "Order in Council" under the above-mentioned Act now represent a considerable number, and regular inspection is necessary in order to ascertain that this requirement is being duly observed.



While compliance is generally obtained, there is a small number of traders who fail in this respect. This applies especially to the ticketing of imported raw tomatoes, and, as reprimands given to several shop-keepers were ineffective, it became necessary to take legal action.

Prosecutions were instituted against two fruit merchants for failing to have imported raw tomatoes ticketed in conformity with the Act. These infringements were aggravated by the fact that the merchants had been cautioned on several occasions. A plea of guilty was tendered, and a fine of £1 was imposed in each case.

The publicity given to these contraventions had a marked effect. From that date, infringements were conspicuously absent.

### PORT SANITARY INSPECTION.

**Shipping Arrivals.**—Vessels which arrived at Leith Docks and Granton Harbour from foreign ports numbered 1,384, representing 1,279,937 tons, whilst vessels which arrived from home ports numbered 9,458, representing 1,730,827 tons. The total number of ships, including steamers, motor, sailing and fishing vessels arriving in the Port Sanitary District was 10,842, having a total tonnage of 3,010,764, showing an increase of 342 vessels and 68,353 tons when compared with last year.

**Sanitation.**—It is the duty of the Local Authority to cause an inspection of their district to be made with a view to the removal of nuisances therein and to secure the proper sanitary condition of all premises, which includes any ship lying in any sea, river, harbour or other water or, *ex adverso*, of any place within the limits of the Local Authority. In giving effect to this provision, the boarding, inspection and re-visiting of vessels totalled 1,402 and the insanitary conditions dealt with were 3,985 necessitating 29 written and 231 verbal intimations, the service of 24 notices and 424 copies of the Regulations. Examination was made of the crews' and passengers' quarters, including bunks, bedding and clothing, sanitary accommodation, water supply, etc., and investigations were also made into the presence of rats and other vermin.

In the course of inspection many matters of an insanitary nature came under observation and these were at once brought to the notice of the Master of the ship for his attention. For example, in 604 cases, floors, tables, decks, etc., were found in a dirty condition; in 1,179 cases the bedding and clothing were dirty or verminous; dirty lockers were found in 445 instances; and foul or choked closets, latrines, wash basins, etc., in 305 instances, besides other insanitary matters.

Persistent efforts are required to keep the crews' living accommodation at a high standard of cleanliness consistent with the requirements of the Department. It is found that considerable indifference exists as to the conditions under which the men sleep and this is greatly aggravated in the case of weekly ships, particularly those engaged in the coal trade. The men in those ships usually supply their own bedding which is frequently found to be in a dirty and unhealthy state. The facilities for those engaged in this dirty work for keeping bedding and blankets clean are very meagre.



Lavatories for the use of sailors and firemen are still, in many instances, of an old type, such as the iron trough or hopper, flushed by hose or hand-bucket. This cleansing is often carried out in a very haphazard manner with the result that the iron surfaces become corroded, foul and offensive. In many cases flushing tanks are provided, but these are not of an automatic type and are thus little improvement upon the dry-closet. The washing facilities in many ships leave much to be desired. The absence of an adequate supply of hot water, especially for firemen, adds to the inconvenience and difficulties of maintaining cleanliness.

Drinking water on board ships is generally found to be satisfactory and the importance of having a pure and plentiful supply is fully appreciated.

**Rat Destruction.**—Under Article 28 of the Sanitary Convention of Paris, 1926, the total number of Certificates granted to Masters of vessels during the year was 153, of which 127 were Exemption Certificates. The fees collected totalled £274 11s. 6d. In 26 cases it was necessary to request fumigation measures to be undertaken for the destruction of rats. Cyanogen chloride gas was employed for this purpose with satisfactory results. The total number of rats killed on board ships in port, on the quays and wharves was 968. Thirty-five of these were submitted to bacteriological examination for plague infection with negative results. In all, 35 vessels arrived from plague-infected ports and all the necessary precautions were taken in respect of these vessels. Rat destruction measures were undertaken in the Dock area by the Dock Commissioners' staff and during the year 12,000 poison baits were laid, in addition to continuous trapping.

**Cleansing.**—The Dock Commissioners continued to maintain a very high standard of cleanliness, the roads, wharves, sheds, sanitary conveniences, etc., being regularly and systematically attended to throughout their area.

**V.D. Clinics.**—Under the auspices of the British Social Hygiene Council, 424 pamphlets of the Scottish Committee containing a list of treatment centres in Scotland approved by the Department of Health for Scotland under the Public Health (Venereal Disease) Regulations (Scotland) 1916, were distributed on board vessels arriving in the Port Sanitary Area. These leaflets are printed in several languages, offer free treatment by the Local Authority, specify the days and hours of clinics, and thereby meet the special requirements of shipping.

In the execution of the duties of the Port Sanitary Department, much valuable assistance has been received from H.M. Collector of Customs, the Leith Dock Commissioners, the Granton Harbour Official, the Board of Trade and the various shipping companies and agents to whom this opportunity is taken of expressing my thanks for their esteemed co-operation.



*Port Sanitary Inspection—Annual Statement.*  
*Year 1935.*

Ships boarded and inspected . . . . .	786
Re-visits made . . . . .	616
Nuisances discovered . . . . .	3,985
Communications written . . . . .	29
Notices served . . . . .	24
Verbal warnings . . . . .	231
Ships fumigated or otherwise treated for vermin by owners . . . . .	111
Fumigation certificates granted . . . . .	42
International fumigation certificates granted . . . . .	26
International Exemption Certificates granted . . . . .	127
Local fumigation certificates granted . . . . .	16
Rats exterminated . . . . .	933
Ships provided with rat guards . . . . .	694
Notices of regulations served upon Masters or Officers in charge . . . . .	424
V.D. Pamphlets distributed on behalf of the B.S.H. Council . . . . .	424
Rats submitted for bacteriological examination . . . . .	35
Negative . . . . .	35
Nuisances abated . . . . .	3,893

*Nuisances Discovered.*

Dirty floors, tables, decks, etc. . . . .	604
Dirty bunks and bedding . . . . .	1,179
Dirty partitions and ceilings . . . . .	356
Dirty lockers . . . . .	445
Foul closets and latrines . . . . .	132
Foul wash basins . . . . .	54
Foul sinks . . . . .	14
Foul baths . . . . .	5
Choked scuppers . . . . .	38
Choked and defective latrines . . . . .	29
Choked and defective wash basins . . . . .	19
Choked and defective sinks and baths . . . . .	14
Accumulations of garbage, refuse, etc. . . . .	132
Dirty fresh water tanks . . . . .	65
Dirty and offensive bilges . . . . .	249
Dirty galleys, food stores, pantries, etc. . . . .	108
Dirty wash places . . . . .	97
Dampness in quarters . . . . .	4
Ships without rat guards . . . . .	92
Presence of rats and mice . . . . .	95
Presence of cockroaches and beetles . . . . .	25
Presence of bugs and fleas . . . . .	67
Miscellaneous . . . . .	162
Total . . . . .	<u>3,985</u>

*Rat Destruction Measures in Dock Area.*

Baits laid . . . . .	12,000
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**STAFF.**

I desire to express my cordial appreciation of the enthusiastic services rendered by all the members of the staff.

I am,

My Lord Provost, Ladies and Gentlemen,

Your obedient Servant,

ALLAN W. RITCHIE, F.R.San.I., F.R.S.E.,  
*Chief Sanitary Inspector.*



## NUISANCES AND SANITARY IMPROVEMENTS IN 1935.

NATURE OF NUISANCE.	Calton.	Canongate.	Newington	Morningside.	Merchiston.	Gorge.	Haymarket	St. Bernard's.	Broughton.	St. Stephen's.	St. Andrew's.	St. Giles.	Daly.	George Square.	St. Leonard's.	Portobello.	South Leith.	North Leith.	West Leith.	Central Leith.	Liberton.	Colinton.	Corstorphine and Craigmond.	TOTALS.
<b>Water-closets.</b> —																								
Water-closets introduced . . . . .	...	13	1	12	1	5	1	1	1	1	...	5	2	2	1	2	...	1	1	2	10	...	...	12
New apparatus substituted . . . . .	...	4	...	3	2	...	...	2	9	3	5	8	3	10	7	41	6	7	2	2	4	...	...	52
Improved or repaired . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	146
Water-closets and sinks in a filthy condition and cleansed . . . . .	...	3	6	1	1	...	2	1	1	2	1	7	...	4	1	11	2	1	...	1	1	...	...	17
Choked water-closets cleared . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	6	13	...	...	1	...	2	2	...	...	59
New water-closet apartments provided . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10	...	...	2
New bathrooms constructed . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10	...	...	10
<b>Sinks, Tubs, and Wash-hand Basins.</b> —																								
Sinks introduced . . . . .	2	10	1	...	...	...	...	4	1	1	2	10	13	4	7	...	1	...	1	1	10	...	...	10
Insanitary sinks abolished . . . . .	3	12	1	...	...	...	...	5	3	1	3	12	15	5	9	...	2	...	1	1	...	...	...	58
Earthenware sinks and tubs substituted . . . . .	8	10	1	2	1	18	1	4	7	5	5	18	13	8	16	4	5	7	1	3	2	...	...	73
Repairs (woodwork, etc.) . . . . .	...	4	...	...	...	...	...	...	...	2	4	1	3	4	...	7	...	1	...	...	3	...	...	139
Choked sinks, wash-tubs, etc., cleared . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	29
Wash-hand basins renewed or introduced . . . . .	2	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	4
<b>Drains.</b> —																								
Choked drains cleared . . . . .	17	7	3	4	1	18	1	7	8	8	10	9	7	11	29	14	21	40	8	8	11	3	3	248
Choked surface traps cleared . . . . .	8	1	...	...	...	3	2	1	...	1	...	4	11	2	7	3	6	2	1	1	...	...	...	52
Drains repaired or renewed . . . . .	2	7	...	...	...	...	...	...	...	...	...	...	1	...	2	1	...	...	...	...	...	...	...	7
Soil pipes repaired or renewed . . . . .	...	2	1	1	...	...	...	2	5	3	1	6	13	6	6	1	3	4	1	2	2	...	...	19
Sinks, etc., waste pipes repaired or renewed . . . . .	3	2	1	3	...	...	...	...	3	...	...	1	1	...	5	5	3	1	2	4	...	...	...	90
Rain-water conductors repaired or renewed . . . . .	3	2	...	...	1	...	...	...	3	...	...	1	1	1	5	...	3	1	...	1	...	...	...	22
<b>CARRY FORWARD . . . . .</b>	72	76	15	27	8	44	7	29	41	28	34	82	82	63	128	89	49	65	18	31	55	3	3	1,049



NUISANCES AND SANITARY IMPROVEMENTS IN 1935—continued.

NATURE OF NUISANCE.	Calton.	Canongate.	Newington.	Morningside.	Merchiston.	Gorge.	Haymarket	St. Bernard's.	Broughton.	St. Stephen's.	St. Andrew's.	St. Giles.	Dalry.	George Square.	St. Leonard's.	Portobello.	South Leith.	North Leith.	West Leith.	Central Leith.	Liberton.	Colinton.	Corstorphine and Craigmond.	Totals.
BROUGHT FORWARD . . . . .	72	76	15	27	8	44	7	29	41	28	34	82	82	63	128	89	49	65	18	31	55	3	3	1,049
<i>Water Supply.</i> —																								
Cisterns found dirty . . . . .	47	29	42	8	3	...	3	24	28	12	7	6	1	25	53	76	37	21	2	22	7	2	...	455
Cisterns found without covers . . . . .	6	...	...	2	...	...	...	1	2	1	...	...	...	3	1	4	10	2	...	4	3	1	...	40
Branches taken off the main . . . . .	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10	...	...	12
Water pipes repaired . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	31
Houses temporarily without water supply due to burst pipes, etc. . . . .	1	1	...	...	...	...	...	...	1	...	1	1	1	3	2	1	1	5	...	...	...	3	...	21
<i>Repairs to Houses.</i> —																								
Floors, hearths, doors, etc., repaired . . . . .	7	13	1	1	1	1	1	...	1	2	2	3	9	6	10	3	7	3	2	3	1	...	...	77
Windows and skylights repaired or renewed . . . . .	8	5	4	...	6	1	...	1	1	1	7	8	6	3	11	2	4	6	3	1	...	...	...	78
Coal bunkers repaired or provided . . . . .	12	2	...	...	...	...	...	...	...	...	...	...	...	...	14	3	...	...	...	...	...	...	...	61
Grates or ranges repaired or substituted . . . . .	10	18	1	1	2	2	1	...	3	1	2	10	6	5	14	4	3	2	...	...	1	...	...	113
Wall and ceiling plaster repaired . . . . .	4	1	...	...	1	...	...	...	1	1	4	16	10	...	...	...	2	12	3	...	...	...	...	21
Defective roofs repaired . . . . .	...	...	...	...	1	...	...	...	...	...	...	3	...	...	...	...	...	6	1	...	...	...	...	2
Boiler of kitchen range renewed . . . . .	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
<i>Nuisances in Houses.</i> —																								
Floors and bedding of houses in a dirty condition and cleansed by tenants . . . . .	1	4	3	2	5	1	1	1	1	...	3	6	1	...	9	21	2	4	...	5	3	...	1	74
Nuisances due to bad smells in dwelling houses caused by escapes of gas, dead vermin, etc. . . . .	11	...	2	4	...	...	2	1	4	5	6	8	2	1	3	1	1	2	1	2	...	1	1	58
Smoke in houses due to foul or defective vents . . . . .	21	5	2	3	1	2	2	3	5	3	1	10	6	2	8	2	6	10	...	4	2	2	1	99
Damp houses remedied or abated . . . . .	4	3	...	2	...	...	2	2	2	...	...	3	2	102	153	63	3	4	4	...	...	...	...	36
Houses overcrowded . . . . .	150	155	37	5	5	75	29	41	43	68	117	226	109	102	153	63	104	217	72	165	44	11	7	1,996
Houses and shops flooded from defects on flats above . . . . .	2	1	...	1	1	...	1	1	1	3	3	3	...	2	5	...	7	8	...	1	...	...	...	40
CARRY FORWARD . . . . .	362	314	107	56	34	126	49	107	140	126	189	387	237	217	413	273	240	375	106	244	130	21	17	4,270



NUISANCES AND SANITARY IMPROVEMENTS IN 1935—continued.

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BROUGHT FORWARD . . . . .	362	314	107	56	34	126	49	107	140	126	189	387	237	217	413	273	240	375	106	244	130	21	17	4,270
<i>Nuisances in Houses (continued) :—</i>																								
Animals kept in, or in close proximity to dwellings	...	...	...	5	1	...	...	1	4	...	...	4	1	4	...	2	2	...	1	1	2	1	...	29
Houses distempered, papered or painted by—																								
Tenants . . . . .	...	7	...	2	2	...	2	2	...	...	...	...	1	...	...	3	16	4	...	2	...	...	...	41
Owners . . . . .	...	6	...	9	12	...	...	4	21	...	...	...	6	...	...	1	13	7	...	2	...	...	...	93
<i>Stairs, Passages, etc. :—</i>																								
Stairs painted . . . . .	73	51	35	37	34	196	16	67	58	36	46	138	34	113	111	18	151	179	66	43	3	...	4	1,509
Stairs and passages in a dirty condition and cleansed by tenants . . . . .	74	42	43	38	54	97	28	61	82	27	44	79	37	75	73	32	36	53	15	25	16	1	4	1,036
Dogs and cats committing nuisance in common stairs and back greens . . . . .	19	1	6	12	2	11	1	7	13	12	6	7	6	15	8	10	6	9	5	6	4	...	...	166
<i>General :—</i>																								
Premises infested by rats . . . . .	16	17	6	19	12	11	24	14	9	17	8	27	13	15	13	28	18	13	21	9	6	8	10	334
Premises infested by other vermin . . . . .	39	44	12	2	2	38	4	10	6	16	8	28	21	20	29	18	20	25	5	11	36	2	...	396
Accumulations of rubbish, garbage and filth removed from areas, roofs, cellars and vacant houses . . . . .	29	199	9	14	15	19	24	10	36	61	20	44	50	49	59	51	550	884	49	462	4	3	2	2,643
Accumulations of manure near dwellings . . . . .	2	1	2	2	2	2	6	10	8	2	...	1	2	...	2	7	4	...	...	...	...	...	...	57
Disused cellars cleaned and closed . . . . .	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7
Tenants casting garbage over windows . . . . .	20	9	3	18	12	11	7	6	8	18	6	4	4	13	10	2	6	3	4	4	...	...	...	169
Surfacing of courts repaired or renewed . . . . .	4	1	...	...	...	...	...	1	...	...	...	...	1	1	4	2	5	...	...	1	...	...	...	36
Noise nuisances . . . . .	2	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	11
Seasonal workers' huts found dirty and cleansed . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6
Miscellaneous nuisances . . . . .	23	6	5	18	10	8	15	11	15	17	9	13	14	12	9	13	17	11	3	7	7	6	14	263
TOTALS . . . . .	664	698	234	234	193	520	176	311	403	337	338	738	429	539	735	460	1084	1563	275	817	210	47	62	11,067



## SUMMARY.

Complaints by citizens . . . . .	3,654
„ „ other Departments . . . . .	263
Nuisances discovered and reported by District Inspectors . . . . .	7,150
Total nuisances dealt with by the Department . . . . .	<u>11,067</u>
Intimations of existence of nuisance served . . . . .	1,040
Notices to remove nuisances served at the instance of the Local Authority . . . . .	38
Intimations served in connection with renewal and introduction of sinks and water-closets . . . . .	68
Notices served do. do. do. do. do. . . . .	9
Notices delivered cautioning persons against casting garbage over windows . . . . .	1,402
Notices served on occupiers failing to take due rotation of stair sweeping and washing . . . . .	788
Notices served for the cleaning of dirty areas, cellars, etc. . . . .	187
Notices and letters served for the white-washing and cleansing of houses . . . . .	88
Notices and letters served for the removal of accumulations of manure . . . . .	14
Intimations under Section 109 of the Housing (Scotland) Act, 1925 . . . . .	978
Notices served in connection with the painting of common staircases . . . . .	4,608
Notices served in connection with the cleansing of water cisterns . . . . .	324
	<u>9,544</u>



VETERINARY DEPARTMENT,  
PUBLIC HEALTH CHAMBERS,  
JOHNSTON TERRACE,  
EDINBURGH, 1, 15th April, 1936.

To  
*The Lord Provost, Magistrates, and  
Council of the City of Edinburgh.*

MY LORD, LADIES AND GENTLEMEN.

I beg to submit, for transmission to the Department of Health for Scotland, my Report for the year ending 31st December, 1935, which has been called for by the Department in virtue of their powers under Section 4 (5) of the Milk and Dairies (Scotland) Act, 1914.

I am,

Your obedient Servant,

A. GOFTON, F.R.C.V.S.,  
*Chief Veterinary Inspector.*

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To  
*The Secretary,  
Department of Health for Scotland,  
Edinburgh.*

SIR,

I beg to submit herewith my Report for the year 1935, as required by Section 4 (5) of the Milk and Dairies (Scotland) Act, 1914. An account of the year's work in connection with the inspection of meat and other foodstuffs, including port food inspection, is added.

#### MILK AND DAIRIES (SCOTLAND) ACT, 1914.

No administrative difficulties have been encountered during the year in the operation of the Act, and no points have arisen which merit special attention.

**Inspection of Cows and Dairy Byres.**—In terms of the Act, the Veterinary Inspector is required to inspect the cattle in all registered dairies in the City from time to time and once at least in each year. In accordance with practice, the cattle in all the registered dairies in the City have been examined at intervals of one month. During



the year 614 visits were made to registered dairies and the cattle therein inspected. In determining the duties of the Veterinary Inspector, under the Act, the Local Authority made provision for the periodical inspection of all dairy cattle in premises which were exempt from registration under the Act. In accordance with this requirement, 30 visits were made to non-registered dairies.

The newly-calved cows offered for sale in the market at Gorgie on the Tuesday and Wednesday of each week were subjected to inspection and examination in the market identical to that which takes place in registered dairy premises. During the year, 1,319 cows were so examined in the market, representing an average of 25 cows exposed for sale each week. One cow was ordered out of the Market Byres on account of mastitis and was slaughtered at the owner's risk.

**Health of Cows, etc.**—Apart from tuberculosis, 120 diseased cows were detected in the course of inspections of cattle in registered or exempt premises. The diseases encountered were as follows :—

Mastitis . . . . .	56
Suppurating conditions of udders and teats . . . . .	30
Johne's Disease . . . . .	1
Retained Placenta . . . . .	8
Psoroptic Mange and Ringworm . . . . .	11
Tumours . . . . .	2
Injuries and General Disorders . . . . .	12
	<hr/>
	120
	<hr/>

The cows in question were removed permanently or temporarily from the milking herds as cases required. The milk was withdrawn from sale in all cases in which risk was entailed of contamination or infection from the diseased condition. In appropriate cases it was fed to pigs or calves after boiling, otherwise it was destroyed.

**Tuberculosis in Dairy Cows.**—During the year 14 cows, on registered dairy premises in the City, which were found to be tuberculous, within the meaning of the Tuberculosis Order of 1925, were dealt with in terms of that Order. These animals were classified as follows :—Tuberculosis of the udder 7, chronic cough and showing definite clinical symptoms of tuberculosis 7.

The tuberculin test was not applied in any case under the powers contained in Section 22 of the Act. So far as the test was employed for the diagnosis of tuberculosis it was used under the powers contained in the Tuberculosis Order.

The incidence of tuberculosis in dairy cows in the City and district revealed by post-mortem statistics at the Abattoir during 1935 shows a lower occurrence than has been the average over a period of years. Of a total of 4,197 cows slaughtered, 1,897 or 45·20 per cent. were affected with tuberculosis in some degree. This compares with an average of 46·45 per cent. over the previous five years. In 10·54 per cent. of cases, the disease was advanced and the whole of the carcase and all the viscera were condemned.



In 19.35 per cent. tuberculosis affected the viscera and localised areas on the carcass, and in 70.11 per cent., it was confined to one or more of the visceral organs. Tuberculosis was responsible for 85.2 per cent. (by weight) of seizures of cow beef from all causes, and 82.4 per cent. (by weight) of seizures of all classes of beef during 1935.

**Number of Cowsheds.**—At December, 1935, there were on the register 62 premises in the occupation of milk producers. The number of cowsheds on these premises was 102 and the average number of cows accommodated therein was 1,727.

Two certificates of registration were transferred to new tenants, one new certificate was granted during the year, and nine were cancelled. The number of dairy premises in the occupation of milk producers in the City was thus reduced by eight.

At December, 1935, the number of exempted premises was 26, and the number of cows therein 73. These premises are all licensed under the Cattle-sheds in Burghs (Scotland) Act, 1866. In only a few cases is milk sold from these premises. Exemption from registration under the Milk and Dairies (Scotland) Act, continued to be granted in those cases in which the amount of milk sold per day did not exceed two gallons.

**Milk and Dairies Order, 1934.**—Articles 4 to 14 of the Milk and Dairies Order 1934, have been complied with so far as these articles apply to the premises of milk producers in the City.

**Milk and Dairies (Scotland) Act, 1914 (Sections 13, 14 and 21).**—The City dairymen continue to observe the terms of Sections 13 and 14 of the Act with regard to the withdrawal from sale of the milk from a diseased cow and notification of the existence of disease.

The City being entirely a receiving and consuming district no question of taking samples of milk under Section 21 of the Act has arisen.

**Milk (Special Designations) Order (Scotland), 1930.**—Three producer's licences for the sale of designated milk under this Order have been in force during the year, namely, two "Grade A" and one "Certified." The licence for the production and sale of certified milk is held by the Royal Victoria Hospital Tuberculosis Trust, Gracemount Farm, Liberton. The average number of cows in milk is 30 and the production is approximately 17,000 gallons. The milk is in part retailed by the producers in the City, and in part utilised in Southfield Sanatorium which belongs to the Trust.

In terms of Section 9 of the Milk Act, 1934, the Department of Agriculture for Scotland formulated the Tuberculosis (Attested Herds) Scheme (Scotland), which came into operation in March, 1935. Under this Scheme the Department undertakes to apply the tuberculin test free of charge to herds of cattle, belonging to producers of milk registered under the Milk Marketing Scheme for Scotland, which comply with the conditions laid down in the Attested Herds Scheme. Provided that the official tuberculin test applied by the Department discloses no reactors, and that the management of the herd and the conditions under which it is kept are, in the Department's opinion, satisfactory, a certificate of attestation is granted by the Department.



The dairy herd belonging to the Royal Victoria Hospital Tuberculosis Trust qualified for and was granted a certificate of attestation within a few weeks of the commencement of the Attested Herds Scheme.

All milks sold in the City under licences granted in terms of the Milk (Special Designations) Order, have been periodically sampled and subjected to bacteriological examination. During the year, 162 samples of graded milk were thus examined. Of these, 29 were samples of pasteurised milk and were representative of milk from both licensed and non-licensed pasteurisers.

**Milk Supply—City Hospitals.**—The dairy herds belonging to the Corporation at Colinton Mains and Bangour Farms have continued to supply milk to certain of the hospitals. Both herds were tested with tuberculin twice during the year and there were no reactors. Samples of milk from both farms were submitted to bacteriological examination at intervals and conformed to the bacterial standard for certified milk.

The average number of cows in milk and the approximate total output of milk for the year was :—

Colinton Mains, 78 cows, 72,000 gallons, and  
Bangour, 66 cows, and 56,000 gallons.

### Bacteriological Laboratory.

The following summary of work performed in the Laboratory during the year has been furnished by Mr W. Jowett, F.R.C.V.S., D.V.H.

**Bacteriological Examination of Milk.**—During the year 236 samples of milk were subjected to test for bacteriological standard. These comprised :—

Certified Milk . . . . .	47
Grade "A" (Tuberculin Tested) Milk . . . . .	32
Grade "A" (Tuberculin Tested) Milk, (as supplied to Schools) . . . . .	36
Grade "A" Milk . . . . .	18
Pasteurised Milk . . . . .	29
Sterilised Milk . . . . .	2
Milk for City Hospitals . . . . .	7
Ordinary Milk . . . . .	65
	236

Six samples of Certified milk fell below the standard specified in the Milk (Special Designations) Order in respect of general bacterial count, and two in respect of the presence of coliform organisms. Three samples of Grade "A" (T.T.) milk failed in both tests and nine in the coliform test only. One sample of Grade "A" milk failed in the general count and four in the coliform test. In all cases the faults were referred to the producers and the Local Authorities concerned, and subsequent tests showed the faults to have been eliminated.



In order to test the hygienic quality of milk as delivered in the City from outside districts, 65 producers' samples were collected on arrival at the premises of distributors. Of these, 50 (equivalent to 77 per cent.) complied with the bacterial standard for Grade "A" milk, and in only one case was it considered necessary to refer back to the Local Authority of the producing district for enquiry into the conditions of production.

One sample of pasteurised milk which had been contaminated with a spore-bearing organism prior to pasteurisation failed to conform to the bacterial standard for pasteurised milk. Coliform organisms were demonstrated in 9 samples, equivalent to 31 per cent. of those examined.

**Milk from Individual Cows in City Byres.**—One hundred and nineteen samples were examined for the presence of the tubercle bacillus and other forms of infection. The tubercle bacillus was demonstrated in 7 samples by microscopical examination. Of the remaining samples, it was found that various types of infection (streptococci, staphylococci, and *C. pyogenes*, etc.) were present in 47.

**Bulk Milk Samples** subjected to biological test for tuberculosis :—

(Brought forward incomplete at the end of 1934) :—

	34			
Tested and completed at 31st December, 1935	219			
Total . . .	253	Positive	15	Inconclusive 6
		<hr style="width: 100%;"/>		
Remaining under test at 31st December, 1935	30			
Total . . .	283			

Excluding inconclusive results due to the premature death of experimental animals, the samples tested and completed showed 5.92 per cent. to be infected with living tubercle bacilli.

Infection was traced in 10 of the 15 positive cases by reference to the Local Authorities concerned and reports were received that investigation had resulted in the slaughter, under the Tuberculosis Order, of 11 cows affected with tuberculosis of the udder. In the remaining 5 cases, in which negative reports were received, check samples taken in the City proved negative to the biological test, showing that infection had ceased, presumably by the disposal of infected animals after sampling and before conclusion of the first biological test.

In connection with tracing the sources of infection, 18 group and individual samples were submitted to microscopical and biological test in the Department and gave 2 positive results.

**Biological Test of Graded Milks.**—Seven samples of Grade "A" (Tuberculin Tested) milk, as supplied to schools in the City, were tested and all proved negative.



## Summary of Examinations Made—

Material.	Examined for.	Number.
Blood . . . . .	Anthrax . . . . .	204
Do. . . . .	Br. Abortus . . . . .	12
Do. (Avian) . . . . .	B. Pullorum . . . . .	328
Skin Scrapings . . . . .	Parasitic Mange . . . . .	3
Do. do. . . . .	Ringworm . . . . .	1
Expectorate . . . . .	B. Tuberculosis . . . . .	4
Milk . . . . .	Do. (Microscopical) . . . . .	122
Do. . . . .	Do. (Biological) . . . . .	264
Do. . . . .	Str. Agalactiæ . . . . .	15
Do. . . . .	Bacteriological standards . . . . .	236
Do. . . . .	Acetone . . . . .	3
Do. . . . .	Blood . . . . .	2
Fæces . . . . .	Nematode Ova . . . . .	2
Miscellaneous Tissues . . . . .	B. Tuberculosis . . . . .	17
Do. do. . . . .	Br. Abortus . . . . .	12
Do. do. . . . .	Actinomycosis . . . . .	1
Do. do. . . . .	Parasites . . . . .	4
Do. do. . . . .	Neoplasms . . . . .	3
Do. do. . . . .	General . . . . .	4
Do. do. . . . .	Adulteration . . . . .	5
Stomach Contents . . . . .	Metallic poisoning . . . . .	1
		1,243

**Tuberculosis in Sheep.**—A case of tuberculosis in a sheep is again recorded and was proved to be due to infection with the bovine type of tubercle bacillus. In the past ten years only five cases of tuberculosis have been detected in sheep slaughtered in the City Abattoirs. These odd cases of tuberculosis in sheep are probably to be explained by the bottle feeding of orphan lambs, but the statistics of the City Abattoirs show one sheep affected in approximately 150,000, and emphasise the very low incidence of the disease in sheep.

**Preparation of Vaccines.**—Vaccines have been prepared, as in previous years, for use in the clinical work of the Department.

## INSPECTION OF MEAT AND OTHER FOODS.

**Fat Stock Markets.**—The usual observation has been maintained in the fat stock markets throughout the year, a Veterinary Officer being detailed for duty in the markets on each market day. Twenty-two cattle, 22 sheep and 1 pig were ordered out of the markets by the Veterinary Officer, on account of disease or injury. In all cases the animals were removed to the slaughterhouse and slaughtered at the owners' risk.

The following table shows the number of animals exposed for sale in the fat stock markets during 1935 :—

Cattle . . . . .	47,601
Calves . . . . .	6,158
Sheep . . . . .	267,446
Swine . . . . .	23,317
	344,522



**Abattoir.**—Supervision has been maintained in accordance with the usual practice at Gorgie Abattoir.

The number of animals passing through the slaughterhouse during 1935 is shown in the following table :—

Cattle	{ Oxen . . . . .	29,611	
	{ Bulls . . . . .	531	
	{ Cows . . . . .	4,197	
	{ Heifers . . . . .	1,397	
		<hr/>	35,736
Calves . . . . .			4,008
Sheep . . . . .			147,884
Swine . . . . .			20,509
			<hr/>
			208,137
			<hr/>

The gross total of animals slaughtered is lower by 4,443 than in 1934, but, with the exception of sheep, the numbers of which fell by 8,328, there were increases in the other classes of animals.

**Carcases and Offal condemned in Abattoir.**—Carcases partially or wholly condemned in the City abattoir weighed 166·78 tons. To this there falls to be added 102·01 tons (weight estimated) of condemned offal, making a total of approximately 268·79 tons. Tuberculosis was responsible for 44·51 per cent. of the number of carcase seizures and for 52·43 per cent. of the number of offal seizures. Comparison between the weight of meat seized on account of tuberculosis and of non-tuberculous disease, shows that tuberculosis was responsible for 82·4 per cent. of all beef seized and destroyed, for 40·7 per cent. of veal and 48·3 per cent. of pork. Details of the seizures are shown in the following tables :—

Number and weight of carcases in the different classes of animals condemned at Abattoir during 1935 :—

	Totally Condemned.		Partially Condemned.		Total Weight in Lbs.
	Number.	Weight in lbs.	Number.	Weight in lbs.	
Oxen . . . . .	80	49,020	378	51,822	100,842
Bulls . . . . .	5	4,289	36	5,143	9,432
Cows . . . . .	257	134,115	404	69,414	203,529
Heifers . . . . .	10	4,117	26	3,283	7,400
Calves . . . . .	58	3,664	13	331	3,995
Sheep and Goats. . . . .	521	20,704	442	9,627	30,331
Swine . . . . .	88	12,193	124	5,872	18,065
Total . . . . .	1,019	228,102	1,423	145,492	373,594



Number of carcasses condemned in the different classes of animals slaughtered in Abattoir during 1935, and causes of condemnation :—

	CATTLE.										Sheep and Goats.		Swine.		TOTALS.
	Oxen.		Bulls.		Cows.		Heifers.		Calves.		Total.	Partial.	Total.	Partial.	
	Total.	Partial.	Total.	Partial.	Total.	Partial.	Total.	Partial.	Total.	Partial.					
Tuberculosis . . . . .	51	289	5	29	200	367	5	24	19	5	...	...	44	49	1,087
Edema and Emaciation . . . . .	...	...	...	...	19	1	2	...	8	2	275	85	1	5	398
Traumatism . . . . .	...	18	...	...	1	5	...	1	1	1	17	42	2	12	100
Septic conditions . . . . .	6	22	...	...	5	16	1	...	...	...	10	53	6	18	137
Pericarditis . . . . .	4	...	...	...	...	...	...	...	...	...	...	...	...	...	4
Peritonitis and Enteritis . . . . .	2	18	...	1	3	7	...	...	3	...	18	8	9	9	78
Pleurisy and Pneumonia . . . . .	3	15	...	2	...	6	...	1	3	5	24	248	9	28	344
Dead, Moribund and Illbled . . . . .	12	...	...	...	13	...	...	...	15	...	164	...	15	...	219
Jaundice . . . . .	...	...	...	...	...	...	...	...	2	...	1	...	1	...	4
Neoplasms . . . . .	...	4	...	...	...	1	...	...	1	...	2	6	...	3	17
Actinomycosis and Actinobacillosis . . . . .	1	10	...	3	...	...	...	...	...	...	...	...	...	...	14
Melanosis . . . . .	...	2	...	1	...	...	...	...	1	...	...	...	...	...	4
Mastitis . . . . .	...	...	...	...	13	1	...	...	...	...	9	...	1	...	24
Metritis . . . . .	...	...	...	...	2	...	1	...	...	...	1	...	...	...	4
Johne's Disease . . . . .	1	...	...	...	1	...	1	...	...	...	...	...	...	...	3
Umbilical Pyæmia . . . . .	...	...	...	...	...	...	...	...	5	...	...	...	...	...	5
	80	378	5	36	257	404	10	26	58	13	521	442	88	124	2,442

Comparison between tuberculous and non-tuberculous diseases as causes of condemnation in carcasses of animals slaughtered in Abattoir during 1935.

By Numbers.	CATTLE.						Sheep and Goats.	Swine	TOTAL.
	Oxen.	Bulls.	Cows.	Heifers.	Calves.	TOTAL.			
Tuberculosis . . . . .	51	5	200	5	19	280	...	44	324
Partial . . . . .	289	29	367	24	5	714	...	49	763
Total and Partial . . . . .	340	34	567	29	24	994	...	93	1,087
Non-tuberculous diseases { Total	29	...	57	5	39	130	521	44	695
Partial . . . . .	89	7	37	2	8	143	442	75	660
Total and Partial . . . . .	118	7	94	7	47	273	963	119	1,355
By Weight.	Tuberculosis. (lbs.)			Non-tuberculous Disease. (lbs.)			Percentages tuberculous.		
Oxen . . . . .	76,624			24,218			76.0		
Bulls . . . . .	8,561			871			90.8		
Cows . . . . .	173,481			30,048			85.2		
Heifers . . . . .	5,861			1,539			79.2		
Calves . . . . .	1,625			2,370			40.7		
Swine . . . . .	8,722			9,343			48.3		



Number of organs condemned in the different classes of animals at Abattoir during 1935 (excluding organs of animals totally condemned).

	CATTLE.						Swine.	Sheep and Goats.	TOTAL.
	Oxen	Bulls.	Cows.	Heifers.	Calves	TOTAL.			
LUNGS :—									
Tuberculosis . . . . .	1,016	101	1,419	54	53	2,643	231	1	2,875
Other Causes . . . . .	239	13	46	5	18	321	219	318	858
HEARTS :—									
Tuberculosis . . . . .	5	...	2	...	...	7	...	1	8
Other Causes . . . . .	...	...	...	...	...	...	...	...	...
BOWELS :—									
Tuberculosis . . . . .	467	34	526	23	10	1,060	98	...	1,158
Other Causes . . . . .	23	2	18	...	...	43	13	2	58
STOMACHS :—									
Tuberculosis . . . . .	59	7	84	6	1	157	34	...	191
Other Causes . . . . .	225	7	51	...	...	283	10	79	372
SPLEENS :—									
Tuberculosis . . . . .	60	5	69	6	6	146	54	...	200
Other Causes . . . . .	4	...	...	...	...	4	1	...	5
LIVERS :—									
Tuberculosis . . . . .	456	41	318	22	14	851	205	1	1,057
Other Causes . . . . .	3,917	92	953	17	11	4,990	128	429	5,547
KIDNEYS :—									
Tuberculosis . . . . .	60	8	72	3	...	143	...	...	143
Other Causes . . . . .	40	2	25	...	...	67	...	...	67
UDDERS :—									
Tuberculosis . . . . .	...	...	11	...	...	11	...	...	11
Other Causes . . . . .	...	...	177	...	...	177	...	...	177
HEADS AND FEET :—									
Tuberculosis . . . . .	822	92	526	45	5	1,490	902	...	2,392
Other Causes . . . . .	141	3	12	2	...	158	13	20	191
Total . . . . .	7,534	407	4,309	183	118	12,551	1,908	851	15,310

Percentage incidence of Tuberculosis in animals slaughtered at Abattoir during 1935 :

Cattle	$\left\{ \begin{array}{l} \text{Oxen} \\ \text{Bulls} \\ \text{Cows} \\ \text{Heifers} \end{array} \right.$	6.18	} . . . . .	11.15	Per Cent.
		32.20			
		45.20			
		6.01			
Calves . . . . .		2.02			
Swine . . . . .		5.18			

**Meat Contracts—City Hospitals, Etc.**—In accordance with instructions, periodical visits were paid to the City Hospital and other institutions belonging to the Corporation, with a view to checking the quality of meat supplied by contractors and whether the meat conformed to specification. A consignment of 1,000 lbs. of mince was rejected and the contractor officially warned. The attention of two contractors was directed to faults which were remedied.

The carcasses of all animals slaughtered for food in the abattoir on Bangour Farm were inspected before issue to the Steward of the Hospital. The number of carcasses inspected during the year was Cattle 7, Sheep 105 and Pigs 67.

**Wholesale Dead Meat Markets.**—During the year meat (fresh and frozen) estimated to be equivalent to 52,859 carcasses was imported into the City for sale in the wholesale dead meat markets. In addition, considerable quantities of frozen boneless meat, kidneys, livers, tripe, etc., were received. It is not possible to ascertain with any approach to accuracy the amount of this class of material which arrives in the City. Daily visits of inspection were made to the dead meat markets and to the premises of wholesale meat traders.



**Retail Shops, Street Hawkers, etc.**—Periodical visits were made during the year to shops, etc., in which foodstuffs are prepared or exposed for sale.

Number of visits paid to Shops, etc., during 1935 :—

Butchers' Shops . . . . .	1,147
Provision Shops . . . . .	2,198
Fishmongers' Shops . . . . .	403
Fruiterers' Shops . . . . .	934
Meat Sales and Wholesale Meat Shops . . . . .	2,305
Live Stock Sales and Markets . . . . .	258
Street Hawkers . . . . .	113
Hide and Skin Merchants . . . . .	407
Fish Markets . . . . .	308
Restaurants . . . . .	381
	8,454

Inspectors are instructed to observe and to report on the sanitary condition of food premises and on the conditions under which foodstuffs are stored. In 41 cases, occupiers of food premises were called upon to carry out cleansing or repairs, and 70 complaints relating to the sanitary condition of lavatories, drains, etc., on food premises were dealt with or passed to the Chief Sanitary Inspector for his attention.

**Foodstuffs Seized in Markets, Etc.**—The weights of foodstuffs seized in markets, shops, and other premises in the City during 1935 were as follows :—

	Weight in lbs.
Beef . . . . .	8,543
Mutton . . . . .	3,852
Pork . . . . .	2,095½
Veal . . . . .	2,155
Poultry and Game . . . . .	1,269½
Edible Offal . . . . .	676
Fruit and Vegetables . . . . .	2,345
Provisions . . . . .	895½
Fish . . . . .	3,226
	25,057½

**Merchandise Marks Orders.**—The Sale of Food Order was revoked in January and was superseded by Orders made under powers contained in the Merchandise Marks Act, 1926. The new Orders provided that imported meat, bacon, etc., on importation and when exposed for sale wholesale or retail, must be marked by a ticket (or otherwise as specified in the Orders), bearing the word "Empire" or "Foreign" as the case might be, or alternatively the name of the country of origin. Seventy-three notices were given to retailers directing attention to the new Orders and explaining their terms. Proceedings were taken in one instance and, on the submission of a plea of guilty, a fine of £2 was imposed.

**Carcases, etc., submitted for Inspection in terms of Article 10 of the Public Health (Meat) Regulations (Scotland), 1932.**—This regulation places an obligation on the consignee of a carcass which he has reason to believe has not been inspected in the manner specified by the Public Health (Meat) Regulations, to report its receipt to the Local Authority of the district. In practice, the wholesale meat traders of the City notify the Veterinary Department in all cases in which they receive home-killed carcasses from beyond the City boundaries. During the year, notification was received in respect of 1,726 carcasses and 48 parts of carcasses. After inspection, 73 carcasses, 10 parts of carcasses, and 3 heads were seized and destroyed.



**Approval of Meat Storage.**—Article 15 of the Public Health (Meat) Regulations (Scotland), 1932 requires persons selling meat from vans, carts, etc., who do not also keep an open shop for the sale of meat, to obtain from the Local Authority a certificate of approval of the accommodation provided for the storage of meat overnight. One new certificate was granted by the Local Authority during the year. Six certificates were renewed and one was cancelled. The storage accommodation provided is in each case satisfactory.

### PORT FOOD INSPECTION.

The usual supervision has been maintained as to the condition and soundness of foodstuffs landed at the Port of Leith during 1935. No feature of outstanding interest has arisen.

The appended summary will serve to show the origin and the kinds of foodstuffs falling under the supervision of the Department at the Port of Leith.

Imported Foodstuffs inspected under the Public Health (Imported Food) Regulations (Scotland), 1932, during 1935 :—

Country of Origin.	Foodstuffs.	Number of Consignments.		
Holland . . . . .	Bacon . . . . .	151		
	Canned Meats . . . . .	24		
	Fruit . . . . .	244		
	Lard . . . . .	13		
	Oysters . . . . .	3		
	Provisions . . . . .	933		
	Vegetables . . . . .	554		
	Yeast . . . . .	100		
		<hr/>	2,022	
Denmark . . . . .	Bacon . . . . .	102		
	Canned Meats . . . . .	60		
	Casings . . . . .	12		
	Fish . . . . .	15		
	Lard . . . . .	8		
	Hams . . . . .	48		
	Pigs' Feet . . . . .	19		
	Provisions . . . . .	560		
	Sausages . . . . .	10		
	Vegetables . . . . .	37		
	Yeast . . . . .	51		
		<hr/>	922	
Canada . . . . .	Bacon . . . . .	5		
	Canned Meats . . . . .	21		
	Casings . . . . .	1		
	Hams . . . . .	19		
	Lard . . . . .	17		
	Fruit . . . . .	23		
	Provisions . . . . .	118		
	Vegetables . . . . .	12		
		<hr/>	216	
Germany . . . . .	Hams . . . . .	2		
	Fish . . . . .	1		
	Fruit . . . . .	12		
	Provisions . . . . .	103		
	Vegetables . . . . .	8		
		<hr/>	126	
U.S.A. . . . .	Canned Meats . . . . .	13		
	Fruit . . . . .	22		
	Provisions . . . . .	39		
		<hr/>	74	
Belgium . . . . .	Fruit . . . . .	84		
	Provisions . . . . .	45		
	Vegetables . . . . .	34		
		<hr/>	163	
			<hr/>	3,523
	Carry Forward . . . . .			3,523



Country of Origin.	Foodstuffs.	Number of Consignments.	
		Brought forward	3,523
Iceland . . . . .	Fish (fresh)	21	
	Fish (salted)	68	
	Provisions	1	90
Argentine . . . . .	Canned Meats	1	
	Grain	6	7
Malay . . . . .	Fruit	18	
	Provisions	22	40
Australia . . . . .	Cereals		1
Egypt . . . . .	Vegetables		2
Greece . . . . .	Fruit		1
India . . . . .	Fruit	1	
	Provisions	1	2
Poland . . . . .	Lard		2
South America . . . . .	Cereals		4
Sweden . . . . .	Provisions		8
			<u>3,680</u>

Imported Foodstuffs condemned or rejected and re-exported at the Port of Leith, during 1935 :—

Fruit :—		Weight in lbs.	Weight in lbs.
Canned Oranges		782	
Gooseberries		1,190	
Greengages		360	
Pears		4,900	
Plums		200	
Raspberry Pulp		224	
Strawberries		1,620	
Melons		696	
Tomatoes		360	
			10,332
Vegetable :—		Weight in lbs.	Weight in lbs.
Carrots		24,504	
Cauliflowers		11,495	
			35,999
Butter			330
Chicory			1,792
Rice			17,760
			<u>66,213</u>
Equal to		Tons. 29	Cwts. 11 Lbs. 21

Summary, showing total diseased and unsound foodstuffs dealt with by the Department in the City, during 1935 :—

	Weight in lbs.
At Abattoir—Carcases	373,594
Offal (weight estimated)	228,505½
In Shops, Warehouses, etc.	25,057½
At the Port of Leith	66,213
<u>693,370</u>	
Equal to	Tons. 309 Cwts. 10 Lbs. 90

I am,

Your obedient Servant,

A. GOFTON, F.R.C.V.S.,

Chief Veterinary Inspector.



To

Chairman and Members of the  
Public Health Committee.

## DISEASES OF ANIMALS ACTS.

LADIES AND GENTLEMEN,

The Acts confer power on the Ministry of Agriculture to make Orders for the control and prevention of animal diseases, to govern the import and export of animals and carcasses, to control the conditions of transport of animals, by land and sea, and for other similar purposes. The following diseases are subject to administrative control by means of Orders made by the Minister :—

Anthrax.  
Foot and Mouth Disease.  
Parasitic Mange of Horses.  
Sheep Scab.  
Swine Fever.  
Bovine Tuberculosis and Contagious Abortion (for certain purposes only).  
Cattle Plague or Rinderpest. (1877.)  
Contagious Bovine Pleuro-Pneumonia. (1898.)  
Glanders and Farcy. (1928.)  
Epizootic Lymphangitis. (1906.)  
Rabies. (1922.)  
Sheep Pox. (1850.)

There have been no cases of the last six diseases in Great Britain since the dates shown against each.

In addition to numerous Orders controlling the movement of animals in foot-and-mouth disease infected areas, the Ministry of Agriculture issued the following new general Orders during the year :—

- (1) Pennine Range (Movement of Sheep) Order of 1935.
- (2) Pennine Range (Movement of Sheep) Orders of 1935 (Nos. 2, 3 and 4).
- (3) Merionethshire (Movement of Sheep) Order of 1935.
- (4) Gloucestershire Swine Fever Infected Area Order of 1935.

**Anthrax.**—One case of anthrax occurred in the City during the year.

Twenty-two deaths of bovine animals on farms (including the case of anthrax referred to) were reported and investigated in terms of the Edinburgh and Midlothian Order of 1910, the main object of which is to eliminate the risk of a case of anthrax escaping detection. The anthrax infected carcase was cremated and the remaining 21, which were negative so far as notifiable disease was concerned, were disposed of by the owners. The cause of death was similarly investigated in respect of 172 cattle, sheep and pigs found dead on arrival of trains and boats, or which died, without previously observed illness, in the lairages attached to the Markets and Slaughterhouses.

**Foot and Mouth Disease.**—Fifty-six outbreaks of foot-and-mouth disease occurred in Great Britain during 1935, entailing the slaughter of 12,444 animals, as compared with 79 outbreaks and 10,302 animals slaughtered in 1934. The movement



of animals within the City was not restricted or regulated by any of the Orders issued by the Ministry of Agriculture in relation to these outbreaks. The last outbreak of foot-and-mouth disease in the City occurred in 1922.

The following Orders, which are more or less complementary to the principal foot-and-mouth disease Orders, have continued in operation, and the observations and visits necessary for their enforcement have been made :—Foreign Hay and Straw Order ; Foot-and-Mouth Disease (Packing Materials) Order ; Foot-and-Mouth Disease (Boiling of Animal Foodstuffs) Order ; Importation of Carcasses (Prohibition) Order ; Importation of Meat, etc. (Wrapping Materials) Order ; and Movement of Animals (Records) Order.

In connection with the Movement of Animals (Records) Order, a check of the record books of stockowners in the City was again made with the assistance of the Police.

**Parasitic Mange.**—No suspected case of parasitic mange was reported during the year.

**Sheep Scab.**—The City has again a clean record in respect of this disease. The Regulations made by the Local Authority, under the Sheep Scab Order, which require the dipping of all sheep in the City during the period 15th July to 31st August, and again during the period 1st September to 30th November, have remained in force. In terms of the Regulations, 14,707 sheep were dipped under supervision during the year.

The Sheep (Movement into Scotland and Northumberland) Order of 1933 requires the double-dipping of all sheep, unless intended for immediate slaughter, moved into Scotland from England (with the exception of Northumberland) as a measure of protection against the introduction of sheep scab into Scotland from south of the border. The movement is carried out under licence and the sheep may be dipped before or after the movement. Eight hundred and ninety-three sheep were received in the City under licence in terms of this Order of which 296 were moved to slaughterhouses and 597 to farms.

**Swine Fever.**—One report of suspected swine fever was investigated and proved negative.

**Regulation of Movement of Swine Order.**—Eight pigs were moved in terms of this Order under licence from scheduled areas in England to various premises in the City, subject to detention and isolation for twenty-seven days after arrival. Periodical visits were made to these premises with the double object of seeing that the conditions of the licence were fulfilled and to maintain observation on the health of the pigs.

**Bovine Tuberculosis.**—Seventeen animals were dealt with under the Tuberculosis Order of 1925. Three animals which were detected in the Live Stock Markets were slaughtered by the owners at their own risk. The 17 animals were grouped as follows :



—Tuberculosis of the Udder, 8; Tuberculous emaciation, 1; and Chronic cough and showing definite clinical evidence of tuberculosis, 8. Tuberculosis of the udder constituted 47 per cent. of the cases dealt with in the City. The 14 animals slaughtered by the Local Authority were classified for compensation into—Advanced 11 (78·6 per cent.) and Not advanced 3 (21·4 per cent.).

The aggregate value of the fourteen animals was £125, and the compensation paid amounted to £46 15s., an average of £3 6s. 9d. per animal. Seventy-five per cent. of the gross compensation is refunded by the Treasury and the proportion payable by the Local Authority was thus £11 13s. 9d. The gross salvage realised was £9 2s. 8d. After deducting outlays, there remained a balance of 8s. 3d. in favour of the Local Authority.

**Control of Dogs Order.**—This Order and the Regulations made in terms thereof require (1) the wearing by dogs of a collar bearing the name and address of the owner, and (2) the maintenance of dogs under effective control between sunset and sunrise. The object of the Order is the prevention of sheep-worrying. Proceedings were taken against 35 persons for breach of the Order or the Regulations. Of these, 1 case was dropped, 7 persons were admonished, and 27 were fined sums varying from 2s. 6d. upwards.

**Importation of Animals.**—(1) Irish and Canadian Cattle. The Orders which control the importation of Irish and Canadian cattle, provide that the imported cattle must be landed at ports approved for the purpose, where, on arrival, they are inspected and thereafter they may be moved on licence, in the case of fat cattle, to a slaughter-house, either direct or through an authorised market, and, in the case of store cattle, to (a) a specially authorised market, or (b) farms or other premises where they must be detained for six days after arrival. 23,180 Irish cattle were received at Gorgie Market under licence from ports, and 1,302 licences were issued authorising movement of these cattle from the Market. 6,569 Irish and 11 Canadian cattle were moved to farms in the district of the Local Authority from the Market or direct from the ports, and were maintained under observation during the period of detention. 858 Irish and 5 Canadian cattle were licensed from the Markets or ports to Gorgie Abattoir.

(2) Dogs and Cats.—The Importation of Dogs and Cats Order is intended to protect Great Britain against the introduction of rabies through the agency of canine or feline animals brought from overseas. The landing of such animals in Great Britain is prohibited except under licence granted by the Ministry of Agriculture. After landing, the animals must be detained for six months in a place of detention or quarantine approved by the Minister for the purpose. Performing animals may be moved from place to place under strictly controlled conditions which are endorsed on the licence and subject to the previous approval of the Ministry in respect of each movement. Twenty-three performing animals were received in the City under the Ministry's licence.

During the year, 43 canine and feline animals were received and detained in the City in quarantine. They were maintained under observation and police supervision.



(3) Horses.—Fifty-four consignments, comprising 698 horses, were landed at Leith Docks from Iceland, Holland, Denmark, Belgium and Germany. The horses were released after inspection and on submission of the necessary certificates.

**The Animals (Importation) Order of 1930.**—This Order makes it unlawful to bring into any port in Great Britain ruminating animals or swine which have been on board a vessel whilst in a port in a prohibited country, whether taken on board the vessel in a prohibited country or not. There was no breach of this Order at the Port of Leith during the year.

**Certification for Export.**—The Dominions of Canada and New Zealand require disinfection and certification of straw and hay used for packing goods exported from this Country to the Dominions. Facilities are provided for the disinfection of straw and hay used for packing, at an old Municipal Disinfecting Station, at a small charge to cover costs. During the year, 165 certificates were issued to cover goods exported in disinfected straw. Surprise visits were paid, from time to time, to the packing establishments of exporters to ensure that the conditions necessary for certification were being complied with.

In addition to the above, certificates were granted, after the necessary inspection to cover export of pigs to Northern Ireland and South Georgia, of ponies to Poland, of wool to Poland and the U.S.A., and of animal casings to Denmark, Germany, Holland and Poland.

**Sea Transport of Animals.**—The Animals (Sea Transport) Order prescribes the accommodation and fittings which must be provided on board ship for transport of animals by sea. It deals also with the protection of animals against unnecessary suffering during sea transport to or from Great Britain. Inspectors of the Ministry maintain supervision of the oversea transport and especially of the export of horses to the Continent, but supervision of the coastwise traffic devolves, in a large measure, on the officers of the Local Authority. Animals were landed at Leith Docks from coastwise vessels, during the year as follows:—Horses 99, Cattle 75, Sheep 32,217, Pigs 431. The cleansing and disinfection of the vessels after landing of the animals was carried out under the supervision of the Officers of the Local Authority.

**The Transit of Animals Orders** are similarly designed to protect animals during transport by road or rail and, in addition, prescribe cleansing and disinfection of cattle trucks, motor and horse-drawn vehicles used in the transport of animals. The Markets Committee have continued to provide facilities and labour at Gorgie Markets for the cleansing and disinfection of road vehicles. 5,507 vehicles were cleansed and disinfected at Gorgie Markets during the year, an average of 105 vehicles per week. The Railway Companies have satisfactorily discharged their obligations in the cleansing and disinfection of cattle trucks, railway sidings and approaches.

**The Markets, Sales and Lairs Order.**—This Order regulates many features in the construction of live stock markets, and provides for cleansing and disinfection on each occasion after use. All the Marts at Gorgie are well constructed for efficient and relatively easy disinfection. Regular supervision has been maintained and the work has generally been well done.



**Summary of Contraventions of the Diseases of Animals Acts and Orders dealt with during the year :—**

Orders.	Number of Cases.	Results.
Transit of Animals (Amendment) Order, 1931 . . . . .	1 1 1	Fined £1. Fined 10s. Admonished.
Sheep (Movement into Scotland and Northumberland) Order	1	Fined 10s.
Animals (Landing from Ireland, Channel Islands and Isle of Man) Order, 1933 . . . . .	1 1	Fined £1. Fined £3.
Control of Dogs Order . . . . .	10 17 7 1	Fined 5s. Fined 2s. 6d. Admonished. Deserted.

**Protection of Animals (Scotland) Act, 1912.**—During the year, 42 animals were found in the Markets suffering from disease or injury which exposed them to unnecessary suffering if put through the ordinary procedure of exposure for sale and disposal. As the result of the action taken, all of these animals were passed to the local Abattoir and there slaughtered.

**Lighting and Cleansing Department Stud.**—Four hundred and eighty visits of attendance were made to the stud under the control of the Lighting and Cleansing Department, and 14 horses were subjected to inspection and examination prior to consideration of purchase for the Lighting and Cleansing Department.

**Corporation Farms.**—The Department has continued to provide the clinical services required in connection with the stocks at Colinton Mains, Bangour and Roddinglaw Farms.

**Staff and Police.**—I desire to express my thanks to the Staff of the Department for their assistance and for the efficient manner in which they have carried out their duties during the year. I also wish to express my gratitude to the Chief Constable for his willing co-operation, and to the Officers of the Police Force, whose assistance has contributed materially to the efficient performance of the duties under the Diseases of Animals Acts.

I am,

Ladies and Gentlemen,

Your obedient Servant,

A. GOFTON, F.R.C.V.S.,  
*Chief Veterinary Inspector.*







# CITY AND ROYAL BURGH OF EDINBURGH.

## HOUSING (SCOTLAND) ACT, 1935.

A report on the overcrowding in the City has been prepared by the Medical Officer of Health and the Chief Sanitary Inspector. It analyses at some length the data which was collected as the result of the Survey carried out under Section 1 (i.) of the Act, and generally indicates the position in the City.

The Survey undertaken was confined to an examination of the number of rooms in houses with a rateable value not exceeding £45 and the number, ages, and sexes of the people living in them.

The total number of such houses in the City at the date of the Survey was 100,642, and it was found that there were 103,083 families residing therein.

Applying the standard defined in Table 1 of the First Schedule of the Act, it was found that 19,746 houses or 19·82 per cent. were overcrowded, and that 20,244 families or 19·64 per cent. were living in overcrowded conditions. Included in these numbers were 2,645 houses which were regarded as unfit for habitation and which will fall to be dealt with under the Act of 1930. The corrected figure for habitable houses, therefore, shows that 17,101 or 18·41 per cent. are overcrowded.

Overcrowding as defined may be caused by (a) excess of numbers in the occupying family, (b) the occupation of the house by more than one family, and (c) the keeping of lodgers. In this connection, it was found that (a) 14,441 houses were overcrowded by the numbers in the family, (b) sub-tenants were responsible for the overcrowding of 1,524 instances, and (c) the keeping of lodgers either caused or aggravated overcrowding in 1,136 houses.

The Report goes on to show that, in order to abate the overcrowding in the 17,101 houses, the provision of 17,423 houses would require to be made. This difference is due to multiple occupancy of houses, *i.e.*, the occupation by two or more sub-tenant families which are also overcrowded and require larger houses.

The Tables on page 11 of the Report show that the process of decrowding will render some 16,700 houses vacant, and that by a process of transference it is theoretically possible to reduce the number of houses required to abate overcrowding to 11,155, leaving a surplus of 10,436 one and two-apartment houses.

Operations for abatement of overcrowding under the 1935 Act should be carried out along with activities for slum clearance under the 1930 Act, and it is suggested that a proportion of these surplus one and two-apartment houses can be used for families dispossessed from unfit houses. This would reduce the surplus one and two-apartment houses to 6,135 two-apartment houses.

The second Table on page 12 summarises the accommodation required after making the necessary adjustments and it would appear that, allowing for the whole needs of the area, so far as these represent *Slum Clearance* and *Overcrowding*, the number of houses required may be put at 13,600.



At this stage it appears advisable that further explanations be presented in order that the Report may be fully understood, but before doing so it is of interest to show the relative position of Edinburgh as compared with other places. This can only be done by comparing the figures given in the Government's White Paper Cmd. No. 5171 which contains a summary of the Reports on Overcrowding Surveys in Scotland. The relative extracts are as follows:—

LOCAL AUTHORITY.	TOTAL NUMBER OF HOUSES SURVEYED	NUMBER OF HABITABLE EMPTY HOUSES	PERCENTAGE OF OVERCROWDED HABITABLE HOUSES TO TOTAL HOUSES SURVEYED (INCLUDING EMPTY HOUSES)
1. Coatbridge . . . . .	8,890	Nil.	43·7
2. Clydebank . . . . .	11,291	34	40·24
3. Motherwell and Wishaw . . . . .	14,916	32	39·02
4. Hamilton . . . . .	7,502	45	38·35
5. Greenock . . . . .	16,666	106	33·49
6. Paisley . . . . .	21,293	25	31·68
7. Glasgow . . . . .	257,421	2,208	28·87
8. Ayr . . . . .	7,802	5	25·87
9. Dundee . . . . .	46,476	227	23·82
10. Falkirk . . . . .	8,715	40	23·72
11. Kilmarnock . . . . .	9,844	Nil.	23·11
12. Aberdeen . . . . .	41,066	98	22·00
13. Kirkcaldy . . . . .	11,246	17	18·88
14. <b>Edinburgh</b> . . . . .	99,608	1,034	17·00
15. Dunfermline . . . . .	9,507	Nil.	15·00
16. Perth . . . . .	9,191	Nil.	13·05
<b>SCOTLAND</b> . . . . .	<b>1,024,992</b>	<b>6,699</b>	<b>23·5</b>

**Note**—While these percentages are accurate for comparative purposes they differ from the detailed percentages of overcrowding given in the Individual Reports of the Local Authorities, as, although the uninhabitable houses to be dealt with under the 1930 Act are included in the total houses surveyed, the White Paper does not give the number of overcrowded unfit houses which, if included, would increase the percentage of overcrowding, *e.g.*, Glasgow 31·3 per cent., Edinburgh 19·82 per cent. Dundee percentage based on families overcrowded.

It is gratifying to find the City occupying so satisfactory a position in the matter of housing. Only the much smaller towns of Dunfermline and Perth show figures which are better.

#### ESTIMATE OF IMMEDIATE REQUIREMENTS TO ABATE OVERCROWDING.

While the total number of houses required is estimated at 13,600, certain factors have to be considered before arriving at the immediate problem facing the Local Authority, and these are as follows:—

(a) *Lodgers*.—It is suggested that the Local Authority will not provide houses for families in which overcrowding is being caused solely by the presence of lodgers, and these total 752.

(b) *Owner-Occupiers*.—Special provisions are contained in the Housing Act of 1935 regarding the owner-occupier of an overcrowded house to the effect that if he can prove that it would be a definite financial hardship for him to remove to a larger house, no action is to be taken with regard to overcrowding. The numbers in the City may be taken at 930 and it is suggested that this would be an appropriate deduction at the present time.

The aforementioned deductions reduce the number of houses required to approximately 12,000.



(c) *Utilisation of Houses rendered Vacant.*—The table on page 12 of the Report shows that there would be over 6,000 two-apartment houses in the City rendered vacant as a result of "decrowding," but, as approximately 705 of these are overcrowded by the keeping of lodgers or are owned and occupied by the owners and have already been deducted from the grand total, this apparent surplus number of houses may now be reduced to 5,295.

It may be assumed that 50 per cent. of that number would be re-occupied by newly married people and by persons at present living in sub-let rooms but not causing overcrowding. Further, as stated in the Report, probably 50 per cent. of the remaining houses, *i.e.*, 1,323, are capable of reconstruction or combination into "new" houses of three apartments, resulting in the provision of some 650 houses. This raises the whole problem of reconstruction with which the Committee is already familiar.

The deduction of these 650 houses would reduce the estimate to 11,300.

(d) *Houses being provided by Local Authority.*—At the moment, there are 1,140 Corporation houses being built, and plans are being considered for 1,186, so that the total number of houses in sight amounts to 2,326.

The deduction of these from the 11,300 referred to above leaves 9,000 houses.

(e) *Private Enterprise.*—It is hoped that the large number of houses which will be built within the next three years by private enterprise and which will be let at rents which conform to the provisions of Section 47(5) of the Housing Act of 1935, will indirectly assist to relieve overcrowding.

(f) *Conclusions.*—So far as the Corporation is concerned, therefore, some 8,000 to 9,000 new houses would seem to represent the immediate needs of the City for both slum clearance and overcrowding, but, inasmuch as 3,500 of the existing houses are overcrowded by the minimum excess of "half a unit," the estimate may be reduced to 4,500 to 5,500 in addition to the 2,326 houses referred to in para. (d).

It is accordingly submitted that, having regard to all these facts, the Corporation's present programme of 1,000 to 1,250 houses per annum is reasonable. The attention of the Committee, however, should be directed to the fact that what is required is not houses in great numbers so much as houses of the correct capacity, and for the next year or two, assuming that the present programme is continued, it will be necessary to provide very largely for four-roomed houses.

It should be borne in mind, however, that the 4,500 to 5,500 houses referred to may not represent the ultimate requirements, but it is suggested that the aforementioned programme is a practicable one which will enable the worst cases of overcrowding to be dealt with in a reasonable time.

The reporters are of opinion that a further Survey will be necessary at the end of three or five years, as experience indicates, in order to assess accurately the results of decrowding and to enable the Committee to revise any programme upon which they may decide.



HOUSING (SCOTLAND) ACT, 1935.

**REPORT ON OVERCROWDING**

by

**Medical Officer of Health and Chief Sanitary Inspector.**

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The first part of the survey required under Sections 1 and 2 of the Housing (Scotland) Act, 1935, has now been completed.

The report on families overcrowded as shown by the survey and statement of accommodation (Forms B and C appended to the Department of Health's Memorandum No. 77) are contained in Table 1 of the Appendix to this report. These are intended to assist the Local Authority in furnishing the information asked for in Form D of the Department's Memorandum showing (a) the Local Authority's proposals for the provision of additional accommodation to abate overcrowding during the three years 1936-1938 inclusive, (b) a statement of the steps proposed to be taken to secure that families living under the worst conditions as regards overcrowding or otherwise living under insanitary housing conditions will be re-housed first, and (c) evidence on which the Local Authority have based their estimate of the number of houses which will be provided by other agencies. In addition to the aforementioned Forms B and C, other tables are given in the Appendix for each Ward showing the number of houses surveyed, the number of houses overcrowded and the degree of overcrowding in the overcrowded families.

**THE NATURE OF THE SURVEY.**

The survey was carried out in order to ascertain the number of dwelling-houses with a rateable value of £45 and under which are overcrowded according to the standard prescribed in Section 2 and in Table 1 of the First Schedule of the Act. Cards were prepared which included, amongst other data, the address of each house, its situation, the size of the house, the number of occupants permitted under Table 1, the name of the tenant, and/or sub-tenant, his occupation and the number and sex of the inmates of the house. Enumerators employed by the City Assessor visited all houses under £45 rental and filled up a card relative to each house. These cards were sent on to the Sanitary Department where the necessary information was collated and the cards thereafter filed away in an up-to-date filing system. Altogether, 100,642 houses were surveyed.

By Section 2 (1) of the Act, a dwelling-house is deemed to be overcrowded when the number of persons sleeping in the house is (a) such that any two of those persons, being persons ten years old or more, of opposite sexes, and not persons living together as husband and wife, must sleep in the same room; or (b) exceeds the permitted number of persons as defined in the First Schedule to the Act, in relation to the number and floor area of the rooms of which the house consists. The present survey, which is of a preliminary character and intended to enable the Local



Authority to decide with a minimum of delay on its immediate housing programme, is based on the numbers and sexes of the persons found in each house at the time of the survey: the further survey, which will also take the size of the house into consideration will fall to be carried out later. For the purposes of the first part of the survey the number of persons to be permitted in each size of house is as follows:—

WHERE A HOUSE CONSISTS OF—	NO. OF PERSONS.	
(a) One room . . . . .	2	
(b) Two rooms . . . . .	3	
(c) Three rooms . . . . .	5	
(d) Four rooms . . . . .	7½	
(e) Five rooms or more . . . . .	10,	with an additional 2 in respect of each room in excess of five.

Sub-section (2) of Section 2 of the Act provides that in computing the number of persons sleeping in a house, no account is to be taken of a child under one year of age, while a child between one and ten years old is to be reckoned as one-half of a unit only. It is also provided that in arriving at the number of rooms in a house no room with a floor area of less than 50 square feet is to be counted for the purposes of the above table.

### THE RESULTS OF THE SURVEY.

The information obtained from the survey is summarised in the following paragraphs; the analysis, however, is restricted to matters of fact only, questions of policy being left for determination by the Committee and the Local Authority.

#### The Extent of the Survey.

(a) *Number of Houses.*—The total number of houses surveyed was 100,642 including 1,034 houses which were empty at the date of the survey. Arranged in the order of the number of apartments per house, the number of houses surveyed may be analysed as follows:—

SIZE OF HOUSE	NUMBER OF HOUSES		
	OCCUPIED	VACANT	TOTAL.
1 Apartment . . . . .	6,133	105	6,238
2 Apartments . . . . .	33,017	249	33,266
3     " . . . . .	30,955	270	31,225
4     " . . . . .	18,939	237	19,176
5     " . . . . .	7,344	116	7,460
6     "     and over . . . . .	3,220	57	3,277
TOTAL . . . . .	99,608	1,034	100,642

(b) *Number of Families.*—In the 100,642 houses, there were found 103,083 families or 1.023 families per house. Houses occupied by more than one family will be considered in greater detail later.



### Families Overcrowded.

Table I in the Appendix contains the report on families overcrowded throughout the whole City as shown by the survey. This table shows the number of families and the size or number of apartments occupied by each family, and distinguishes between non-overcrowded and overcrowded families. The number of adults or units were arrived at by the method prescribed in Section 2 (2) of the Act, that is, by omitting infants under one year and by reckoning children between one and ten years as equal to half an adult. In this table, sub-let families are shown as occupying a "house" relative to the number of apartments occupied by them. For example, a four-apartment house may be found to be occupied by a principal tenant and two sub-tenants, the principal tenant occupying two apartments and the sub-tenants each occupying one apartment, and, for the purposes of this table instead of appearing as one house, it appears as three houses, one of two apartments and two of one apartment. The actual number of overcrowded houses is shown in a later table on page 9.

The number of overcrowded families is equal to the summation of the numbers to the right of the dark transverse line, the overcrowding being attributable to excess of numbers of persons per occupied apartment. To this total there falls to be added the number of houses in which, while there is no excess on a numerical basis, there is overcrowding in respect of the lack of proper separation of the sexes, that is, where two persons of different sexes over ten years of age not being husband and wife are compelled to sleep in the same apartment, and this applies only to the one-apartment houses. This table may be summarised as follows:—

IN HOUSES OF	Total Number of Families	NUMBER OF FAMILIES OVERCROWDED			
		Owing to Number of Occupants	Owing only to Sex Separation	TOTAL	Percentage Over- crowding
1 Apartment . . .	9,777	3,583	177	3,760	38.46
2 Apartments . . .	34,113	12,587	...	12,587	36.9
3 „ . . .	30,612	3,558	...	3,558	11.62
4 „ . . .	18,456	333	...	333	1.8
5 „ . . .	7,120	6	...	6	0.08
6 Apartments and over	3,005	...	...	...	...
TOTAL . . .	103,083	20,067	177	20,244	19.64

Out of the total 103,083 families, 20,067 are overcrowded by reason of excess numbers, and 177 are overcrowded in respect of the sex separation factor making a total of 20,244 overcrowded families.

Over all, overcrowding exists among approximately one-fifth of the families (19.64 per cent.). The table also shows that approximately 80 per cent. of the overcrowding occurred in the one and two-apartment houses and 98 per cent. occurred in the houses of three apartments and under.



## Degree of Overcrowding.

Table 1 in the Appendix shows the degree of overcrowding in the various sizes of houses in excess of the permitted number of "Adults." A clearer view, however, is obtained of the intensity of the overcrowding as it exists in the several groups of houses by summarising the figures as follows:—

EXCESS OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER.	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 Apts. and Over.	
$\frac{1}{2}$ in excess . . .	1,313	2,124	758	157	6	...	4,358
1 " . . .	1,132	4,176	1,169	46	...	...	6,523
$1\frac{1}{2}$ " . . .	349	1,269	408	64	...	...	2,090
2 " . . .	324	2,093	534	24	...	...	2,975
$2\frac{1}{2}$ " . . .	124	776	196	22	...	...	1,118
3 " . . .	137	960	215	20	...	...	1,332
$3\frac{1}{2}$ " . . .	71	362	89	...	...	...	522
4 " . . .	58	416	90	...	...	...	564
$4\frac{1}{2}$ " . . .	37	146	41	...	...	...	224
5 and more . . .	38	265	58	...	...	...	361
Sex Separation . . .	177	...	...	...	...	...	177
TOTAL . . .	3,760	12,587	3,558	333	6	...	20,244
Permitted No. of Adults	2	3	5	$7\frac{1}{2}$	10	12+	...

This summary provides the data which will enable the Committee and the Local Authority to determine the families which they regard as being least satisfactorily housed, and which should be dealt with first. Other circumstances, however, require to be taken into consideration, namely, sex separation and cases of overcrowding which are aggravated by ill health certified by a medical practitioner.

#### Overcrowding in Relation to Ownership and Fitness of Houses.

This section further analyses the figures shown in the preceding table and is divided into four groups, namely, (1) houses privately owned and let; (2) houses owned by the Local Authority; (3) houses owned and occupied by the owner; and (4) unfit houses.



## HOUSES PRIVATELY OWNED AND LET.

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 Apts. & over	
$\frac{1}{2}$ in excess . . .	790	1,579	284	78	2	...	2,733
1 " . . .	641	3,302	602	24	...	...	4,569
$1\frac{1}{2}$ " . . .	178	940	142	29	...	...	1,289
2 " . . .	168	1,649	239	13	...	...	2,069
$2\frac{1}{2}$ " . . .	56	562	60	7	...	...	685
3 " . . .	71	750	110	4	...	...	935
$3\frac{1}{2}$ " . . .	19	258	35	...	...	...	312
4 " . . .	25	327	47	...	...	...	399
$4\frac{1}{2}$ " . . .	10	111	8	...	...	...	129
5+ " . . .	15	194	27	...	...	...	236
Sex Separation . . .	100	...	...	...	...	...	100
TOTALS . . .	2,073	9,672	1,554	155	2	...	13,456

## HOUSES BELONGING TO THE LOCAL AUTHORITY.

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 Apts. & over	
$\frac{1}{2}$ in excess . . .	94	283	397	33	2	...	809
1 " . . .	108	349	418	14	...	...	889
$1\frac{1}{2}$ " . . .	30	153	216	17	...	...	416
2 " . . .	29	176	227	7	...	...	439
$2\frac{1}{2}$ " . . .	13	93	121	11	...	...	238
3 " . . .	9	67	76	9	...	...	161
$3\frac{1}{2}$ " . . .	9	35	45	...	...	...	89
4 " . . .	6	34	36	...	...	...	76
$4\frac{1}{2}$ " . . .	3	11	23	...	...	...	37
5+ " . . .	6	15	27	...	...	...	48
Sex Separation . . .	12	...	...	...	...	...	12
TOTALS . . .	319	1,216	1,586	91	2	...	3,214



## OWNER-OCCUPIER HOUSES.

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 Apts. & over	
$\frac{1}{2}$ in excess . . .	115	61	46	35	2	...	259
1 " . . .	108	125	101	7	...	...	341
$1\frac{1}{2}$ " . . .	30	35	28	16	...	...	109
2 " . . .	29	39	35	4	...	...	107
$2\frac{1}{2}$ " . . .	11	10	3	3	...	...	27
3 " . . .	9	14	10	4	...	...	37
$3\frac{1}{2}$ " . . .	9	4	1	...	...	...	14
4 " . . .	3	6	1	...	...	...	10
$4\frac{1}{2}$ " . . .	4	1	3	...	...	...	8
5+ " . . .	2	2	2	...	...	...	6
Sex Separation . . .	11	...	...	...	...	...	11
TOTALS . . .	331	297	230	69	2	...	929

## UNFIT HOUSES.

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 Apts. & over	
$\frac{1}{2}$ in excess . . .	304	201	31	11	...	...	547
1 " . . .	275	400	48	1	...	...	724
$1\frac{1}{2}$ " . . .	111	141	22	2	...	...	276
2 " . . .	98	229	33	...	...	...	360
$2\frac{1}{2}$ " . . .	44	111	12	1	...	...	168
3 " . . .	58	129	19	3	...	...	209
$3\frac{1}{2}$ " . . .	34	65	8	...	...	...	107
4 " . . .	24	49	6	...	...	...	79
$4\frac{1}{2}$ " . . .	20	23	7	...	...	...	50
5+ " . . .	15	54	2	...	...	...	71
Sex Separation . . .	54	...	...	...	...	...	54
TOTALS . . .	1,037	1,402	188	18	...	...	2,645



## SUMMARY.

	TOTAL FAMILIES	NUMBER OVERCROWDED	PERCENTAGE OVERCROWDED
Fit Houses :—			
Privately owned and let . . . . .	58,987	13,456	22·81
Owned by Local Authority	12,354	3,214	26·00
Owner-Occupier . . . . .	25,002	929	3·71
Unfit Houses . . . . .	6,740	2,645	39·35
TOTALS . . . . .	103,083	20,244	19·64

From this summary, it will be seen that overcrowding is greatest in unfit houses, next in houses owned by the Local Authority, then in houses privately owned and let, and, as is to be expected, lowest in houses owned and occupied by the owner. In explanation of the high percentage of overcrowding in the houses owned by the Local Authority, it should be borne in mind that it has been the Local Authority's practice to give preference to families when letting the houses, and also that a considerable number of families from overcrowded houses have been rehoused during the past few years, the standard of overcrowding at that time being the old standard of 400 cubic feet per person, a standard which is materially different from the new overcrowding standards.

## Classification of Occupancies.

The following table shows the degree of overcrowding among families in the various classes of occupancy. In explanation, it may be stated that "Single Occupancy Families" means where a house is occupied solely by the one family. "Single Occupancy Families with Lodgers" indicates houses where lodgers are kept, and the group headed "Multiple Occupancy Families" shows houses where sub-letting is taking place.

	TOTAL NUMBER OF FAMILIES	NUMBER OVERCROWDED	PERCENTAGE OVERCROWDED
Single Occupancy Families . . . . .	88,632	17,223	19·43
Single Occupancy Families with Lodgers . . . . .	7,335	1,184	16·14
Multiple Occupancy Families :—			
Principal Tenant . . . . .	3,271	488	14·91
Sub-Tenant . . . . .	3,845	1,349	35·08
TOTALS . . . . .	103,083	20,244	19·64

*Sub-let Houses.*—With regard to the sub-letting of houses, it will be noted from the foregoing table that in 3,271 houses, there were in addition to the principal tenant's families, 3,845 sub-tenant families making a total of 7,116 families in



these houses. As is to be expected, the highest percentage of overcrowding took place in the sub-let rooms, and it will be observed that 1,349, or 35 per cent. of the sub-let families were overcrowded. In 488 instances, the whole house was not big enough for the principal tenant's requirements, and the sub-letting considerably aggravated the extent of the overcrowding.

The question of the rehousing of overcrowded sub-let families is considered later.

### Houses Overcrowded.

Table II. in the Appendix (Statement of Accommodation) contains the information required to complete Form C appended to the Housing Memorandum No. 77. Arranged in order of size of house, it shows respectively the number of overcrowded fit houses privately owned, those erected by the Local Authority, and the number of unfit houses. In the following tables, it has been thought fit, as a matter of interest, to sub-divide the privately owned houses into two groups, namely, those which are privately owned and let, and those which are owned and occupied by the owner.

In the preceding sections, overcrowding has been shown in relation to "families," while in this section, the overcrowding is shown in relation to "houses." The difference between the total numbers is attributable to multiple occupancies.

### Classification of Houses Surveyed.

The fitness, ownership and sizes of the 99,608 occupied houses in respect of which information was obtained are shown in the following summary:—

SIZE OF HOUSE	FIT HOUSES				UNFIT HOUSES	GRAND TOTAL
	Privately Owned and Let	Owned by Local Authority	Owner-Occupier	TOTAL		
1 Apartment . . .	3,290	438	65	3,793	2,341	6,134
2 Apartments . . .	25,690	2,657	1,314	29,661	3,355	33,016
3 " . . .	15,780	8,121	6,271	30,172	783	30,955
4 " . . .	8,105	676	9,935	18,716	223	18,939
5 " . . .	2,453	144	4,720	7,317	27	7,344
6 Apartments and over	1,271	5	1,933	3,209	11	3,220
TOTALS . . .	56,589	12,041	24,238	92,868	6,740	99,608

It is interesting to note that approximately 57 per cent. of the houses under £45 rental in Edinburgh are privately owned and let, approximately 24 per cent. are owned and occupied by the owners, approximately 12 per cent. are owned by the Local Authority, and approximately 7 per cent. are unfit houses.

The 6,740 unfit houses are those which have been listed by this Department as a result of a survey made in 1930 in terms of the Housing (Scotland) Act, 1930.



### Number of Houses Overcrowded.

Adopting the same grouping as in the previous summary relating to families, the numbers and percentages of houses found to be overcrowded were as follows:—

SIZE OF HOUSE	FIT HOUSES										GRAND TOTAL	Percentage
	Privately Owned and Let	Percentage	Owned by Local Authority	Percentage	Owner-Occupier	Percentage	TOTAL	Percentage	UNFIT HOUSES	Percentage		
1 Apartment	1,242	37.75	151	34.47	11	16.92	1,404	37.03	1,037	44.30	2,441	39.80
2 Apartments	9,731	37.88	1,164	44.19	252	19.18	11,147	37.58	1,402	41.79	12,549	38.01
3 "	1,795	11.38	1,717	21.14	278	4.43	3,790	12.56	188	24.01	3,978	12.85
4 "	349	4.30	104	15.38	129	1.30	582	3.11	17	7.62	599	3.16
5 "	65	2.57	...	...	29	6.14	94	1.28	...	...	94	1.28
6 Apartments and over	49	3.86	...	...	35	1.81	84	2.62	1	...	85	2.64
TOTAL HOUSES OVERCROWDED	13,231	23.38	3,136	26.04	734	3.03	17,101	18.41	2,645	39.24	19,746	19.82

As in the case of families, overcrowding in houses is approximately one-fifth of the total with over 75 per cent. of the overcrowding occurring in the one and two-apartment houses and over 96 per cent. occurring in houses of three apartments and under.

It will be observed that the highest percentage of overcrowding occurred in the "unfit house" category, namely, 39.24; in the Local Authority's houses, 26.04 per cent.; in the privately owned and let houses, 23.38 per cent., and in the houses owned and occupied by the owner, 3.03 per cent. The reason why the "unfit houses" shows the highest percentage of overcrowding is due to the fact that 92 per cent. of these houses are of one and two apartments.



### Data from which the Requirements to Abate Overcrowding may be Estimated.

The Department of Health required that fit houses alone were to be included in Form C, and that action in respect of unfit houses would be taken under the 1930 Act. In the following tables, fit and unfit houses are, therefore, considered separately. In estimating the number of new houses required to rehouse the families from unfit houses, regard was had to the estimated number of houses to be rendered vacant by decrowding operations. Where families in unfit houses only required, according to the number of units in the family, a one or two-apartment house, some of the surplus houses were considered as being available for these families. As previously stated overcrowding may occur through an excess of persons in the occupying family or may be due to the keeping of lodgers or to the sub-letting of a room or rooms to another family. The following summary shows the extent to which overcrowding is attributable to these causes:—

SIZE OF HOUSE	SINGLE OCCUPANCY HOUSES	SINGLE OCCUPANCY HOUSES WITH LODGERS	MULTIPLE OCCUPANCIES	TOTAL.
1 Apartment . . .	1,375	11	18	1,404
2 Apartments . . .	9,839	801	507	11,147
3 " . . .	2,952	281	557	3,790
4 " . . .	267	43	275	585
5 " . . .	5	...	87	92
6 Apartments and over	3	...	80	83
TOTAL . . .	14,441	1,136	1,524	17,101

This analysis shows that the major portion of overcrowding is in "single occupancy families" living in one and two-apartment houses, namely, 11,214 houses. "Multiple occupancies" were, however, responsible for 1,524 cases of overcrowding, and the keeping of lodgers for 1,136 cases.

*Requirements to Abate Overcrowding.*—This estimate, based on the results of the survey, is made on the assumption that houses will be provided (a) where lodgers are causing overcrowding, and (b) for sub-tenant families.

The gross number of houses required to abate overcrowding may now be summarised thus:—

	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 Apts. and up	TOTAL.
Single Occupancy . . .	...	924	8,056	4,705	861	56	14,602
Single Occupancy with Lodgers . . .	...	6	639	420	65	6	1,136
Multiple Occupancies	253	824	464	122	21	1	1,685
TOTAL . . .	253	1,754	9,159	5,247	947	63	17,423



As is explained in the following paragraph, the ultimate number of new houses required to be provided will be substantially modified by the number of houses rendered vacant during the process of transfer or substitution.

*Effect of Decrowding.*—It is obvious that, by the transfer to houses of a larger size of the 14,441 "single occupancy families" and the 1,136 "single occupancy families with lodgers," there will be rendered vacant a similar number of houses at present occupied by them. As the result of the decrowding of "multiple occupancy families," whether principal tenants or sub-tenants, 93 houses will also be completely vacated. At the time of the survey, 1,034 houses were found to be empty. While the process of transfer will be a gradual one, all these houses will in time become empty, and can be occupied by families from overcrowded houses thus reducing the estimate of the new houses required to abate overcrowding. The following summary indicates the number of houses of each size thus to be rendered vacant:—

	HOUSES TO BE RENDERED VACANT.						TOTAL.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 Apts. and up	
Single Occupancy . . . . .	1,375	9,839	2,952	267	5	3	14,441
Single Occupancy with Lodgers . . . . .	11	801	281	43	...	...	1,136
Multiple Occupancies . . . . .	8	55	27	3	...	...	93
Empty Houses . . . . .	105	249	270	237	116	57	1,034
TOTAL . . . . .	1,499	10,944	3,530	550	121	60	16,704

#### ESTIMATE OF NUMBER OF HOUSES REQUIRED TO ABATE OVERCROWDING.

It will be apparent that the number of new houses which it will be necessary to provide to abate overcrowding is to be found by deducting from the gross number of houses required to meet the needs of families at present overcrowded, the number of houses to be rendered vacant as a result of the process of transfer. This is shown in the following summary:—

	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 Apts. and up	TOTAL
Houses required to abate overcrowding . . . . .	253	1,754	9,159	5,247	947	63	17,423
Houses to be rendered vacant by decrowding . . . . .	1,499	10,944	3,530	550	121	60	16,704
SURPLUS . . . . .	1,246	9,190	...	...	...	...	10,436
DEFICIENCY . . . . .	...	...	5,629	4,697	826	3	11,155

It will thus be seen that as a result of the decrowding of fit houses, 10,436 houses of one and two apartments will become surplus to requirement, and that to make



complete provision for decrowding, 11,155 houses of three apartments and upwards will require to be provided.

The surplus of 10,436 one and two-apartment houses, however, is subject to reduction, as there are 4,301 families at present living in unfit houses who only require a house of one or two apartments, and these families could obtain accommodation in the surplus houses. In the "sub-tenant family" group, there are families who are living in sub-let apartments but are not causing overcrowding, and no provision has been made in the estimates to provide new houses for them, and a certain proportion, who will be anxious to obtain a house of their own, will be able to get accommodation in the surplus houses. In many instances, the surplus two-apartment houses (probably 50 per cent.), are capable of reconstruction, and, by combining two houses and forming a house of three apartments with all modern requirements, will be rendered available as "new" houses, and so reduce the estimate of new houses required to abate overcrowding.

### (b) Unfit Houses.

In an earlier summary, it was shown that there were 6,740 unfit houses of which 2,645 were overcrowded. While these houses are to be dealt with apart from the decrowding provisions of the 1935 Act, the following summary is given in order to show the total number of houses which will be required to replace these unfit houses and, at the same time, make provision for such overcrowding as exists among them:—

SIZE OF HOUSE.	NO. OF HOUSES REQUIRED.
One Apartment . . . . .	2,553
Two Apartments . . . . .	1,748
Three Apartments . . . . .	1,650
Four Apartments . . . . .	660
Five Apartments . . . . .	119
Six Apartments and Over . . . . .	10
	6,740

In so far as one and two-apartment houses may be required to meet the needs of displaced families, these may be obtained as already mentioned from among the large number of fit houses to be rendered vacant as a result of the decrowding operations. For houses of three apartments and upwards, however, additional building will be required to the extent shown in the summary.

### SUMMARY OF ACCOMMODATION REQUIRED.

The net result of the decrowding of families in fit houses and the rehousing of families in unfit houses is shown in the following summary:—

SIZE OF HOUSE	RESULTS OF DECROWDING		HOUSES REQUIRED FOR FAMILIES DISPLACED FROM UNFIT HOUSES	SURPLUS	DEFICIENCY
	SURPLUS	DEFICIENCY			
1 Apartment . . . . .	1,246	...	2,553	...	...
2 Apartments . . . . .	9,190	...	1,748	6,135	...
3 " . . . . .	...	5,629	1,650	...	7,279
4 " . . . . .	...	4,697	660	...	5,357
5 " . . . . .	...	826	119	...	945
6 Apartments and over . . . . .	...	3	10	...	13
TOTAL . . . . .	10,436	11,155	6,740	6,135	13,594

It will be observed that there would appear to be a need for the provision of 1,207 one-apartment houses, but, as there is a surplus of 7,342 two-apartment houses these have been deducted from that number and have reduced the surplus two-apartment houses to 6,135.



APPENDIX.—Table I.

CITY AND ROYAL BURGH OF EDINBURGH  
HOUSING (SCOTLAND) ACT, 1935  
(SECTION 1.)

Form **B**  
Overcrowding

Report on Families Overcrowded as shown by Survey.

1	2													3			4							
	Number of Families* containing the number of "Adults"† shown at the head of the columns hereunder occupying houses with the number of Apartments in Column 1.													Number of Families Overcrowded										
	1	1½	2	2½	3	3½	4	4½	5	5½	6	6½	7	7½	8	8½		9	9½	10	10+	Owing to number of occupants‡ (a)	Owing only to sex separation factors§ (b)	Total (c)
1 Apartment .	2,611	123	3,460	1,313	1,132	349	324	124	137	71	58	37	18	9	7	1	3	...	...	3,583	177	3,760	9,777	
2 Apartments .	2,739	59	8,244	3,433	7,051	2,124	4,176	1,269	2,093	776	960	362	416	146	133	58	39	15	9	11	12,587		12,587	34,113
3 Apartments .	1,605	29	6,865	2,373	6,738	1,700	4,247	1,156	2,341	758	1,169	408	534	196	215	89	90	41	30	28	3,558		3,558	30,612
4 Apartments .	1,174	11	4,842	1,075	4,225	623	2,776	474	1,428	243	639	185	322	101	157	46	64	24	22	20	333		333	18,456
5 Apartments .	462	4	1,796	271	1,660	248	1,183	162	628	111	274	45	129	39	54	13	19	7	9	6	6		6	7,120
6 Apartments and over .	187	6	673	49	666	92	484	50	327	31	184	27	92	16	51	13	25	6	10	16	...		...	3,005
TOTALS .	8,778	232	25,880	8,514	21,472	5,141	13,190	3,235	6,954	1,990	3,284	1,064	1,511	507	617	220	240	93	80	81	20,067	177	20,244	103,083

\* Where house is occupied by more than one family, enter each family according to number of apartments separately occupied.  
 † "Adult" means a person 10 years of age and over, or two children between 1 and under 10 years. Disregard infants under 1 year.  
 ‡ Enter in Column 3(a) the sum of the figures to the right of the transverse line in Column 2.  
 § Enter in Column 3(b) families not already included in Column 3(a). It is only for single-apartment houses that Column 3(b) is required.



CITY AND ROYAL BURGH OF EDINBURGH  
HOUSING (SCOTLAND) ACT, 1935  
(SECTION 1.)—Statement of Accommodation.

ENTRY	HOUSES	NUMBER OF APARTMENTS						TOTALS.
		1	2	3	4	5	6+	
1	Surveyed (Fit) . . . . .	3,792	29,662	30,172	18,716	7,317	3,209	92,868
2	Overcrowded (Fit) . . . . .	1,404	11,147	3,790	582	94	84	17,101
	Percentage Overcrowded . . . . .	37·03	37·58	12·56	3·11	1·28	2·62	18·41
3	Required to abate Overcrowding in <i>Fit Houses</i> . . . . .	253	1,754	9,159	5,247	947	63	17,423
4	Fit existing houses :— (i) Empty . . . . .	105	249	270	237	116	57	1,034
	(ii) To be rendered vacant . . . . .	1,394	10,695	3,260	313	5	3	15,670
	(iii) Total . . . . .	1,499	10,944	3,530	550	121	60	16,704
5	Estimated Surplus . . . . .	1,246	9,190	...	...	...	...	10,436
	New Houses required for <i>Overcrowded Houses</i> . . . . .	...	...	5,629	4,697	826	3	11,155
1a	Surveyed (Unfit) . . . . .	2,341	3,355	783	223	27	11	6,740
2a	Overcrowded (Unfit) . . . . .	1,037	1,402	188	17	...	1	2,645
	Percentage Overcrowded . . . . .	44·30	41·79	24·01	7·62	...	9·09	39·24
3a	Required for <i>all Unfit Houses</i> — overcrowded or otherwise . . . . .	2,553	1,748	1,650	660	119	10	6,740
5a	New Houses required for Unfit Houses . . . . .	...	...	1,650	660	119	10	2,439
	Net Estimated Surplus . . . . .	...	6,135	...	...	...	...	6,135
6	Overcrowded Houses belonging to the Local Authority in- cluded under Entry (2) . . . . .	173	1,164	1,695	104	...	...	3,136



CALTON WARD.

Ward 1

DETAILS OF HOUSES SURVEYED.

HOUSES	NUMBER OF APARTMENTS						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit) . . .	163	2299	1543	623	231	95	4954
Overcrowded (Fit) . . .	61	880	126	21	3	4	1095
Percentage Overcrowded	37.4	38.3	8.16	3.37	1.3	4.22	22.1
Surveyed (Unfit) . . .	54	90	5	3	...	...	152
Overcrowded (Unfit) . . .	26	32	2	...	...	...	60
Percentage Overcrowded	48.2	35.6	40.0	...	...	...	39.4

DEGREE OF OVERCROWDING.

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . .	63	148	25	7	1	...	244
1 .. . . .	55	305	45	1	...	...	406
$1\frac{1}{2}$ .. . . .	18	75	8	4	...	...	105
2 .. . . .	11	161	18	...	...	...	190
$2\frac{1}{2}$ .. . . .	2	54	4	...	...	...	60
3 .. . . .	3	62	4	...	...	...	69
$3\frac{1}{2}$ .. . . .	4	28	...	...	...	...	32
4 .. . . .	2	28	3	...	...	...	33
$4\frac{1}{2}$ .. . . .	...	15	...	...	...	...	15
5+ .. . . .	2	26	1	...	...	...	29
Sex Separation only . . .	5	...	...	...	...	...	5
TOTALS . . .	165	902	108	12	1	...	1188



**CANONGATE WARD.**

Ward 2

**DETAILS OF HOUSES SURVEYED.**

HOUSES	NUMBER OF APARTMENTS						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit) . . . . .	75	1669	1304	551	109	84	3792
Overcrowded (Fit) . . . . .	16	590	150	28	4	1	789
Percentage Overcrowded	21.35	35.4	11.5	5.08	3.67	1.19	20.8
Surveyed (Unfit) . . . . .	354	613	137	24	...	...	1128
Overcrowded (Unfit) . . . . .	165	276	41	1	...	...	483
Percentage Overcrowded	46.6	45.00	29.9	4.16	...	...	42.8

**DEGREE OF OVERCROWDING.**

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . . . .	71	171	35	3	...	...	280
1 " . . . . .	59	287	56	2	...	...	404
$1\frac{1}{2}$ " . . . . .	25	83	23	2	...	...	133
2 " . . . . .	24	142	25	1	...	...	192
$2\frac{1}{2}$ " . . . . .	11	54	6	2	...	...	73
3 " . . . . .	8	67	9	1	...	...	85
$3\frac{1}{2}$ " . . . . .	1	26	4	...	...	...	31
4 " . . . . .	2	17	6	...	...	...	25
$4\frac{1}{2}$ " . . . . .	2	8	3	...	...	...	13
5+ " . . . . .	3	23	3	...	...	...	29
Sex Separation only . . . . .	13	...	...	...	...	...	13
TOTALS . . . . .	219	878	170	11	...	...	1278



NEWINGTON WARD.

Ward 3

**DETAILS OF HOUSES SURVEYED.**

HOUSES	NUMBER OF APARTMENTS						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit) . . . .	80	623	1195	1126	361	151	3536
Overcrowded (Fit) . . .	27	202	180	14	...	1	424
Percentage Overcrowded	33.75	32.42	15.06	1.24	...	...	12.00
Surveyed (Unfit) . . . .	42	49	4	...	...	...	95
Overcrowded (Unfit) . .	10	30	1	...	...	...	41
Percentage Overcrowded	23.81	63.33	25.00	...	...	...	43.16

**DEGREE OF OVERCROWDING.**

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . . .	29	40	40	4	...	...	113
1 " . . . .	22	73	48	...	...	...	143
$1\frac{1}{2}$ " . . . .	4	35	20	3	...	...	62
2 " . . . .	2	40	26	2	...	...	70
$2\frac{1}{2}$ " . . . .	3	19	10	1	...	...	33
3 " . . . .	1	13	9	...	...	...	23
$3\frac{1}{2}$ " . . . .	...	7	4	...	...	...	11
4 " . . . .	1	2	6	...	...	...	9
$4\frac{1}{2}$ " . . . .	...	2	1	...	...	...	3
5+ " . . . .	...	2	3	...	...	...	5
Sex Separation only . .	1	...	...	...	...	...	1
TOTALS . . . .	63	233	167	10	...	...	473



**MORNINGSIDE WARD.**

Ward 4

**DETAILS OF HOUSES SURVEYED.**

HOUSES	NUMBER OF APARTMENTS						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit) . . . .	13	167	820	2197	839	239	4275
Overcrowded (Fit) . . .	2	42	22	10	2	2	80
Percentage Overcrowded	15.38	25.15	2.68	.46	.24	.84	1.87
Surveyed (Unfit) . . . .	9	12	9	1	1	...	32
Overcrowded (Unfit) . .	3	6	...	...	...	...	9
Percentage Overcrowded	33.3	40.00	...	...	...	...	28.13

**DEGREE OF OVERCROWDING.**

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . . .	5	7	6	5	...	...	23
1 " . . . .	6	24	10	1	...	...	41
$1\frac{1}{2}$ " . . . .	2	5	1	2	...	...	10
2 " . . . .	...	9	4	...	1	...	14
$2\frac{1}{2}$ " . . . .	...	...	...	1	...	...	1
3 " . . . .	...	2	1	...	...	...	3
$3\frac{1}{2}$ " . . . .	...	1	...	...	...	...	1
4 " . . . .	...	...	...	...	...	...	...
$4\frac{1}{2}$ " . . . .	...	...	...	...	...	...	...
5+ " . . . .	...	...	...	...	...	...	...
Sex Separation only . .	...	...	...	...	...	...	...
TOTALS . . . .	13	48	22	9	1	...	93



MERCHISTON WARD.

Ward 5

**DETAILS OF HOUSES SURVEYED.**

HOUSES	NUMBER OF APARTMENTS						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit) . . .	31	751	1733	1480	546	181	4722
Overcrowded (Fit) . . .	...	216	67	18	3	2	306
Percentage Overcrowded	...	28.76	3.87	1.22	.55	1.10	6.48
Surveyed (Unfit) . . .	...	2	...	...	...	...	2
Overcrowded (Unfit) . . .	...	1	...	...	...	...	1
Percentage Overcrowded	...	...	...	...	...	...	...

**DEGREE OF OVERCROWDING.**

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . .	14	41	9	4	...	...	68
1 " . . .	6	95	37	3	...	...	141
$1\frac{1}{2}$ " . . .	1	16	4	5	...	...	26
2 " . . .	...	37	5	1	...	...	43
$2\frac{1}{2}$ " . . .	...	13	...	...	...	...	13
3 " . . .	...	7	1	...	...	...	8
$3\frac{1}{2}$ " . . .	...	1	1	...	...	...	2
4 " . . .	...	5	1	1	...	...	7
$4\frac{1}{2}$ " . . .	...	...	...	...	...	...	...
5+ " . . .	...	2	1	...	...	...	3
Sex Separation only . . .	...	...	...	...	...	...	...
TOTALS . . .	21	217	59	14	...	...	311



GORGIE WARD. 9377

Ward 6

**DETAILS OF HOUSES SURVEYED.**

HOUSES	NUMBER OF APARTMENTS						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit) . . . . .	74	3169	3523	519	171	84	7540
Overcrowded (Fit) . . . . .	37	1262	499	36	2	1	1837
<i>May stay</i> Percentage Overcrowded	<i>37</i>	<i>1967</i>	<i>3024</i>	<i>483</i>	<i>169</i>	<i>83</i>	<i>5703</i>
	5.00	3.98	14.16	6.94	1.17	...	24.36
Surveyed (Unfit) . . . . .	...	1	...	...	...	...	1
Overcrowded (Unfit) . . . . .	...	1	...	...	...	...	1
Percentage Overcrowded	...	...	...	...	...	...	...

**DEGREE OF OVERCROWDING.**

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . . . .	52	222	102	11	...	...	387
1 " . . . . .	43	463	152	2	...	...	660
$1\frac{1}{2}$ " . . . . .	20	103	51	6	...	...	180
2 " . . . . .	16	196	61	...	...	...	273
$2\frac{1}{2}$ " . . . . .	8	68	31	5	...	...	112
3 " . . . . .	2	88	19	1	...	...	110
$3\frac{1}{2}$ " . . . . .	4	31	10	1	...	...	46
4 " . . . . .	1	36	13	...	...	...	50
$4\frac{1}{2}$ " . . . . .	1	12	5	...	...	...	18
5+ " . . . . .	3	15	9	...	...	...	27
Sex Separation only . . . . .	1	...	...	...	...	...	1
TOTALS . . . . .	151	1234	453	26	...	...	1864



**HAYMARKET WARD.**

Ward 7

**DETAILS OF HOUSES SURVEYED.**

HOUSES	NUMBER OF APARTMENTS						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit) . . . .	136	734	941	633	336	85	2865
Overcrowded (Fit) . . . .	13	209	55	12	2	1	292
Percentage Overcrowded	9.56	28.47	5.84	1.90	.60	...	10.19
Surveyed (Unfit) . . . .	15	50	5	1	...	...	71
Overcrowded (Unfit) . . . .	5	12	2	...	...	...	19
Percentage Overcrowded	33.33	24.00	40.00	...	...	...	26.76

**DEGREE OF OVERCROWDING.**

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . . .	6	48	14	2	...	...	70
1 " . . . .	16	76	23	...	...	...	115
$1\frac{1}{2}$ " . . . .	1	31	4	1	...	...	37
2 " . . . .	5	33	8	...	...	...	46
$2\frac{1}{2}$ " . . . .	1	12	2	...	...	...	15
3 " . . . .	...	14	2	...	...	...	16
$3\frac{1}{2}$ " . . . .	...	4	1	...	...	...	5
4 " . . . .	...	2	1	...	...	...	3
$4\frac{1}{2}$ " . . . .	...	3	...	...	...	...	3
5+ " . . . .	...	1	...	...	...	...	1
Sex Separation only . . . .	2	...	...	...	...	...	2
TOTALS . . . .	31	224	55	3	...	...	313



**ST. BERNARD'S WARD.**

Ward 8

**DETAILS OF HOUSES SURVEYED.**

HOUSES	NUMBER OF APARTMENTS						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit) . . . .	167	650	1840	1114	426	85	4282
Overcrowded (Fit) . . .	46	207	154	34	1	1	443
Percentage Overcrowded	27.54	31.85	8.37	3.05	...	...	10.35
Surveyed (Unfit) . . . .	35	99	24	1	...	...	159
Overcrowded (Unfit) . .	17	38	...	...	...	...	55
Percentage Overcrowded	48.57	38.38	...	...	...	...	34.59

**DEGREE OF OVERCROWDING.**

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . . .	44	44	43	8	...	...	139
1 " . . . .	23	90	45	3	...	...	161
$1\frac{1}{2}$ " . . . .	8	26	15	4	...	...	53
2 " . . . .	6	49	16	1	...	...	72
$2\frac{1}{2}$ " . . . .	3	13	9	...	...	...	25
3 " . . . .	...	10	5	3	...	...	18
$3\frac{1}{2}$ " . . . .	2	8	1	...	...	...	11
4 " . . . .	1	8	3	...	...	...	12
$4\frac{1}{2}$ " . . . .	...	3	2	...	...	...	5
5+ " . . . .	...	4	...	...	...	...	4
Sex Separation only . .	4	...	...	...	...	...	4
TOTALS . . . .	91	255	139	19	...	...	504



**BROUGHTON WARD.**

Ward 9

**DETAILS OF HOUSES SURVEYED.**

HOUSES	NUMBER OF APARTMENTS						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit) . . . .	117	1170	1192	770	275	273	3797
Overcrowded (Fit) . . .	45	386	130	25	7	10	603
Percentage Overcrowded	38.46	33.10	10.91	3.2	2.55	3.66	15.88
Surveyed (Unfit) . . . .	89	102	21	15	4	...	231
Overcrowded (Unfit) . . .	42	33	4	...	...	...	79
Percentage Overcrowded	47.19	32.35	19.05	...	...	...	34.20

**DEGREE OF OVERCROWDING.**

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . . .	58	83	20	5	...	...	166
1 " . . . .	43	149	45	3	...	...	240
$1\frac{1}{2}$ " . . . .	9	45	11	4	...	...	69
2 " . . . .	15	82	16	1	...	...	114
$2\frac{1}{2}$ " . . . .	6	19	8	...	...	...	33
3 " . . . .	3	19	8	...	...	...	30
$3\frac{1}{2}$ " . . . .	4	8	8	...	...	...	20
4 " . . . .	1	7	3	...	...	...	11
$4\frac{1}{2}$ " . . . .	...	1	...	...	...	...	1
5+ " . . . .	1	5	2	...	...	...	8
Sex Separation only . . .	2	...	...	...	...	...	2
TOTALS . . . .	142	418	121	13	...	...	694



**ST. STEPHEN'S WARD.**

Ward 10

**DETAILS OF HOUSES SURVEYED.**

HOUSES	NUMBER OF APARTMENTS						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit) . . . .	277	672	943	590	454	276	3212
Overcrowded (Fit) . . .	91	201	97	22	13	6	430
Percentage Overcrowded	32·85	29·91	10·29	3·73	2·86	2·17	13·39
Surveyed (Unfit) . . . .	160	235	101	30	2	2	530
Overcrowded (Unfit) . .	46	89	25	...	...	...	160
Percentage Overcrowded	28·75	37·87	24·75	...	...	...	30·19

**DEGREE OF OVERCROWDING.**

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . . .	76	59	20	3	...	...	158
1 " . . . .	62	99	31	...	1	...	193
$1\frac{1}{2}$ " . . . .	21	36	8	1	...	...	66
2 " . . . .	16	48	13	...	...	...	77
$2\frac{1}{2}$ " . . . .	8	9	7	...	...	...	24
3 " . . . .	6	15	10	...	...	...	31
$3\frac{1}{2}$ " . . . .	1	10	1	...	...	...	12
4 " . . . .	3	10	...	...	...	...	13
$4\frac{1}{2}$ " . . . .	1	1	1	...	...	...	3
5+ " . . . .	...	7	1	...	...	...	8
Sex Separation only . .	17	...	...	...	...	...	17
TOTALS . . . .	211	294	92	4	1	...	602



**ST. ANDREW'S WARD.**

Ward 11

**DETAILS OF HOUSES SURVEYED.**

HOUSES	NUMBER OF APARTMENTS						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit) . . . .	324	493	267	165	60	36	1345
Overcrowded (Fit) . . .	109	193	36	10	6	1	355
Percentage Overcrowded	33.64	39.15	13.48	6.06	10.00	...	26.40
Surveyed (Unfit) . . . .	373	166	44	16	5	1	605
Overcrowded (Unfit) . .	169	38	9	...	...	...	216
Percentage Overcrowded	45.31	22.90	20.45	...	...	...	35.54

**DEGREE OF OVERCROWDING.**

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . . .	96	33	5	4	...	...	138
1 " . . . .	88	82	18	1	...	...	189
$1\frac{1}{2}$ " . . . .	28	25	5	...	...	...	58
2 " . . . .	28	33	10	1	...	...	72
$2\frac{1}{2}$ " . . . .	10	15	2	...	...	...	27
3 " . . . .	9	17	1	...	...	...	27
$3\frac{1}{2}$ " . . . .	7	7	1	...	...	...	15
4 " . . . .	5	7	...	...	...	...	12
$4\frac{1}{2}$ " . . . .	6	5	...	...	...	...	11
5+ " . . . .	3	6	1	...	...	...	10
Sex Separation only . .	18	...	...	...	...	...	18
TOTALS . . . .	298	230	43	6	...	...	577



ST. GILES WARD.

Ward 12

**DETAILS OF HOUSES SURVEYED.**

HOUSES	NUMBER OF APARTMENTS						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit) . . . .	621	1276	755	429	110	43	3234
Overcrowded (Fit) . . . .	256	541	129	28	7	3	964
Percentage Overcrowded	41.22	42.40	17.09	6.53	6.36	6.98	29.81
Surveyed (Unfit) . . . .	378	280	66	27	5	4	760
Overcrowded (Unfit) . . . .	159	129	13	7	...	1	309
Percentage Overcrowded	42.06	46.07	19.70	25.93	...	...	40.66

**DEGREE OF OVERCROWDING.**

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . . .	134	91	23	10	...	...	258
1 " . . . .	143	218	35	1	...	...	397
$1\frac{1}{2}$ " . . . .	50	67	9	1	...	...	127
2 " . . . .	46	100	12	1	...	...	159
$2\frac{1}{2}$ " . . . .	27	39	4	2	...	...	72
3 " . . . .	27	57	12	1	...	...	97
$3\frac{1}{2}$ " . . . .	17	31	1	1	...	...	50
4 " . . . .	14	32	5	...	...	...	51
$4\frac{1}{2}$ " . . . .	5	10	4	...	...	...	19
5+ " . . . .	5	19	4	...	...	...	28
Sex Separation only . . . .	32	...	...	...	...	...	32
TOTALS . . . .	500	664	109	17	...	...	1290



DALRY WARD.

Ward 13

**DETAILS OF HOUSES SURVEYED.**

HOUSES	NUMBER OF APARTMENTS						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit) . . . .	206	3177	1222	426	68	23	5122
Overcrowded (Fit) . . .	90	1062	169	27	4	1	1353
Percentage Overcrowded	43.69	33.43	38.30	6.34	5.88	...	26.42
Surveyed (Unfit) . . . .	28	36	1	...	...	...	65
Overcrowded (Unfit) . .	15	13	...	...	...	...	28
Percentage Overcrowded	53.57	36.11	...	...	...	...	43.08

**DEGREE OF OVERCROWDING.**

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . . .	85	196	21	9	...	...	311
1 " . . . .	60	373	61	2	...	...	496
$1\frac{1}{2}$ " . . . .	22	129	16	1	...	...	168
2 " . . . .	17	196	28	...	...	...	241
$2\frac{1}{2}$ " . . . .	4	82	5	1	...	...	92
3 " . . . .	5	95	6	...	...	...	106
$3\frac{1}{2}$ " . . . .	2	17	1	...	...	...	20
4 " . . . .	1	29	4	...	...	...	34
$4\frac{1}{2}$ " . . . .	2	12	...	1	...	...	15
5+ " . . . .	2	19	...	...	...	...	21
Sex Separation only . . .	6	...	...	...	...	...	6
TOTALS . . . .	206	1148	142	14	...	...	1510



**GEORGE SQUARE WARD.**

Ward 14

**DETAILS OF HOUSES SURVEYED.**

HOUSES	NUMBER OF APARTMENTS						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit) . . . .	275	1137	961	771	328	105	3577
Overcrowded (Fit) . . . .	78	375	109	22	12	7	603
Percentage Overcrowded	28.36	32.98	11.34	2.85	3.66	6.66	16.86
Surveyed (Unfit) . . . .	126	210	48	5	...	...	389
Overcrowded (Unfit) . . . .	53	79	11	...	...	...	143
Percentage Overcrowded	42.06	37.62	2.29	...	...	...	36.76

**DEGREE OF OVERCROWDING.**

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . . .	73	81	12	8	...	...	174
1 " . . . .	54	145	46	3	...	...	248
$1\frac{1}{2}$ " . . . .	14	53	13	2	...	...	82
2 " . . . .	18	71	15	2	...	...	106
$2\frac{1}{2}$ " . . . .	6	36	2	...	...	...	44
3 " . . . .	10	34	8	...	...	...	52
$3\frac{1}{2}$ " . . . .	6	15	3	...	...	...	24
4 " . . . .	2	15	1	...	...	...	18
$4\frac{1}{2}$ " . . . .	5	3	2	...	...	...	10
5+ " . . . .	3	9	1	...	...	...	13
Sex Separation only . . . .	12	...	...	...	...	...	12
TOTALS . . . .	203	462	103	15	...	...	783



**ST. LEONARD'S WARD.**

Ward 15

**DETAILS OF HOUSES SURVEYED.**

HOUSES	NUMBER OF APARTMENTS.						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit) . . . .	385	1422	833	427	189	105	3361
Overcrowded (Fit) . . . .	138	525	123	32	4	7	829
Percentage Overcrowded	35.84	36.92	14.77	7.49	2.12	6.67	24.67
Surveyed (Unfit) . . . .	229	478	160	44	1	...	912
Overcrowded (Unfit) . . . .	97	201	34	4	...	...	336
Percentage Overcrowded	42.36	4.21	21.25	9.09	...	...	36.84

**DEGREE OF OVERCROWDING.**

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . . .	97	114	29	9	...	...	249
1 " . . . .	83	239	42	1	...	...	365
$1\frac{1}{2}$ " . . . .	27	73	14	1	...	...	115
2 " . . . .	37	130	12	1	...	...	180
$2\frac{1}{2}$ " . . . .	7	42	10	...	...	...	59
3 " . . . .	10	65	14	...	...	...	89
$3\frac{1}{2}$ " . . . .	1	29	4	...	...	...	34
4 " . . . .	3	24	2	...	...	...	29
$4\frac{1}{2}$ " . . . .	1	10	3	...	...	...	14
5+ " . . . .	4	11	...	...	...	...	15
Sex Separation only . . . .	27	...	...	...	...	...	27
TOTALS . . . .	297	737	130	12	...	...	1176



**PORTOBELLO WARD.**

Ward 16

**DETAILS OF HOUSES SURVEYED.**

HOUSES	NUMBER OF APARTMENTS						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit) . . . .	77	1246	3112	1863	697	383	7378
Overcrowded (Fit) . . .	30	486	486	55	9	12	1078
Percentage Overcrowded	38.96	39.00	15.62	2.95	1.29	3.13	14.61
Surveyed (Unfit) . . . .	27	59	11	15	2	3	117
Overcrowded (Unfit) . . .	16	24	3	2	...	...	45
Percentage Overcrowded	59.26	40.68	27.27	13.33	...	...	38.46

**DEGREE OF OVERCROWDING.**

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . . .	75	95	113	16	...	...	299
1 " . . . .	56	172	126	7	1	...	362
$1\frac{1}{2}$ " . . . .	8	68	76	3	...	...	155
2 " . . . .	7	66	78	4	...	...	155
$2\frac{1}{2}$ " . . . .	1	36	38	1	...	...	76
3 " . . . .	3	44	29	4	...	...	80
$3\frac{1}{2}$ " . . . .	2	15	18	...	...	...	35
4 " . . . .	3	20	12	...	...	...	35
$4\frac{1}{2}$ " . . . .	3	3	7	...	...	...	13
5+ " . . . .	1	13	8	...	...	...	22
Sex Separation only . . .	4	...	...	...	...	...	4
TOTALS . . . .	163	532	505	35	1	...	1236



**SOUTH LEITH WARD.**

Ward 17

**DETAILS OF HOUSES SURVEYED.**

HOUSES	NUMBER OF APARTMENTS						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit) . . . . .	122	2662	2461	838	273	232	6588
Overcrowded (Fit) . . . . .	48	1048	370	29	2	7	1504
Percentage Overcrowded	39.34	39.37	15.03	3.46	.73	3.02	22.83
Surveyed (Unfit) . . . . .	61	127	20	5	1	...	214
Overcrowded (Unfit) . . . . .	36	58	4	...	...	...	98
Percentage Overcrowded	59.02	45.67	20.00	...	...	...	45.79

**DEGREE OF OVERCROWDING.**

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . . . .	69	193	74	8	...	...	344
1 " . . . . .	52	359	105	...	...	...	516
$1\frac{1}{2}$ " . . . . .	13	112	39	3	1	...	168
2 " . . . . .	12	187	53	3	...	...	255
$2\frac{1}{2}$ " . . . . .	...	58	13	1	...	...	72
3 " . . . . .	5	86	19	1	...	...	111
$3\frac{1}{2}$ " . . . . .	3	36	16	...	...	...	55
4 " . . . . .	5	41	7	...	...	...	53
$4\frac{1}{2}$ " . . . . .	1	6	5	...	...	...	12
5+ " . . . . .	...	24	8	...	...	...	32
Sex Separation only . . . . .	4	...	...	...	...	...	4
TOTALS . . . . .	164	1102	339	16	1	...	1622



NORTH LEITH WARD.

Ward 18

DETAILS OF HOUSES SURVEYED.

HOUSES	NUMBER OF APARTMENTS						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit)	203	1512	923	357	85	58	3138
Overcrowded (Fit)	116	679	210	46	4	4	1059
Percentage Overcrowded	57.14	44.19	22.75	12.90	4.71	6.90	33.75
Surveyed (Unfit)	210	409	106	24	5	1	755
Overcrowded (Unfit)	111	196	33	2	...	...	342
Percentage Overcrowded	52.86	47.92	31.13	8.33	...	...	45.30

DEGREE OF OVERCROWDING.

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess	102	116	29	9	...	...	256
1	100	245	56	4	...	...	405
$1\frac{1}{2}$	34	90	19	4	...	...	147
2	34	145	29	...	...	...	208
$2\frac{1}{2}$	16	65	10	2	...	...	93
3	18	75	19	2	...	...	114
$3\frac{1}{2}$	8	28	3	...	...	...	39
4	8	51	14	...	...	...	73
$4\frac{1}{2}$	5	21	4	...	...	...	30
5+	5	29	4	...	...	...	38
Sex Separation only	12	...	...	...	...	...	12
TOTALS	342	865	187	21	...	...	1415



WEST LEITH WARD.

Ward 19

**DETAILS OF HOUSES SURVEYED.**

HOUSES	NUMBER OF APARTMENTS						TOTALS
	1	2	3	4	5	6+	
Surveyed (Fit) . . .	158	1313	855	656	459	221	3662
Overcrowded (Fit) . .	80	521	91	33	3	6	734
Percentage Overcrowded	50.63	39.68	10.64	5.03	.65	2.71	20.04
Surveyed (Unfit) . . .	97	208	12	8	1	...	326
Overcrowded (Unfit) .	39	88	2	...	...	...	129
Percentage Overcrowded	40.21	42.31	16.66	...	...	...	39.57

**DEGREE OF OVERCROWDING.**

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . .	47	80	9	9	...	...	145
1 " . . .	46	201	33	3	...	...	283
$1\frac{1}{2}$ " . . .	14	51	13	9	...	...	87
2 " . . .	10	121	15	...	...	...	146
$2\frac{1}{2}$ " . . .	4	37	4	1	...	...	46
3 " . . .	10	53	8	1	...	...	72
$3\frac{1}{2}$ " . . .	3	16	2	...	...	...	21
4 " . . .	6	27	2	...	...	...	35
$4\frac{1}{2}$ " . . .	3	3	...	...	...	...	6
5+ " . . .	4	15	3	...	...	...	22
Sex Separation only .	8	...	...	...	...	...	8
TOTALS . . .	155	604	89	23	...	...	871



**CENTRAL LEITH WARD.**

Ward 20

**DETAILS OF HOUSES SURVEYED.**

HOUSES	NUMBER OF APARTMENTS						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit) . . . .	139	1692	743	250	72	83	2979
Overcrowded (Fit) . . .	62	753	116	20	5	5	961
Percentage Overcrowded	44·60	44·50	15·61	8·00	6·94	6·02	32·26
Surveyed (Unfit) . . . .	26	77	5	...	...	...	108
Overcrowded (Unfit) . .	11	33	3	...	...	...	47
Percentage Overcrowded	42·31	42·86	60·00	...	...	...	43·52

**DEGREE OF OVERCROWDING.**

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . . .	54	110	19	7	...	...	190
1 " . . . .	52	223	37	...	...	...	312
$1\frac{1}{2}$ " . . . .	8	62	5	1	...	...	76
2 " . . . .	6	130	23	2	...	...	161
$2\frac{1}{2}$ " . . . .	4	60	1	...	...	...	65
3 " . . . .	8	81	8	...	...	...	97
$3\frac{1}{2}$ " . . . .	3	22	4	...	...	...	29
4 " . . . .	...	32	3	...	...	...	35
$4\frac{1}{2}$ " . . . .	1	17	...	...	...	...	18
5+ " . . . .	...	23	3	...	...	...	26
Sex Separation only . .	5	...	...	...	...	...	5
TOTALS . . . .	141	760	103	10	...	...	1014



## LIBERTON WARD.

Ward 21

## DETAILS OF HOUSES SURVEYED.

HOUSES	NUMBER OF APARTMENTS						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit) . . . .	105	1130	1531	439	220	61	3486
Overcrowded (Fit) . . .	40	557	371	35	...	1	1004
Percentage Overcrowded	38.10	49.30	24.23	7.97	...	...	28.80
Surveyed (Unfit) . . . .	16	43	2	3	...	...	64
Overcrowded (Unfit) . .	12	22	1	1	...	...	36
Percentage Overcrowded	75.00	51.16	...	...	...	...	56.25

## DEGREE OF OVERCROWDING.

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . . .	50	110	84	10	...	...	254
1 " . . . .	47	170	87	6	...	...	310
$1\frac{1}{2}$ " . . . .	17	68	46	6	...	...	137
2 " . . . .	12	89	51	1	...	...	153
$2\frac{1}{2}$ " . . . .	3	31	20	4	...	...	58
3 " . . . .	8	43	21	2	...	...	74
$3\frac{1}{2}$ " . . . .	2	16	6	...	...	...	24
4 " . . . .	...	20	3	...	...	...	23
$4\frac{1}{2}$ " . . . .	1	9	2	...	...	...	12
5+ " . . . .	2	8	6	...	...	...	16
Sex Separation only . .	...	...	...	...	...	...	...
TOTALS . . . .	142	564	326	29	...	...	1061



COLINTON WARD.

Ward 22

**DETAILS OF HOUSES SURVEYED.**

HOUSES	NUMBER OF APARTMENTS						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit) . . . . .	32	406	240	601	234	70	1583
Overcrowded (Fit) . . . . .	15	128	31	5	...	...	179
Percentage Overcrowded	46.88	31.53	12.92	.83	...	...	11.31
Surveyed (Unfit) . . . . .	10	3	...	...	...	...	13
Overcrowded (Unfit) . . . . .	5	2	...	...	...	...	7
Percentage Overcrowded	50.00	66.66	...	...	...	...	53.85

**DEGREE OF OVERCROWDING.**

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . . . .	9	24	10	...	...	...	43
1 " . . . . .	9	45	12	1	...	...	67
$1\frac{1}{2}$ " . . . . .	5	10	1	...	...	...	16
2 " . . . . .	2	21	3	1	...	...	27
$2\frac{1}{2}$ " . . . . .	...	6	1	1	...	...	8
3 " . . . . .	1	11	...	...	...	...	12
$3\frac{1}{2}$ " . . . . .	1	4	...	...	...	...	5
4 " . . . . .	...	2	...	...	...	...	2
$4\frac{1}{2}$ " . . . . .	...	2	...	...	...	...	2
5+ " . . . . .	...	1	...	...	...	...	1
Sex Separation only . . . . .	4	...	...	...	...	...	4
TOTALS . . . . .	31	126	27	3	...	...	187



**CORSTORPHINE & CRAMOND WARD.**

Ward 23

**DETAILS OF HOUSES SURVEYED.**

HOUSES	NUMBER OF APARTMENTS						TOTALS.
	1	2	3	4	5	6+	
Surveyed (Fit) . . . .	12	292	1235	1891	774	236	4440
Overcrowded (Fit) . . .	4	84	69	20	1	1	179
Percentage Overcrowded	33.33	28.77	5.59	1.06	...	...	4.03
Surveyed (Unfit) . . . .	2	6	2	1	...	...	11
Overcrowded (Unfit) . .	...	1	...	...	...	...	1
Percentage Overcrowded	...	...	...	...	...	...	...

**DEGREE OF OVERCROWDING.**

EXCESS NO. OF "ADULTS" IN FAMILY OVER PERMITTED NUMBER	NUMBER OF APARTMENTS OCCUPIED BY EACH FAMILY						TOTALS.
	1 Apt.	2 Apts.	3 Apts.	4 Apts.	5 Apts.	6 and over	
$\frac{1}{2}$ in excess . . . .	4	18	16	6	...	...	44
1 " . . . .	7	43	19	2	...	...	71
$1\frac{1}{2}$ " . . . .	...	6	7	1	...	...	14
2 " . . . .	...	7	13	2	...	...	22
$2\frac{1}{2}$ " . . . .	...	8	9	...	...	...	17
3 " . . . .	...	2	2	...	...	..	4
$3\frac{1}{2}$ " . . . .	...	2	...	...	...	...	2
4 " . . . .	...	1	1	...	1	...	3
$4\frac{1}{2}$ " . . . .	...	...	2	...	...	...	2
5+ " . . . .	...	3	...	...	...	...	3
Sex Separation only . .	...	...	...	...	...	...	...
TOTALS . . . .	11	90	69	11	1	...	182