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ANNUAL REPORT

of the

Public Health Department and various Sub-Departments of the City of Edinburgh

FOR THE YEAR 1921

By

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EDINBURGH, *May* 1922.

MY LORD PROVOST AND GENTLEMEN,

I have the honour to submit my Annual Report on the Health of the City and its Public Health Administration during the year 1921.

In introducing it, two items of special interest should be referred to as having an important bearing upon the facts and figures which are embodied throughout the whole Report.

The first of these is that it is possible now for the first time to include statistical and general information bearing on health matters as applying to the whole of the area recently included within the City boundaries, representing a total population of over 420,000, and including an area of over 32,500 acres.

In the second place, the statistics supplied and the conclusions based upon them may be regarded in the present Report as being of a specially correct and unassailable nature in so far as the population dealt with is the absolutely correct one as ascertained from the Census figures, which have been brought quite up to date through the recent enumeration, and which are for the first time available for the purposes of an Annual Report.

Statistics based on a calculated population during an intercensal period are always subject to some slight doubt as to their perfect accuracy. All question of dubiety from that source, however, disappears upon the present occasion.

The possibility of error in calculating the population several years after the publication of the Census is quite a substantial one, and it was the general experience that the issue of the recent Census indicated some considerable error in calculated populations as existing in the larger centres compared with what in point of fact the Census has revealed. Thus, in this City the death-rate for 1920 on a calculated population was returned as 13·2. If based upon the information now brought to light from the Census the correct figure would have been 14·2 per 1000. It was then stated in last year's Report that 13·2 marked the lowest record death-rate that had ever occurred in the City. Even, however, when the present Census figures are applied, the actually correct death-rate for 1920 is found to have been 14·2, and that figure still continues to represent the lowest record of any preceding year in the history of the City.

Death-rate.

The general death-rate for the year 1921 now under report is only very slightly above that magnificent record, representing as it does a rate of 14·4 per 1000 of the population. As just indicated, these figures apply for the first time to the Extended Area, and it is of some interest to break them up in order to determine the contributory rates applicable to the City within its former boundaries; to Leith, and to the Suburban Area, each of course in proportion to population. It is then found that while the death-rate in the City was 14·8 during the year, that within the Leith boundary was 14·0, and within the Suburban Area 11·0 per 1000.

No annual Health Report can be considered satisfactory, nor could useful deductions be drawn from it unless a study of it includes not only recognition of present-day health conditions, but also a comprehensive knowledge of those which pertained in former years, and an effort to forecast the future with the view of considering what methods are still possible in order to attain better results even than those that represent the history of, say, the past quarter of a century.

The effects of Public Health Administration in reducing Death-rates

The great advances in the science of preventive medicine have rendered it possible to successfully overcome many of the former ravages of infectious disease, and to reduce materially the high rates of mortality which were associated with former years.

It is much to be feared that these changes are not always appreciated, and in point of fact that absence of a backward look referred to tends towards a failure to fully appreciate the contrast as revealed in present-day conditions. If that were done more frequently there would certainly result a much more widespread appreciation of the efforts of those who have fought so successfully in the battle of preventive medicine, and who have succeeded to so remarkable a degree in their life-saving campaign, applicable alike to almost all forms of infectious disease, and affecting also the general well-being of the community, even although infectious disease be for the moment disregarded. It is fair also to claim that a retrospective look would exercise an influence on the opinion held by at least a few that the expenditure on Public Health administration is undue and should form one of the earlier points of attack in the course of an economic campaign.

It is not uncommon to hear the opinion expressed that progress in Public Health is not commensurate with the expenditure. A study of vital statistics and an observation of existing conditions and facilities, including the value attachable through the provision of hospitals and various institutions and organisations from which the public so fully benefits, should be an effective and sufficient answer.

If the experience of this City alone were taken as furnishing an example of success in Public Health Administration as judged by its death-rate, then some facts might be stated in such a simple way as to bring forcibly home what these reductions actually mean.

In 1897 the death-rate in this City was 19·4. In the year under report it was 14·4, and it may be claimed that the rate has gradually diminished year by year with very few exceptions from the maximum to the minimum figures. Had the rate of death which applied to the maximum figure been continued to the year under report it would have meant that over 2,000 extra deaths would now fall to be recorded as having taken place during the year as compared with those now appearing in our splendidly low record of statistics.

The City of Edinburgh, is, of course, admittedly fortunately circumstanced from a health point of view. Its situation is admittedly a healthy one. Further, being a City of University, Colleges and Educational facilities which are practically world-renowned, there is resident in it a comparatively large proportion of young healthy lives. The City also holds advantages over many other large centres of population which are chiefly industrial and subject to a greater amount of atmospheric impurity than exists here. These factors contribute largely towards the splendid position which the City takes among others in its recorded annual death-rates.

Thus comparing these applicable to the year 1921 the rate of Aberdeen, like Edinburgh, is 14·4, while it is considerably below Glasgow with its 15·1 and Dundee with 15·3 per 1000 of the population.

Housing in Relation to Death-rates.

No fact has been more prominently and consistently dwelt upon for many years in these Annual Reports than the influence of Housing conditions and environment in the determination of death and sickness rates. For a great number of years it has been emphasised that a very few wards in the City which I have termed "Black Spots" have an unenviable notoriety in excessive death-rates as compared with others.

There are scattered throughout the body of this Report several Charts in the form of "Line Charts." These represent diagrammatically the death-rates applicable to each ward under the various headings of General, Infantile, and Phthisis death-rates. Each of the Charts shows a horizontal line representing a mean, while the lines above or below indicate the relative death-rates applicable to each ward. It is a matter of profound interest that with wearisome monotony year after year the lines above the mean apply to almost the same wards, numbering about five, and to all possible causes of death. This fact throws a flood of light on the cause of failure to still further reduce existing rates. No deep research is necessary in order to discover an explanation which thus lies on the surface. The very evident indication in every

effort made towards reducing death-rates and promoting a more healthy community is to deal with these wards in which the high rates exist and the causes of these are so perfectly obvious.

I have been so impressed for many years with the close association of housing and death-rates in their relation of cause and effect, that I have compared the experience of this City with that found present in several other large centres of population, and I have addressed a series of questions to some Medical Officers of Health requesting a description of the wards under their supervision according to the mortality rates. The answers as supplied by these Medical Officers have been so interesting and so much in accordance with the experience in this City that I think it of interest to submit a short selection of them.

District	Population	Death-rate per 1000		Infantile mortality	
		General	Phthisis		
Edinburgh—					
St Bernard's	16,738	10·3	0·6	101	Well-to-do and better working class.
Merchiston	24,527	10·4	0·7	56	Residential and better working class.
Portobello	18,179	12·2	0·9	128	Mixed population; parts congested.
Calton	24,207	14·2	1·1	91	Better working class; much old tenement property at parts.
George Square	23,800	16·2	1·7	147	Mixed population; much insanitary property.
St Leonard's	24,001	17·1	1·5	164	Working class; much insanitary property.
St Giles	24,776	20·7	1·5	165	Mostly poorer class; much insanitary property.
City	...	**14·8**	**1·2**	**123**	
Glasgow—					
Kelvinside	22,047	8·5	0·3	39	Conditions good; business class and professional.
Park	22,203	11·8	0·5	80	Better class artisan, a few large houses, good property.
Blackfriars	19,355	20·0	2·2	129	Poorer working class, very congested district.
Cowcaddens	33,263	21·8	1·8	179	Mostly poorer classes, densely populated.
Calton	34,527	22·8	2·0	171	Mostly poorer classes; many uninhabitable houses.
City	...	**17·2**	**1·4**	**129**	
Liverpool—					
Wavertree	47,164	12·1	...	87	Better-class artisan and middle class.
Walton	85,646	13·0	...	87	Better-class artisan and middle class.
West Derby (East)	72,053	13·5	...	93	Better-class artisan and middle class.
Abercromby	42,235	23·3	...	137	Houses varied character, unskilled labouring class and foreigners.
Scotland	44,560	25·8	...	146	Working class; much insanitary property.
Exchange	35,587	28·1	...	181	Working class; much insanitary property.
City	...	**17·9**	...	**117**	
Aberdeen—					
Rubislaw	20,210	10·2	0·6	83	Residential and well-to-do, including better-class artisan.
Torry	11,428	11·4	0·6	115	Working class; modern tenements.
Greyfriars	13,850	16·3	1·3	170	Poorer class; much dilapidated property.
City	...	**15·4**	**1·1**	**133**	

Housing Needs in Central Areas.

It may thus be taken as an accepted axiom that future progress in successfully carrying on a better health campaign in this City must depend very largely indeed upon the efforts which may be devoted towards an improvement in the environment and housing conditions of the persons living in the four or five well-known overcrowded and poorest wards in the City. It was in full knowledge of these facts that for many years past I have emphasised in these Reports and elsewhere the tremendous importance of dealing with the existing conditions *in the Centre of the City*, either prior to or at the same time as houses were being built in the surrounding suburbs. As my views throughout have remained unaltered, I think a repetition of a few of them may serve to bring them quite up-to-date, and, as opportunity occurs in the future, may be an aid towards indicating the direction in which future efforts towards better housing would be most effectively directed.

Thus in 1913, after referring to the most clamantly necessitous wards, and describing the death-rates in them, there occurs the following :—

"These instances, which might be multiplied, point definitely to the districts or portions of districts within which lie the cause, and from which spring the effects, represented by enormously increased death-rates as compared with better favoured wards in the City, and all efforts to reduce the existing death-rate applicable to the whole City must of necessity be specially directed towards these particular areas."

Further on in the Report I find the following :—

"Whatever method is adopted, however, it is certain that the over-populated districts with their over-populated tenements must receive early attention in the interests of life and health which, of course, must be the primary consideration."

In 1915, among other references to the same condition, the following occurs :—

"The condemnation and closing of uninhabitable properties which have been carried on by the Corporation for some years past is, of course, a step in the right direction in attempting to mitigate these evils, but no substantial progress can be anticipated until the whole question of the housing conditions under which the people live, particularly in the districts referred to, has been dealt with in a very much more sweeping manner than has hitherto been the case."

In another Report the following occurs :—

"The acute housing famine in the City at present implies the increased difficulty in procuring suitable alternative accommodation on a large scale, and I have always maintained the view that, at least in selected districts, the erection of some block dwellings, largely on the Continental or London Peabody dwelling principle, would be the best method of relieving the situation, and would contribute largely towards satisfying the immediate requirements."

From a Report dated 23rd September 1919, the following occurs :—

"The decision of the Corporation to erect houses only of the type at present under construction, raises in my opinion the whole question of the urgency of the situation so far as the slum areas in the City are concerned, and the considerable number of houses which properly fall to be condemned as unfit for occupation. It must be at once admitted that accommodation in the new dwellings will not be available for the poorest class of persons, who at present reside in the worst slum areas of the City, and I see no prospect under existing conditions of any relief being granted along that particular line.

"I would refer also to another class of dwelling which constitutes quite a considerable proportion of the tenement dwelling-houses in the City. I refer to the high tenements consisting of probably four or five flats and giving housing accommodation, it may be, to probably twenty or more families. The sanitary conditions are as a general rule unsatisfactory. The over sub-division and the consequent density of the population are such as to render it impossible for the occupants to live under the conditions which are aimed at under the new Housing and Town Planning Act. The number of tenements falling within this category is very large indeed, and some estimate of them may be gathered by bearing in mind the fact that 37 per cent. of the City's population reside in houses consisting of one or two rooms.

"According to the recommendations made by the Royal Commission on Housing, a very large proportion of these dwellings would fall to be condemned. It is not suggested that such a sweeping procedure could be immediately adopted, but it is certain that, in the interests of the residenters, immediate steps should be taken towards improving the existing conditions.

"It cannot be supposed that the persons who occupy the very large number of dwellings to which I am now referring, and which constitute from the Housing point of view the most urgent conditions, are to be those who will likely be transferred to the new suburban dwellings when completed. It has been suggested,

however, that the transference to the new Corporation houses of their new set of tenants will leave a corresponding number of houses in the City to be occupied by others and thus relieve the situation as now described by me. I do not consider that this will be the eventual experience. I am rather of opinion that the houses which may, on the completion of the new dwellings, be vacated, will in many instances, be either sub-divided for the accommodation of persons unable or unwilling to pay a high rent, or, having been vacated by one set of tenants who have found the accommodation unsatisfactory, they will immediately be succeeded by another set who will be condemned to live under similar conditions. The result of this will be that a system of creating and perpetuating slum areas is likely to be continued throughout the City."

And in another Report, dated 18th October 1919, the following occurs:—"I would desire in conclusion to direct attention to one additional Table which accompanies this Report. It throws some interesting side-light on the extent to which many tenements in the City are overcrowded, and from it the condition of these tenements involved may be readily gathered. Each ward in the City is specified, and there is set out the number of tenements existing in each with details regarding the extent of occupancy of each. Thus in the Calton Ward 7 tenements contain 3 tenants, 20 contain 4 tenants, 11 contain 5 tenants and so on. A glance at this Table will show that among the extreme cases of subdivision and over-crowding there exists 454 tenements in which 16 tenants reside, 102 in which 17 tenants reside, 76 in which 18 tenants reside and so on until among the extreme cases are found 14 instances in which there are 28 tenants, 9 in which there are 30, until the maximum is reached of 3 instances in which there are no fewer than 43 tenants under one roof, and actually one instance in which 53 tenants are found resident."

From an address by me in 1918 which was subsequently printed and circulated in the City, the following so clearly indicates my views as to justify its inclusion at this time:—

"The present indications point undoubtedly toward building almost exclusively on the outskirts of cities, but I myself am satisfied that if such a procedure only is adopted no real progress will ever be made towards healthily housing large populations. I have had many inquiries made among just the class of persons who reside under housing conditions which are unquestionably inimical to health, and I find in a fraction of instances only a willingness to leave the centres in which they are doomed to reside and remove to another, however superior, at a distance from their present dwellings. The arguments which those persons use in favour of their decision are, indeed, difficult to controvert. They point to the difficulties in transit, which, of course, might be overcome. They point further, however, to the expense entailed in connection with it to themselves and their families; to the loss of time in travelling to and from; to the difficulty of returning home to a midday meal; to the unduly early hours at which they must leave home, particularly on winter mornings, and to several other objections which in their minds bulk so largely as to counterbalance the advantages which most people willingly accord to suburban residences. I am well aware that these objections, though very general, are not invariable, and there certainly exist many persons of the middle and working class who are in a position and who desire to take advantage of up-to-date cottage or small tenement dwellings on the outskirts of the City, and in view of these undoubted facts I suggest that building on the fringe and reconstructing in the centre must be carried on together, and in such strict proportion as would at once benefit all persons who hold one or other of these opinions. There can be no question that it is possible to transform densely populated urban centres, and in order to do so it is not by any means necessary to make a thorough clean sweep of all densely packed, decaying property, but rather to judiciously select and reconstruct the best of these; to sacrifice the others, and to so transform grossly unhealthy districts into healthy, habitable and desirable ones."

These extracts are reminiscent, and are included here in order that my views in regard to this matter may be kept quite up-to-date.

Housing Progress—Present and Prospective

Many houses have been erected, affording accommodation for a considerable number of persons, in the outskirts, and some in the centre of the City have been most satisfactorily reconstructed. It must be admitted, however, that whatever good work is being carried on in this direction, it must of necessity fall far below the actual necessities of the case. The housing question, as it affects the more densely crowded wards of the City, is a real one, and it cannot be claimed that within recent years any substantial inroads have been made upon the urgency of the conditions there. Of course, no one now expects, in view of the existing economic conditions, the sweeping improvements that were fondly hoped for some few years ago. Most of the available money set apart for this purpose has been utilised, and so little must now remain for any improvements in the centre as to be almost negligible. There remains, however, the stern fact that year by year the urgency is becoming greater.

Prior to the War it was a routine practice for the Public Health Authorities to close periodically a large number of houses which were found unfit for human habitation. These were condemned by the Public Health Committee, which had the power to sit as an open court, and deliver its finding without right of appeal. All houses so condemned either remained permanently closed or were put into such a condition of good structure and sanitation by the owners as to justify a subsequent withdrawal of the closing order.

During the past few years, however, this whole procedure has necessarily come to an end. Houses, which during that period would have been condemned, have remained in occupation, and it is unnecessary to add that when such a condition is reached the decay that follows is very rapid in its progress. All of this means that probably some thousands of houses, which in ordinary course would have been condemned as uninhabitable, continue at present as inhabited dwellings, and there seems little likelihood of a resumption of the former method of condemnation, in consequence of the impossibility of offering accommodation to persons who would thus be dishoused. With no desire to prophesy evil, it must be evident that a continuation of this position of matters for some years longer is bound to be followed by effects which, to say the least, would adversely affect our health conditions. It cannot be doubted that the success which has attended Public Health efforts in this City in the past in reducing death-rates to their present most satisfactory figures, has been, in a very large measure at least, due to the improved housing conditions, and if that be so, a reversion to the old state of matters will in time have a certain effect in a precisely opposite direction.

I have prepared and submitted to your Public Health Committee several large areas in the City in which improvement schemes might be carried out. These have been carefully surveyed and duly detailed. Of course, it is never for a moment to be imagined that these, under present conditions, can be given immediate effect to, but they will remain in readiness for the time when changed and more prosperous conditions will justify housing reform on a large scale. It is satisfactory to know that meantime some effort is intended to be made, at least in regard to one of these proposed schemes situated in the Cowgate district. That has always been from a statistical point of view essentially a "Black Spot," and it will be a movement in the right direction, which is certain to be attended by good results, to have the improvements carried out in that small area which are proposed at an early date

In connection with the housing question, one or two suggestions might be made. These, of course, in order to be practical, must evidently not entail undue present expenditure on the part of the Corporation.

The first of these is that all old unoccupied, obstructive buildings in rear of occupied property in the City should be immediately dealt with and removed. I have in respect of a considerable number of these already given such certificates as

are initially necessary towards such proceedings being carried out. This class of property is perfectly well known and very many examples of it are to be found, peculiarly enough, in the very poorest districts where there is the minimum supply of fresh air and sunlight available to the houses that are still in occupation.

A few examples may be readily found in the rear of the Grassmarket, in some parts of St Leonard's, and in other similar wards. Most of them are not only decrepit and valueless, but are in a positive state of wreckage. There appears no reason why, following on the certificates which I have granted, the owners ought not to be called upon to remove them, and in case of failure that the Local Authority should themselves carry out a piece of work which would certainly redound to the benefit of the tenement dwellers in the immediate vicinity of such places.

The second suggestion which might be made in reference to the present position of housing is that either at the present time or in the near future, very serious consideration should be given to the question as to whether or not economic conditions would now justify the Local Authority requiring the owners of property themselves to carry out such work as is necessary to make such fit for human occupation. It is obvious that this could not be immediately done on a large scale, but that by small beginnings the minimum of disturbance would be entailed to present occupants. It is well-known that the cost of material has fallen to an extent that would appear to justify such a step, and it is equally well-known that the number of men seeking employment is such as to entail no difficulty in that direction in carrying out this suggestion. If proceeded with gradually the difficulty of obtaining temporary substitute accommodation should be correspondingly small. The third possible suggestion of dealing with the existing housing requirements would imply that the Corporation, unaided by Government, would itself assume the responsibility of providing new or reconstructed houses on a fairly liberal scale, but this time all situated within the central districts of the City where the need has always been and is now most acutely felt.

In regard to the practicability of the suggestion of the onus of reconstruction and improvement being laid upon owners, I submit an extract from a report applicable to London and of so recent date as November 1921, in which the following occurs:—

"Members of Parliament who sought during the passage of the Housing Acts to impose greater powers on the Ministry of Health in dealing with property owners who failed to put their houses in a proper state of repair will be interested to know that in the great majority of cases which have been dealt with by the Local Authorities it has not been found necessary to set in motion the powers which exist under the Acts to compel property owners to take the necessary action. The informal notices of the Local Health Officers have invariably been acted upon, and some of the owners have even gone further than they were obliged to go in order to put the houses in a fit state of repair. An examination of 1,400 reports of Officers of Health in England alone recently made by the Ministry of Health brings out this fact to a striking extent. The number of houses in London which were put in a proper state of repair after informal notice had been given being already 29,316, out of a total of 36,132."

Reorganisation of Hospital Accommodation.

One of the earlier matters which required attention in consequence of the extension of the City boundaries consisted in making such a re-arrangement in regard to certain of the hospitals within the new boundaries as to ensure that they would be utilised to their fullest extent with the maximum of convenience in administration, and with due regard to the interests of patients and their friends.

After giving the matter full consideration, it was decided that the Royal Victoria Hospital would remain, as at present, a Sanatorium for early cases of pulmonary tuberculosis, and for this purpose the Board of Health has sanctioned the use of 130 beds there.

Pilton Hospital, which was formerly the General Fever Hospital at Leith, was set apart for the treatment of more advanced cases of pulmonary disease, for which the use of 100 beds has been sanctioned by the Board.

All fever cases, which were formerly treated in that Institution, are now transferred to Colinton Mains Hospital, where additional bed accommodation has been rendered possible through the transference of advanced pulmonary cases which, prior to the re-arrangement, were treated in two pavilions there.

The Shelters at Colinton Mains Hospital which have been sanctioned for the accommodation of 63 patients are now utilised for the accommodation of cases of tuberculous disease other than pulmonary, while the Craiglockhart Poorhouse pavilions continue as formerly relegated to the treatment of Parish cases of Pulmonary Tuberculosis, there being for that purpose a total of 48 beds.

If due account be also taken of 21 beds which are set apart for convalescent tuberculous cases in Polton Farm Colony, Lasswade, it will thus be apparent that the total bed accommodation existing for the use of the City at present for the treatment of cases of Tuberculosis, pulmonary and non-pulmonary, amounts to 362 beds.

Infectious Disease.

There were during the year 318 deaths from all forms of infectious disease, except those of tuberculous origin, being equal to a rate of ·7 per 1,000 of the population.

Scarlet Fever.

2,163 cases of this disease have been notified during the year, showing an incidence rate of 5·14 per 1,000 of the population, as compared with 4·51 per 1,000 during the previous year within Edinburgh's former boundaries. The increased incidence was largely, if not wholly, accounted for by an epidemic which occurred in Leith during last summer, and which fortunately ran an extremely short course, although at its inception there were elements present which might have occasioned results of a much more widespread nature, and a persistence during a much longer period than fortunately was the case.

The epidemic broke out on 9th July and was practically at an end ten days later. 337 cases occurred throughout its course, and there being elements connected with it which are certainly of interest from a Public Health point of view, the following details are here submitted :—

"Enquiry as to the origin of the epidemic was immediately set on foot. It was at once evident that owing to the sudden occurrence of so large a number of cases, from the fact that adults and children of all ages were involved, and from the localised nature of the epidemic, that characteristics associated with a milk supply were so evidently present as to remove all source of doubt regarding it. Attention was therefore immediately directed to the milk supply.

In the course of these enquiries a very remarkable sequence of events was disclosed. Indeed, instead of the ordinarily occurring infection being traceable to one milk supply, there was actually found in connection with this outbreak no fewer than four separate milk supplies. These were as follows :—

(1) *A. Cow-feeder.*—While no case of Scarlet Fever was found present in A.'s house or that of any of her workers, her son, who assisted in the cow byre as a milker, was found suffering from illness accompanied by a sore throat as a prominent symptom.

A.'s byre stood out prominently from the first as an evident source of the spread of the disease. Indeed the milk supply from that byre formed at least part of the supply in 282 cases of infection, and itself formed the sole supply in 10 cases.

One or two of these were extremely instructive. In one case a child wholly fed on condensed milk and living with its parents in Newhaven visited a grandmother in Leith. A special supply of milk was obtained from A.'s dairy as a treat for the infant, who in a few days was found suffering from Scarlet Fever and was removed to hospital.

Another very similar case occurred, and further there were 8 patients who received a supply directly from that cow byre.

In view of the virulence of the outbreak, A.'s milk supply was wholly stopped on the evening of Tuesday, 12th July.

(2) *B. Cow-feeder.*—One of the milkers in this cow byre, along with his wife and two children, were found suffering from Scarlet Fever and were removed to hospital.

In this case a number of dairies in the district were supplied from this cow byre, but 4 persons received their sole supply from it.

(3) *C. Dairy-keeper.*—C. and two of his children, together with a milk carrier, were found suffering from Scarlet Fever and removed to hospital.

43 cases were found traceable to this dairy who received among others their supply from A.

(4) *D. Dairy-keeper.*—A sister of D. had a few days previously been removed from Edinburgh while suffering from Scarlet Fever. She had been a visitor at the house of D. about that time.

A milk carrier in connection with this dairy was also found suffering from Scarlet Fever and removed to hospital.

70 cases were found traceable to this dairy, who received their supply, among others, from A.

In addition to the stoppage of A 's milk supply, and the removal to hospital of all persons living under circumstances which would tend towards the spread of the disease, all of the houses, cow byres, dairy shops, &c., which were in any way associated with the outbreak were thoroughly disinfected, and every possible connection or associate with infected persons was traced.

A house-to-house visitation throughout the district was carried out, and every possible step taken to cope with this very exceptionally aggravated outbreak.

It is satisfactory to report that these measures were attended with the best possible results, as was evidenced by the daily diminishing number of cases which occurred. Indeed, the fall from 82 on 13th July to 10 on the 18th is sufficient evidence of the fact that the various sources of infection were, without exception, discovered, and that the means for suppression of the outbreak were attended by immediate and excellent results."

From the foregoing it is evident that several items of peculiar interest were involved in this outbreak. Not only was it without any doubt due to milk origin, but within the first few days of its ravages several other milk centres were involved, and they in turn became sources of infection. The very excellent result of coping with an outbreak of such sudden virulence, in confining it to the district in which it originated, and in successfully overcoming it within so short a period is in my view traceable largely, if not wholly, to the insistence with which every case, as it occurred, was immediately segregated. Whatever views may be held regarding the value of hospital treatment of Scarlet Fever there can be no doubt that the experience gleaned from this serious outbreak is a strong argument in favour of it, more particularly where, as in the present outbreak, the district involved was a working class one and almost without exception the cases occurred in tenement dwellings occupied in each case by large numbers of families of young persons.

Influenza.

In addition to the epidemic just described, the only other serious outbreak of disease, which had its origin in the year under report, was the last widespread, far-reaching, and serious epidemic of Influenza. Its early manifestations were evident towards the close of the year, and while at its acme it nominally ran a course of fourteen weeks, there were only five of these where the condition reached proportions of a really serious nature.

The number of deaths in the extended City during these five weeks was as follows:—71, 118, 99, 48, 25, and then the fatal cases tailed off in three or four weeks, until the outbreak came to a definite conclusion.

It is somewhat remarkable that the outbreak of two years previously ran a course of especial virulence during almost precisely the same number of weeks as

in the outbreak now under report. The former, however, was of a much more serious type in all respects. More persons were affected; the type was much more serious; and the number of deaths was considerably larger. These included also a larger proportion of young persons than were affected during the most recent outbreak. In the latter the total number of deaths was 409. These involved 149 males and 260 females; and, while the number of fatalities among young persons under 15 years of age was practically negligible, all of the others occurred beyond that age, and particularly, of course, among persons from 65 to 85 years of age. During the occurrence of this epidemic the hospital accommodation was seriously strained, but all the demands upon it were met by a judicious selection of cases, and by admitting specially those in which complications existed and whose home conditions contra-indicated the necessary attention being devoted to them. One of the outstanding features of the outbreak was, indeed, the number of cases in which complications supervened. Lung conditions were extremely common. Thus in 193 cases Pneumonia accounted for the fatal result; in 70 cases, Acute Bronchitis; while only in 45 fatal cases was uncomplicated Influenza certified as the sole cause of death.

Tuberculous Disease.

The total number of deaths from all forms of Tuberculous disease throughout the year amounted to 564. Of these 381 were due to pulmonary forms and 183 to other manifestations of Tuberculosis. Of the cases of pulmonary disease, 296 occurred within the former boundaries of Edinburgh City area; 71 in Leith area; and 14 in the Suburban area.

The available sanatorium accommodation has been very fully taken advantage of during the course of the year; and the recently established effort to deal with non-pulmonary cases at Colinton Mains has proved in every way eminently successful. In many respects it may be claimed that this branch of the work is more successful and more encouraging than is the treatment of pulmonary forms of the disease. In treating the non-pulmonary types, where there exists tuberculous disease of bones, glands, joints, &c., permanent and satisfactory results are attained in the large majority of cases, and these chiefly without the necessity of surgical interference. The period of residence in hospital while under treatment is sometimes prolonged, but that can only be regarded in the light of a secondary consideration where so many cures of a permanent nature result.

Full details in regard to the excellent work which is being carried out in the various sanatoria and the Royal Victoria Dispensary will be found in the body of this Report.

The Corporation still continues to discharge the duty laid upon it some years ago by the Board of Health, of treating Parish Phthisis patients at Colinton Mains Hospital.

From the beginning of this arrangement I found it necessary to urge objections, supported by many obvious arguments; but at that time the requirements of the Board were duly carried into effect. The arrangement has now continued for several years—the male Parish patients being housed in two pavilions, which were formerly under the direct supervision of the Parish Council, but which, under an arrangement, were let for that purpose to the Corporation.

Experience in carrying out this branch of work has served to fully emphasise the fears which I expressed in regard to it at its inception. The men at times are extremely difficult to control, and it is with difficulty that the matron can keep the pavilions supplied with suitable nurses from the General Hospital Staff. The fact is, the class of patient involved, while amenable to Poorhouse discipline, is much less so to the comparatively more lenient discipline associated with a Corporation Sanatorium. This leads to obvious difficulties. It is found almost impossible to confine the men within the precincts of the ground allotted to them for exercise, and they are frequently found wandering even beyond the extreme limits of the hospital grounds. The conduct of some of them at times is objectionable, and the complaints from the nurses who attend the wards are frequent. It is needless to say that they

demand the right to leave the sanatorium when they feel inclined and to re-enter it when they choose. In that respect they carry into effect the same procedure as is known to the Parish Authorities among a certain class. It may, however, be safely averred that the "out-and-in" habit is probably carried to a greater extent when patients are under the Local Authority Hospital administration than if they were inmates of the Parish Hospital. Obvious dangers are evident in connection with this state of matters. A man suffering from Pulmonary Tuberculosis of an acutely infectious type may leave the sanatorium and subsequently be discovered in a common lodging-house. He literally demands re-admission, however aggravated may have been the circumstances which attended his departure from hospital. In order to protect the citizens, it becomes necessary to grant his request, and so on the cycle proceeds from year to year.

This state of matters is eminently unsatisfactory. It might, of course, be suggested that a warrant be sought from the Sheriff for compulsory detention of a case of infectious disease. It might also be suggested, as has been done by the Board of Health, in reply to an aggravated specific case of this kind, which I found it necessary to lay before them, that the defaulting man might be proceeded against under the Public Health Act for exposing himself in public places while suffering from an infectious disease. The adoption of such a procedure, however, of itself involves risk to those with whom the man comes into contact while being dealt with by the law authorities. He must be placed in a police cell and possibly subsequently in a prison cell while during the process of transference, and even at other times he, an infectious case, is constantly coming into contact with other persons. The whole subject bristles with difficulties, but I have a strong conviction that the time has now come when the Local Authority should make a renewed effort to have Parish Tuberculous cases treated by the Parish Authorities, who are in every sense better equipped for the purpose, and more accustomed to deal with that class of person. In at least one or two other large centres of population this method is adopted. Of course the Local Authority must of necessity make a payment to the Parish Authorities in respect of such work, but it can with some force be stated that, even after such payment were made, it would be found that a substantial economy to the Local Authority would result, and certainly greater efficiency in the treatment of this particular class of infectious person.

It is suggested, then, that some advance should be made to the Board of Health in order that they might be consulted in reference to this very evidently important matter.

While there is available bed accommodation for 48 male patients of this class at Colinton Mains, the average number always under treatment is between 30 and 40.

Measles. Measles is one of the non-notifiable forms of infectious disease, and it is necessary therefore to depend for information regarding its presence and the extent to which it exists mainly to two sources, one being the Education Authorities, who kindly keep the Department informed regarding children of school age who may be affected, and very specially is information gathered from doctors who request the removal of cases to hospital.

During the year, 261 patients were admitted to the hospital suffering from Measles. Of these 29 died, while including these there was a total of 77 deaths throughout the City generally, all of these, with the exception of 1, were children under the age of 5 years. It may be added that the case mortality of those which were treated in the hospital amounted to 11·1 per cent.

The fatal issue in so many of these cases was due to one of the several forms of complications so much associated with this disease. It is this fact indeed that necessitates a judicious selection of cases which demand removal to hospital as offering almost the only chance in many instances of a satisfactory recovery. Thus it is essential in small houses with a minimum of fresh air and in crowded localities to follow this procedure where possible, particularly where the patients infected are young infants.

Whooping-cough.

There has throughout the year been no really serious outbreak of this disease. There have, however, been no fewer than 80 deaths resulting from it. All of these occurred in children under 7 years of age and 40 of them in infants under 1 year.

In common with Measles, the dangerous nature of this disease is popularly not fully recognised, and it is much feared that in consequence a considerable number of the fatal cases where complications supervene are due to the absence of sufficient attention and precaution during the course of the illness. 141 cases were under treatment in the hospital, and as showing the virulence of the disease no fewer than 32 of these died, giving a case mortality of 22·6 per cent. Of course, it is proper to recognise that the cases in which removal was carried out were as a rule the most serious owing to complications, or owing to the very early age of the patient involved.

The number of deaths which have occurred during the year as a result of Whooping-cough and Measles fully justifies the recent recommendation of the Board of Health in favour of the desirability of hospital treatment for those diseases to even a greater extent than may have been formerly considered necessary. In the City it may be claimed that they have been always regarded in their due light as among the most dangerous forms of infectious disease, and after careful selection the most urgent of them have received the benefit of treatment in hospital.

Cerebro-Spinal Meningitis.

This disease has never assumed the form of what may be termed an outbreak or epidemic, and it is extremely unlikely that such an eventuality is to be feared. There are always, however, stray isolated cases which occur at long intervals and none of which is found ever to have been associated with a previous case. Whatever view may be held regarding the infectious nature of the disease, it is certain that the experience here, comparatively limited though it be, is all against such a theory.

Looking back several years, during which the small recorded number have come under the notice of the Health Authorities, there has never been the slightest reason to suspect that the contact with or close proximity to a sufferer has been the cause of a further spread. The extreme limitation in the number of cases during these past years is of itself an argument almost conclusive in favour of the non-infective theory.

It is well indeed that this disease is of so infrequent occurrence as there can be no doubt as to the serious nature of it and the high case mortality which attends it.

During the year there were 7 cases throughout the City, 4 of which were fatal. The persons affected, though thus fortunately few in number, represent practically all age periods from 1 year to 60 years. It is never possible to suggest or discover any predisposing or actual cause of the disease. The illness comes on gradually and it is sometimes even a few days before medical assistance is sought. These facts explain why in nearly all of the cases which were removed to hospital the patient had been ill for probably at least a week prior to removal, and the condition had therefore asserted itself very definitely and seriously by that time.

Diphtheria.

991 cases of this disease were notified during the year, showing an incidence rate of 2·3 per 1,000 of the population.

All over, the type of the infection was not in the large proportion of cases an unduly severe one. The great majority of the patients, of course, were removed at the earliest possible stage and treated at Colinton Mains Hospital. The extreme necessity for the earliest possible application of treatment in this particular form of disease is proved very effectively by the experience at Colinton Mains during the past year, details of which will be found in the general body of this Report. While the percentage case mortality was equal to 7·5, it was found that where the anti-toxin treatment was applied within the third or fourth day of the commencement of the disease the case mortality was 6·6 per cent., while in the case of delay for a day or two beyond that period it reached 11·1 per cent., and if the case remained untreated for a week or beyond it, the mortality reached so high a figure as 15·9 per cent.

All of this is illustrative of one of the many marked advances in the treatment of disease within recent years, and it goes further in the way of emphasising the great

advantages which the citizens enjoy in the possession of the Corporation's magnificent hospital at Colinton Mains, with its latest and best equipment, and with its medical staff of so high a reputation.

Comparing the results in the treatment of this disease with those obtained some years ago, it is found that whereas the average case mortality during former years reached 20 per cent. to 28 per cent., it has been reduced so as to show only 7·5 per cent. of fatal results. There was not throughout the whole year any localised serious outbreak of the disease. It is one which is endemic, *i.e.*, always present to a greater or lesser extent, in all large centres of population. The authorities have, therefore, constantly to be on the outlook for cases as they occur, and require to deal with them in a very thorough manner so as to ensure the earliest possible application of treatment.

The method of taking swabs from all contacts, which has been in force here for several years, continues to be adopted as a routine practice, and is certainly one of the important means by which spread of the disease is prevented. When a swab reveals the presence of the organism in the throat, the person involved, who is termed the carrier, is at once segregated in order to prevent possible infection spreading from such source. The presence of the organism does not of itself imply that the carrier is affected to the slightest degree, but that he may unconsciously become a source of infection to others under certain conditions.

During the year the number of contacts who were thus dealt with reached a total of 4,987, and of these 775 were found to give positive results. A treatment of a week or two as a rule suffices to transform what might have been sources of infection into persons who may be safely permitted to return to their ordinary spheres of duty.

Enteric Fever.

Fortunately this disease can now be dismissed as one which entails to the Health Authorities no anxiety. In former days its ravages were acute, and large numbers of deaths had to be recorded as a result of it from year to year. Now it may be regarded practically here at least as a foe that has been conquered.

During the whole year, and including the whole extended area, only 9 cases occurred, and only 1 death—that being a case that had been under treatment since the preceding year. Therefore it may be confidently said that the disease is now practically negligible.

Venereal Disease.

The equipment set up by the Corporation under its V.D. Scheme continues to carry on excellent and far-reaching curative work. While, as reported by Dr Lees, the number of new cases which have been treated at the Royal Infirmary has slightly diminished during the year, there is an offset to that in the statement that the number of actual attendances on the part of those under treatment has increased. The daily clinic at that large centre, in association with the number of beds set apart in the Infirmary for the treatment of patients who specially require such, is sufficient meantime to deal with all reasonable demands that have been made upon it. There are, however, in addition, smaller accessory branches, where treatment of the various manifestations of Venereal Disease are being actively carried out at the instance of the Corporation, and included within its scheme on a small scale. Thus the Royal Maternity Hospital is doing excellent work under Dr Ballantyne, before, during, and after the puerperal period. Similar work, specially directed towards the treatment and cure of women and young children, is being carried on at the Women's Hospital, Bruntsfield, under a special arrangement made between the Managers of that institution and the Corporation. There are also in several of the Corporation's Clinical Centres throughout the City, clinics available for sufferers, all of which facilities are being taken advantage of to a satisfactory extent.

The figure representing the new cases which present themselves for treatment at the Royal Infirmary Clinic, viz., 2,726, is an arresting one, but even that assumes a new meaning when it is remembered that unfortunately it represents only a comparatively small proportion of the real sufferers from this appalling disease, so far-reaching in its effect upon the individual, and in its consequences to others.

The cost entailed on the Local Authority in carrying out this Scheme is, of course, a large one, and there can be little doubt that all indications seem to point in the direction of it being an ever-increasing one.

During the year under report, the gross expenditure amounted to over £16,000, of which, of course, the Government subsidy recoverable is in proportion to 75 per cent. of this amount. The importance of the cost to the body, municipal or Government, called upon to bear it is doubtless of secondary consideration as compared with the question as to whether or not the outlay is to its fullest extent being justified by result. There cannot be a shadow of a question as to the splendid work which is being carried on, and the enormous number of cures that are being effected in the case of persons who not only present themselves for treatment but who continue with great perseverance and regularity to carry out the requirements laid upon them, more particularly in regard to their subsequent visits to the Clinical Centre.

The problem really resolves itself into one which would ensure that in the interests of the sufferer and of the public, some form of compulsion should be vested in the authorities to be most carefully and judiciously exercised in the public interest. For several years this question has been dealt with in these Annual Reports, and within the last year or so there is evidence of a decided movement among authorities in the direction of an attempt towards obtaining some increased powers.

There are one or two objections which, on the surface, appear plausible. The first is that any attempt to obtain such information, as ought to precede any compulsory steps, would involve some form of notification of the disease, and the obvious fear is that any such procedure would tend rather to prevent sufferers seeking medical aid when such is so essential to them.

Another objection that has been urged is based upon the erroneous impression that any compulsion would be likely to militate adversely in the case of women rather than men. In point of fact, a sex distinction has arisen, and fears have arisen with it.

I feel satisfied that where a Local Authority is called upon to expend large sums of money in an attempt to cure particular forms of disease, there should be some means available to them by which their Medical Officer should be furnished with powers somewhat, at least, similar to those contained in the Infectious Disease Notification Act. It must be remembered that even in regard to the diseases included under this Act, no Medical Officer of Health carries out to the fullest extent all of the powers contained in it. They are present to be utilised in such cases as, in his opinion, necessitate particular procedure.

The present position of matters seems utterly fallacious. While sufferers from Scarlet Fever and other types of infectious disease are under the supervision of the Medical Officer of Health, and are required to exercise in the interest of the public certain isolation and other precautions, no powers are vested in the Authorities to require such, or anything approaching such, in the case of Venereal Diseases. As matters stand at present, Local Authorities are called upon to pay the large cost of cure, and it is left to the decision of the sufferers as to whether or not they will take advantage of the facilities offered them, and as to whether or not they will continue taking advantage of these until their cure is certified as a complete one.

The whole question is one which has recently engaged the attention of several conferences which have been called to deal with it, and is being much discussed further in medical and municipal circles.

The difficulty which has heretofore attended most of these discussions is to condescend upon a method which would not entail undue hardship upon sufferers who may have been innocently affected, and to ensure such privacy to sufferers as would not prevent any from taking advantage of the facilities for cure now so freely offered by different Local Authorities.

An evidence of this difficulty may be gathered from the terms of a motion which was recently passed at one of the conferences referred to, viz.:— "That this Conference is of opinion that some form of modified notification of Venereal Diseases, which shall be enforced *only* when a patient refuses or neglects to *continue* treatment, is needed to check the spread of this disease and to protect the Public."

This resolution obviously does not meet the whole requirements of the situation. It deals with the class of persons *who have already* put themselves under treatment and who withdraw from such before their cure is completed. It does *not* take cognisance of the large number of persons *who do not* put themselves under treatment, but while suffering from an active and virulently contagious form of Venereal Disease continue a life which is fraught with the greatest possible danger to others with whom they come in contact. Such people in my view form the great danger of the spread of this disease, and they almost wholly would occupy the attention of the Medical Officer of Health in his efforts to successfully deal with it. Some such solution might be found for this difficulty in a phraseology that I suggest as follows:—

"Persons suffering from Venereal Disease in an infective stage known to the Medical Officer of Health, or notified to him by a Medical Practitioner, *and who are so acting as to imply danger to the Community*, will be subject to be dealt with by the Medical Officer of Health through all the powers contained in the various sections of the Public Health Act and the Notification of Infectious Disease Act in like manner as other forms of infectious disease."

This would enable the Medical Officer of Health to deal with cases, men or women, who are constantly coming under his observation as real dangers to others, and would go largely towards ensuring that greater value would be returned to a Local Authority for the very large expenditure that it has been called upon by Government to incur in what meantime is a comparatively futile effort. It would further render it compulsory for patients to continue under treatment until a satisfactory and complete cure had been affected.

Cancer.

In several recent Reports I have referred rather specially to the one form of disease, the cause of which up to now has baffled every effort of research, and the havoc wrought by which is alarmingly on the increase year by year.

The advances which have been made during the past year in the reduction of death-rates from practically all causes stand out in violent contrast to the history of the ever-increasing ravages made on human life by Cancer. If a table of statistics representing the annual death-rates from all forms of disease or from any special form of it be placed side by side with a corresponding table representing the annual deaths due to Cancer, it will be found that whereas in the former case there is a constant fall throughout the years, there is in the latter a constant rise. Unfortunately, the increase is a substantial one, so substantial indeed as largely to negative the reduction of deaths due to general causes by the constant increase in deaths due to this particular disease.

Thus, if the year 1898 be taken as a starting point, the general death-rate which was then 17·6 per 1,000 of the population has now fallen to 14·4, as has already been referred to in this Report. Running side by side, however, with this progress there falls to be regarded the depressing fact that whereas in the former year 267 deaths were due to some form of Cancerous Disease, a gradual rise has taken place until the number reached during 1921 is 482 within the original Edinburgh boundary. As the extended boundary is now being dealt with, however, it is of some interest to compare the number of deaths and rates per 1,000 which have occurred within the original Edinburgh area, within Leith area, and the County area. The total of these is 625, of which 482 or 1·5 per 1,000 occurred within Edinburgh's original boundaries, 108 or 1·3 per 1,000 within the Leith area, and 35 or 1·3 within the recently added County area.

A graphic conception of the ravages of this disease will perhaps be best appreciated when it is stated that in the Extended Boundary of the City, deaths

from Cancer very nearly approximated the total number of deaths from Pulmonary Tuberculosis, Measles, Whooping-cough, and all other forms of infectious disease. Indeed, the ratio of figures is represented by 625 due to Cancer and 699 due to Pulmonary Tuberculosis and all other forms of infectious disease—the number of deaths due to Pulmonary Tuberculosis being 381, and infectious disease deaths 318.

All of this, of course, represents information of a depressing nature, the more so when it falls to be added that the constant and deep research which has been carried out for many years in order to determine the etiology or cause of this disease, has not yet brought to light any fundamental fact of special interest, and certainly nothing that would shed a ray of hope of improvement or that would enable efforts to be directed towards its prevention or cure.

In last year's Report I referred to several factors which in my experience were fairly commonly associated with the presence of the disease, and which along with others furnished some food for thought, whatever fraction of importance might be attached to them. One of these is the fact that contrary to almost every other form of disease, Cancer is not specially associated with poverty, but if anything the tendency is the reverse.

Generally speaking, the majority of the cases in the City are found in the good class wards, although, of course, by no means limited to them, but a careful analysis of the figures is in favour of the conclusion that the disease is more prevalent there than, as might be expected, where poverty abounds.

I referred also on a previous occasion to the interesting fact that the alimentary tract and the organs associated with it were relatively more frequently the involved sites of the disease than other parts of the body.

The experience of the past year continues to strengthen that observation, and at least suggests as a train of thought whether or not the condition, or some forms of it, may in any way be associated with the present-day feeding, which is so much in contrast to that of former years.

Nothing has occurred during the year to give rise to any suspicion that the condition is contagious in character, nor that there is a hereditary tendency which reveals itself within a few years following the death of parents or forefathers. Heredity may be present and probably is. This, however, is one of the lines along which there is room for a somewhat extended and complicated conduct of statistical enquiry.

The whole question, however, must be left in the hands of those who are specially devoting their lives to research in connection with it, but with the passing of years it is certain that the speeding up of research work becomes each year more necessary. When the condition is annually exacting a greater toll, it is clear that every possible means that can be adopted through research must be carried out in order to leave no effort untried which might throw light upon a condition that is working such serious havoc on the lives of the people.

Child Welfare and Infantile Mortality

The number of births during the year was 9,028, showing a birth-rate of 21·5 per 1,000 of the population, while the infantile mortality rate over the extended City was 96 per 1,000 births.

Dividing the area into three parts, that within the original Edinburgh boundary showed a mortality of 96 per 1,000, the Leith area 102 per 1,000, and the Suburban area 68 per 1,000. These rates are very slightly in excess of those applicable to the year immediately preceding.

There has been no outstanding epidemic of infectious disease in either of these years, the presence of which is always reflected in a high infantile mortality rate, and thus the rates applicable to both years fairly satisfactorily correspond. The fractional increase during the year under report may, to a certain extent, be associated with such privation as must necessarily attend difficult economic conditions, as was the case during the recent coal strike and present unemployment. During

such times everything has been done in order to safeguard the infant population, and it is evident that the efforts towards that end were satisfactory from the close correspondence that exists between the death-rate of the year under report and the immediately preceding one.

A comparison might be made between the rate applicable to Edinburgh and the other three large centres of population in Scotland, viz., Glasgow, Dundee, and Aberdeen.

In Edinburgh, as just reported, the rate was 96 per 1,000; in Glasgow, 106; in Aberdeen, 108; and in Dundee, 114.

All that has been already said in connection with the influence of the overcrowded districts of the City in affecting death-rates, as shown by the line charts in this Report, may be repeated with equal or greater force in regard to the rate of infantile mortality. Reference to the chart applicable to this will show that the ward of St Giles reaches a point above the mean enormously in excess of others, and that the figure represented is a death-rate of 150 per 1,000. The St Leonard's district, as usual, closely approximates this rate—there being 133 per 1,000; while two of the Leith wards, North and Central Leith, show rates considerably above those applicable to the other wards in the City.

The whole work in connection with the Maternity and Child Welfare Services has been carried on with great energy, not only within the original City boundaries, but also in Leith and the extended boundaries generally.

The large staff of Voluntary Visitors, who for years have given themselves so loyally, under the able direction of Councillor Mrs Somerville, to the work of systematic visitation of infants within the first year of their lives, continues to be carried through without interruption. The value of this voluntary work cannot be too highly spoken of. Dr Finlay, with Miss Turnbull as Superintendent of the Official Nurses, are also continuing most assiduously to carry out the many and far-reaching branches of work under the Scheme.

It is much to be feared that the extent of this work and the far-reaching nature of it, including its innumerable details, are not quite well known to the public at large.

It is always noticeable, however, that when such details are explained and understood, there appears to be a strong consensus of opinion in favour of every possible means being adopted for the betterment of the young child. It must always be borne in mind that the Child Welfare Scheme is carried out solely for the benefit of infants and young children under 5 years of age, together with expectant and nursing mothers. There could not be a section of the population more defenceless in time of need, or who more urgently call for assistance; it may be in feeding or by means of medical attendance, of which they so much stand in need. This assistance then is supplied through the operations of the Scheme. Voluntary and official visitors at intervals visit not all houses where young children reside, but those who are known to require their assistance, and in almost every instance appreciation is shewn or expressed by the parents of those who receive the particular form of help needed. Besides visitation and assistance in the home, the mothers and children have opportunities afforded them of receiving treatment at certain dispensaries which are specially subsidised by the Corporation, and at special small centres where clinics are held periodically for their benefit. In cases of real need, rather than that the infants should suffer, a supply of milk is either given free or at such a reduced price as is consistent with the parents' means, so that the infant of the household may be preserved from real suffering through want. In some cases it is even found necessary to supply food to an expectant or nursing mother, and when it is stated that here also officials, well accustomed to conduct enquiries and not in the least likely to be taken advantage of, are satisfied as to the good faith in every case, it is impossible to imagine that any real objection should be urged against the advisability—indeed human necessity—of making this very necessary provision.

Gogarburn House.

A part of the Scheme which has probably been subjected to more criticism than any other centres round a Convalescent Home at Gogar for the residence of puny, badly-thriving children within the age limit referred to, who, by the fresh air, feeding, attention and change in surroundings may be expected to be restored to such a condition of health as to enable them the better to contend against the influences of their home surroundings on their return there.

Considerable adverse criticism was indeed roused about a year ago on a complaint made by a father and mother regarding the treatment of two of their children while resident there. Much correspondence resulted, and some criticism found its way into the public prints. Strict enquiry clearly proved, beyond all shadow of a doubt, that the complaint was without any foundation, but the influence of such a complaint is apt to attach itself for some time to a public institution, and it is not quite certain that the stigma has yet been removed from the otherwise excellent character of the institution in question. Where any suspicion remains, it must be comforting to learn that the father and mother in question subsequently made application to have one of their children re-admitted to the institution, where he now is, enjoying its full benefit and making satisfactory progress in health.

It will also be interesting in this connection as throwing light upon the specially useful function which is discharged by such a Home as Gogarburn House, if one or two additional facts regarding it are now supplied.

It was opened in September 1918, and up to the date of this Report has been three and a half years in use. During that period no fewer than 637 children have received the advantage of the benefits which are available there. These benefits are certainly real, not imaginary. There can be no question whatever that the poorer class of children, who have been resident in that institution, have vastly improved as a result of their residence and treatment there—a fact which parents and those responsible for the children have seldom failed to acknowledge with feelings of very great and evident gratitude.

When these benefits enjoyed by so many young children are considered along with the cost connected with the upkeep of this institution, it may be imagined that any further criticism would probably be thereby satisfactorily answered. Thus, while during the year under report, the total cost of upkeep, excluding the furnishing of an additional building, was £4,037; only half this amount is met by the citizens, while the other half is received as a Government gratuity. It may fairly be claimed that the £2,000 chargeable to the City shows a good and adequate return in the benefit accruing to so many children who are weakly and of tender age.

Victoria Park House.

Victoria Park House, Leith, was reopened for the reception and treatment of young infants up to 2 years of age in September 1921. There is accommodation for 20 of these young infants, and the sanctioned staff is also kept within limitation.

From the time of opening until the end of the year under report, 50 young children had been received and treated in the Home, and the benefits offered have thus been well taken advantage of.

The matron and staff are most efficient in the discharge of their duty; most kindly in their treatment of the infants under their care; and the results throughout have been most satisfactory.

Port Sanitary Administration.

Satisfactory work is being carried on in the various necessary branches of sanitary, medical, and veterinary supervision in connection with the Leith Port. Central premises have been obtained from the Commissioners within the precincts of the docks, in order to render this work more satisfactory and more easily carried into effect. The alterations necessary towards this end are in operation, and when completed will afford accommodation for medical inspection of such cases from abroad as may be required in addition to the ordinary inspection on board ship. It will also afford accommodation for the Veterinary Inspector and the Sanitary Inspector on dock duty.

Satisfactory arrangements have been completed with the authorities responsible for immediately reporting the arrival of any ship from abroad on which there is, or has been, any case of illness in connection with which there might be any possibility of an infectious condition. These arrangements apply both to the Port of Leith and the Harbour at Granton, and work with great smoothness.

The special branches of work carried on by the Department under the Factory and Workshops Act, the Sale of Food and Drugs Act, the Inspection of Dairies and Ice-Cream Shops, and the Shops Act, are separately dealt with in the body of this Report, and reference is made to them there.

Only one or two matters call for special remark.

Food and Drugs.

In the Report under the Sale of Food and Drugs Acts attention is drawn to the extreme difficulty in dealing effectively with the adulteration of the milk supply on account of the limited penalties which are almost invariably inflicted in cases of contravention.

It is much to be feared that milk adulteration will be continued so long as the dishonest milk dealer finds he can do so at a profit, and it is right that attention should be directed to this matter with a view of supplying at least one reason why the quality of the milk is sometimes called in question by the public. The fault most certainly does not lie with the Authorities in failing to exercise supervision.

In probably no other city is so much supervision exercised or proportionately so many samples taken for the purpose of analysis. A fine of £2 or £3 or even £5 does not serve as a deterrent, however, and instances are not unknown here in which the same offender has been convicted of the offence for a fifth time. Obviously on balance of profit by adulteration compared with fines imposed, such a person must find that adulteration pays. The far-reaching effect of watering milk in its influence on the health of infants and children is such as to require that special attention be directed to this matter, and either additional powers obtained under which the fines will be commensurate with the offence, or that the powers already existing may be exercised more fully than at present.

Bakehouses and Workshops.

The work in connection with the inspection of Bakehouses and Workshops has been within recent times increased in consequence of the new provisions by the Board of Health laying upon the Local Authority the inspection of all Bakehouses, whether factories or otherwise, and certain other provisions connected with Workshop inspection.

These new regulations are welcome and entirely in the direction of efficiency. It is in every sense advisable that the Local Authority on health grounds should have the fullest right and duty imposed upon it of inspecting all premises where baking is carried on.

The new regulations then are being strictly carried out and every precaution is being taken to fulfil another of its useful provisions which prevents the possibility of a recently confined mother returning to her work at an unduly early period. In such a City as this, the danger of such is comparatively negligible, but the powers are welcome. Contraventions of this provision, of course, are chiefly to be found in factory districts where large numbers of women are so commonly employed and in many instances are responsible for the upkeep of homes and families

Dairies.

The inspection of Dairies is carried out as a daily routine part of the Department's work. The number of dairy shops has for several years past been on the decline. The smaller shops have in many instances felt the undue difficulty of competing against large Milk Distributing Companies and many have gradually ceased to exist. Thus, within the area of the original Edinburgh boundary in 1909, the number of Dairy shops was 454. This gradually fell until in the year 1920 the number had fallen to 352, showing a total fall of 102. At present the total number included in the Edinburgh and Leith boundary is 424, or 30 fewer than in Edinburgh alone in the year 1909.

The rapidity with which large distributing companies are assuming control of the retail milk business is found in the fact that one company alone has now 37 branches throughout the City, and there are indications that this number is destined to be speedily increased.

The constant inspection of these premises during the past years has, without doubt, raised the hygienic standard most materially. It is extremely rare to find any contravention of the dairy regulations, and the whole standard of cleanliness and attention to detail is enormously in advance of those existing in former years.

Shops Acts.

The provisions of the Shops Acts entail upon the Inspector, charged with the duty of enforcing them, the necessity for constant supervision in making enquiries during the day and in carrying out observations after closing hours, in order to detect contraventions of the Act.

Where so many interests are involved there are frequently complaints on the part of some that their particular interest is not receiving that amount of attention in this respect which it appears to deserve. Some assurance, therefore, may be gathered from the fact that, during the year, in addition to the innumerable warnings given and enquiries made, there were 55 prosecutions conducted at the instance of the Department, involving as this did the keepers of shops of practically every variety in the City.

This record should suffice to ensure that this particular branch of the department's work is being carried on with great energy. It is necessary, however, to point out that at times circumstances arise which increase materially the duties of the Inspector under the Act. Among these may be mentioned the fact, that in several instances the keepers of shops of a particular class have, at their own request, obtained the advantage of a Closing Order, and later, when such has been put in force, many of those who have so voted are found among its strongest opponents.

There are also difficulties in determining in special cases, to the satisfaction of those engaged in the particular class of business, what in certain instances is to be regarded as the main business carried on in a particular shop. Combinations in trade in some cases are so numerous as to increase materially the difficulty of determining whether a particular shop should be regarded as a tobacconist or a newsagent or a confectioner or a bookseller; and it is just in connection with such matters that considerable time and trouble are involved in judiciously arranging matters so far as possible to the satisfaction of all.

There remains another difficulty, however, in connection with the carrying-out of these Acts, and propably it constitutes the main one. The penalty for contravention is such as to act in the majority of cases as no deterrent. In fact, during the year there have been instances in which persons, on being warned regarding contraventions, have stated their intention of continuing to contravene the Act as being more profitable to them despite any fine which may be inflicted subsequently.

These, then, are a few of the difficulties, but they are being dealt with as they occur; and, as already indicated, the number of prosecutions may serve to show the energy which is being brought to bear upon this branch of the Department's service.

I would refer to the body of this Report for detailed information in regard to each branch of the work carried on in connection with the Department, and for the various statistical tables and charts which more fully serve to explain them in detail.

To all my colleagues in the service I desire to express my sincere thanks for their ever loyal and helpful co-operation, and, further, to acknowledge my very high appreciation of the magnificent work that is being carried on in the special department supervised by each.

I am, my Lord Provost and Gentlemen,

Your obedient Servant,

A. MAXWELL WILLIAMSON, M.D., B.Sc.

SUMMARY OF STATISTICS

FOR THE YEAR 1921.

Population at Census	**420,264.**
Area of City	**32,526 Acres.**
Density of Population	**12·9 Persons per Acre over total Area.**
Houses Inhabited	**100,185.**
Ratio of Population to Occupied Houses at Census	**4·19.**
Marriages Registered	**4,610.**
Births Registered	**9,394, Birth-rate 22·4.**
Do. (Corrected for Country Births)	**9,028, Birth-rate 21·5.**
Deaths (Corrected for Country Deaths)	**6,048, Death-rate 14·4.**
Infantile Mortality	**871 Deaths under one year, or 96 per 1,000 Births.**
Cancer Death-rate	**1·5 per 1,000.**
Phthisis Death-rate	**·9 per 1,000.**
Infectious Diseases Death-rate (excluding Phthisis)	**·7 per 1,000.**

SUMMARY OF STATISTICS

FOR THE YEARS 1917, 1918, 1919, 1920, and 1921.

	1917	1918	1919	1920	1921
Population Estimated to middle of year	320,116	318,250	316,390	314,193	*420.264
Area of City—Acres	11,416	11,416	11,416	11,416	32,526
Density of Population—Persons per acre	28·4	27·8	27·7	27·5	12·9
Houses Inhabited	74,010	74,593	75,526	75,968	100,185
Marriages Registered	3,154	3,777	4,690	4,483	4,610
Birth-rate	16·5	16·3	19·1	26·5	22·4
Do. (Corrected for Country Births)	15·3	15·1	17·7	24·7	21·5
Deaths (Corrected for Country Deaths)	15·3	16·0	17·6	14·2	14·4
Infantile Mortality	123	94	117	89	96
Cancer Death-rate	1·3	1·4	1·3	1·4	1·5
Phthisis Death-rate	1·2	1·0	1·0	·9	·9
Infectious Diseases Death-rate (excluding Phthisis)	1·6	·5	1·3	·6	·7

* Census Population.

Note.—Further detailed statistics for a series of years are shown in the Tables throughout this Report.

VITAL STATISTICS

AND

REPORTS RELATING TO CHILD WELFARE, TUBERCULOSIS, CITY HOSPITAL, VENEREAL DISEASES, SANITARY DEPARTMENT, VETERINARY DEPARTMENT, &c.

POPULATION.

The year 1921 being the occasion of the decennial Census, the population of the City of Edinburgh as enumerated in the month of June was found to be 420,264. The rates throughout this Report are based upon this return of population, and as a consequence the statistics may be regarded with greater confidence than in intercensal years, when an estimate of population has to be made. Where necessary, the rates for intercensal periods have been adjusted in order that accurate comparisons may be afforded.

The City boundaries were extended in November 1920, and the following figures show the population resident in the various areas on Census day 1921, as compared with the Census of 1911 :—

	Census 1911	Census 1921
Edinburgh - -	320,318	311,838
Leith - - -	80,488	81,618
Suburban Area -	23,240	26,808
	424,046	420,264

By the extension of the City, the gross population has been increased by 99,946. In the Edinburgh area there has been a decrease in population during the intercensal period amounting to 8,480, while the Leith and Suburban areas show an increase of 1,130 and 3,568 respectively. The nett decrease of population in the extended City is, therefore, 3,782.

Of the 420,264 persons resident in the City on Census day, 192,013 or 45·7 per cent. were males, and 228,251 or 54·3 per cent. were females. In 1911 the males within the City boundaries as they presently exist numbered 193,195, and the females 230,851. The male population thus shows a decrease of 0·6 per cent., and the female a decrease of 1·1 per cent. The ratio of females per 100 males in 1911 was 119·5 ; in 1921 it was 118·9.

The Table on the next page shows the fluctuation in population that has taken place in the City wards during the intercensal period. It will be noted that in all but three of the wards in the City, as it existed prior to the Extension Act, a decrease has occurred.

WARDS.	Census Population, 1911.	Census Population, 1921.			Increase.	Decrease.
		Males.	Females.	Total.		
Calton	23,178	10,829	12,188	23,017	...	161
Canongate	24,316	11,032	12,024	23,056	...	1260
Newington	18,756	7,185	10,943	18,128	...	628
Morningside	22,671	8,547	13,547	22,094	...	577
Merchiston	23,222	9,586	13,210	22,796	...	426
Gorgie	19,667	9,880	11,020	20,900	1233	...
Haymarket	14,746	4,888	8,767	13,655	...	1091
St Bernard's	16,457	6,744	8,257	15,001	...	1456
Broughton	15,797	7,145	8,442	15,587	...	210
St Stephen's	18,030	7,329	9,974	17,303	...	727
St Andrew's	11,522	4,776	6,280	11,056	...	466
St Giles	25,671	10,825	11,378	22,203	...	3468
Dalry	22,075	10,581	11,521	22,102	27	...
George Square	23,380	10,601	12,770	23,371	...	9
St Leonard's	24,068	10,594	12,295	22,889	...	1179
Portobello	16,762	8,690	9,990	18,680	1918	...
South Leith	28,372	13,907	14,299	28,206	...	166
North Leith	22,172	10,648	10,499	21,147	...	1025
West Leith	17,459	8,196	9,632	17,828	369	...
Central Leith	12,485	6,996	7,441	14,437	1952	...
Liberton	8,943	4,470	4,796	9,266	323	...
Colinton	6,664	4,717	4,341	9,058	2394	...
Corstorphine and Cramond	7,633	3,847	4,637	8,484	851	...
Total	424,046	192,013	228,251	420,264	9067	12,849
Edinburgh Area	320,318	139,232	172,606	311,838	...	8480
Leith Area	80,488	39,747	41,871	81,618	1130	...
Suburban Area	23,240	13,034	13,774	26,808	3568	...

Note.—The Ward Populations in this Table include persons resident in Institutions and Military Quarters. The various rates throughout this Report relating to Wards are calculated on adjusted populations. See Table on Page 7.

Through the courtesy of the Burgh Assessor, I am able to submit a Table showing the number of occupied houses in the various wards of the extended City as at Whitsunday 1921. The total has been subdivided to show the number applicable to the City as it existed prior to the Extension Act, and the number applicable to Leith and the suburban areas, which were added.

NUMBER OF DWELLING-HOUSES OCCUPIED AT WHITSUNDAY 1921.

	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	12	339	1,388	1,517	1,532	460	138	169	5,555
2	Canongate	107	1,232	1,525	1,092	1,147	246	86	29	5,464
3	Newington	17	161	356	482	1,069	562	320	1,645	4,612
4	Morningside	1	48	54	231	1,017	1,900	1,241	1,764	6,256
5	Merchiston	...	39	296	631	2,057	1,438	367	888	5,716
6	Gorgie	16	136	1,662	1,574	1,138	133	69	57	4,785
7	Haymarket	6	165	440	338	631	268	172	1,390	3,410
8	St Bernard's	31	371	507	459	969	421	122	765	3,645
9	Broughton	11	188	598	924	1,033	713	229	265	3,961
10	St Stephen's	38	554	806	870	917	570	259	542	4,556
11	St Andrew's	44	904	623	315	197	112	67	628	2,890
12	St Giles	82	1,771	1,580	678	689	145	62	88	5,095
13	Dalry	6	295	2,076	1,908	908	46	7	2	5,248
14	George Square	33	841	1,190	852	1,205	524	211	245	5,101
15	St Leonard's	106	1,841	2,103	818	602	242	99	31	5,842
16	Portobello	18	316	539	754	1,025	490	442	524	4,108
17	South Leith	5	500	1,519	1,928	1,909	291	139	111	6,402
18	North Leith	12	1,073	1,901	950	522	78	31	34	4,601
19	West Leith	9	640	1,075	615	608	413	274	710	4,344
20	Central Leith	...	309	1,633	634	495	86	24	21	3,202
21	Liberton	80	780	469	116	101	79	94	128	1,847
22	Colinton	33	417	354	161	101	79	52	252	1,449
23	Corstorphine and Cramond	58	381	246	229	302	265	204	411	2,096
	Total	725	13,301	22,940	18,076	20,174	9,561	4,709	10,699	100185
	Edinburgh Area	528	9,201	15,743	13,443	16,136	8,270	3,891	9,032	76,244
	Leith Area	26	2,522	6,128	4,127	3,534	868	468	876	18,549
	Suburban Area	171	1,578	1,069	506	504	423	350	791	5,392

The following Table gives a general survey of the increase which has taken place in the population since 1861, and at the same time shows the number of births and deaths each year since 1881, with the corresponding rate per 1,000 of the population.

The figures throughout this Table have been adjusted to remove errors in estimating for intercensal years.

Years.	Population.	Deaths.	Rate per 1000	Births Registered.	Rate per 1000
†1861	170,444	3946	23·1	5694	33·4
†1871	196,979	5484	27·8	6874	34·8
†1881	228,346	4308	18·8	7360	32·2
1882	232,602	4292	18·4	7351	31·6
*1883	239,910	4275	17·8	6844	28·5
1884	242,802	4556	18·7	7481	30·8
*1885	245,447	4241	17·2	7372	29·9
1886	248,121	4555	18·3	7451	30·0
1887	250,824	4824	19·2	7641	30·4
1888	253,264	4374	17·2	7500	29·6
1889	256,318	4415	17·2	7414	28·9
*1890	259,110	4999	19·2	7177	27·6
†1891	261,225	5257	20·1	7382	28·2
1892	265,573	4746	17·8	7169	26·9
1893	269,105	4830	17·9	7434	27·6
1894	272,683	4350	15·9	7207	26·4
1895	276,309	5246	18·9	7402	26·6
1896	279,983	4275	15·2	7610	27·1
*1897	297,198	5782	19·4	7990	26·8
1898	301,305	5320	17·6	8097	26·8
1899	305,468	5396	17·6	8218	26·9
*1900	309,688	5396	17·4	8129	26·2
†1901	316,921	5633	17·7	7920	24·9
*1902	317,880	5113	16·0	7909	24·8
1903	318,219	4963	15·5	8112	25·4
1904	318,560	4995	15·6	7777	24·4
1905	318,777	4799	15·0	7741	24·2
1906	319,120	4868	15·2	7649	23·9
1907	319,464	4978	15·5	7504	23·4
1908	319,809	4690	14·6	7506	23·4
1909	320,282	5106	15·9	7410	23·1
1910	320,504	4651	14·5	7063	22·0
†1911	320,829	4652	14·4	§6507	20·8
1912	321,119	4701	14·6	6346	19·7
1913	321,645	4630	14·3	6243	19·4
1914	325,780	5025	15·4	6466	19·8
1915	323,388	5419	16·7	5851	18·1
1916	321,993	4812	14·9	5748	17·8
1917	320,116	4924	15·3	4913	15·3
1918	318,250	5090	16·0	4830	15·1
1919	316,390	5583	17·6	5612	17·7
1920	314,193	4442	14·2	7774	24·7
*†1921	420,264	6048	14·4	9028	21·5

* City boundaries extended. † Census year.

§ The Births from this year onward are corrected for transfer births, *i.e.*, births to parents domiciled outwith the City are excluded, while births occurring to Edinburgh parents beyond the City are included.

MARRIAGES.

In the course of the year 4,610 marriages were registered in the City, the rate being 11·0 per 1,000 of the population. The rate in Glasgow was 10·7; in Dundee, 10·0; and in Aberdeen, 11·0. From these figures it is clear that the post-war "boom" in marriages has subsided. In the case of Edinburgh, the comparatively high marriage rate may be accounted for by the fact that a large number of "irregular" marriages are contracted within the City between parties from all districts in the south-east of Scotland. For the four quarters of the year the figures were as under :—

1st Quarter - - -	1,151
2nd ,, - - -	1,118
3rd ,, - - -	1,335
4th ,, - - -	1,006
	4,610

DEATHS AND DEATH-RATE.

There were registered in the City during 1921 the deaths of 6,544 persons. Of this number 688 were persons belonging to districts in Scotland outwith the City, and whose deaths were, for statistical purposes, transferred to the district of usual residence. Under this arrangement the deaths of 192 Edinburgh citizens, which occurred in other districts, were similarly transferred for inclusion in the mortality statistics of the City. As a result of the adjustments, the nett deaths of Edinburgh citizens during the year numbered 6,048, being equal to a death-rate of 14·4 per 1,000 of the population.

In view of the fact that the rate is based upon the population as enumerated at the Census in June 1921, the death-rate for the year may be regarded as an accurate reflection of the health conditions prevailing in the City. In the Report for 1920 the death-rate for the City, which did not then include Leith or the suburban areas, was given as 13·2 per 1,000. The population upon which this rate was calculated was, however, an estimated one, based upon the number of persons per occupied house. The number of houses was that ascertained at Whitsunday 1920, and the number of persons per occupied house was that ascertained at the Census of 1911. Through adjustments in population, rendered necessary by the publication of the new Census figures, the rate for 1920 is increased to 14·2 per 1,000. The rate of 14·4 recorded for 1921 would therefore indicate that, generally, there has been a continuance of the remarkably healthy conditions reported in the previous year.

It must be borne in mind, however, that the death-rate for 1921 relates to the extended City, and it will be of interest to show the rates as they apply to the three areas. They are as follows :—

Edinburgh area	14·8	per 1000
Leith area	14·0	,,
Suburban area	11·0	,,

The following Table shows the number of deaths that occurred and the transfers that were made in each of the four quarters of the year, together with the death-rates based on the nett City deaths :—

Quarter.	Total Deaths Registered.	Transferred to other Districts.	Transferred from other Districts.	Nett City Deaths.	Death-rates per 1000.
1st .	2024	180	47	1891	17·9
2nd .	1616	173	53	1496	14·2
3rd .	1354	165	55	1244	11·8
4th .	1550	170	37	1417	13·4
Total .	6544	688	192	6048	14·4

Undernoted are the death-rates for the eight largest towns in Scotland, from which it appears that Edinburgh occupies a very favourable position when compared with other large centres of population. The average death-rate in the fifteen "larger burghs" of Scotland was 14·6; in the smaller burghs, 13·2; and in the county districts, 12·4. For the whole of Scotland the rate was 13·6.

	Rate per 1000 of Population.		Rate per 1000 of Population.
Glasgow	15·1	Paisley	13·3
Edinburgh	14·4	Greenock	14·6
Dundee	15·3	Coatbridge	14·1
Aberdeen	14·4	Motherwell and Wishaw	12·5

The Table on page 5 is introduced with the object of showing the influence that overcrowding and bad housing conditions have upon death-rates. Year by year I have, with unfailing regularity, directed attention to this important phase of public

health conditions, and have urged the necessity of drastic measures being taken in connection with the clearance of slums and the opening up of congested areas. As already stated, the figures for the year 1921 are based upon an accurate return of population, and it is noteworthy that the death-rates in certain wards once more emphasise in the most convincing manner the urgent call for improvement.

In St Giles Ward, where the housing conditions leave much to be desired, a death-rate of 19·5 was recorded, being 5·1 higher than that for the whole City. The Infantile Mortality in this ward was also higher than any of the City wards, reaching 150 deaths under 1 year per 1,000 births, as compared with 96 per 1,000 for the whole City. In regard to the Phthisis death-rate, St Giles Ward again returned the highest figure, with 1·5 per 1,000 as against 0·9 for the City. A record, hardly less depressing, was returned for St Leonard's Ward, another district where housing reform is overdue. St Leonard's had a general death-rate of 18·2, an infantile Mortality rate of 133, and a Phthisis death-rate of 1·2. In contrast to these two wards may be cited the case of two where very much better housing conditions prevail. In Morningside Ward the death-rate was only 13·4 per 1,000, and the Infantile Mortality rate 24 per 1,000; while in Merchiston Ward the death-rate was 13·7, and the Infantile Mortality 66.

Ward.	Density of Population per Acre.	Housing.		Death-rate per 1000.			Infantile Mortality.
		1 Room.	2 Rooms.	All Causes.	Phthisis.	Zymotic.	
Calton	100·3	236	1,859	12·9	·8	·6	79
Canongate	23·3	590	2,289	14·3	1·2	1·1	94
Newington	19·9	121	466	14·2	·2	·4	81
Morningside	15·6	7	154	13·4	·7	·1	24
Merchiston	31·4	40	751	13·7	·3	3	66
Gorgie	30·3	51	2,292	11·3	·9	·5	82
Haymarket	14·2	139	464	13·2	·4	·2	69
St Bernard's	11·6	155	796	13·7	1·1	·4	97
Broughton	33·0	163	1,104	11·3	·9	·5	82
St Stephen's	91·0	405	901	13·6	·7	·3	72
St Andrew's	53·6	717	727	15·9	1·0	·7	104
St Giles	81·5	1,344	1,822	19·5	1·5	1·5	150
Dalry	118·2	223	3,192	13·5	·7	·9	100
George Square	87·5	635	1,566	17·8	1·3	·7	93
St Leonard's	219·4	1,202	2,445	18·2	1·2	1·0	133
Portobello	8·2	120	1,061	12·7	·7	·3	77
South Leith	33·8	199	2,728	12·9	·8	1·0	84
North Leith	96·0	566	2,214	16·4	1·0	1·6	124
West Leith	38·0	274	1,516	11·9	·6	·5	83
Central Leith	101·6	180	1,750	13·7	·7	1·1	119
Liberton	1·4	149	990	10·6	·9	·6	74
Colinton	1·1	83	582	13·6	·3	·6	53
Corstorphine and Cramond	1·0	65	493	13·4	·3	·3	78
Total—Extended Area	12·9	7,664	32,162	14·4	·9	·7	96
Edinburgh Area	28·6	6,148	21,889	14·8	1·0	1·0	96
Leith Area	49·7	1,219	8,208	14·0	·9	·9	102
Suburban Area	1·3	297	2,065	11·0	·5	·4	68

In regard to the conditions prevailing in Leith, the same association of congested localties and high mortality rates has to be recorded. North Leith, where a considerable number of old properties exist, had a death-rate of 16·4, an Infantile Mortality rate of 124, and a Phthisis death-rate of 1·0. West Leith, on the other hand, although it includes the old fishing village of Newhaven, is a ward which consists largely of the suburban type of dwelling. The death-rate there was 11·9, and the Infantile Mortality rate 83.

In order to demonstrate more fully the evil effects of overcrowding on the health of the community, it may be interesting to take together as one area the four wards

which are generally referred to as comprising the "Old Town," viz., St Giles, George Square, St Leonard's, and Canongate. In this connection some rather startling figures emerge. In the first place, more than one-fifth of the entire population of Greater Edinburgh is resident within the area of these four wards; and, secondly, as regards housing conditions, almost 50 per cent. of the one-roomed houses, and 25 per cent of the two-roomed houses in the City, are situated within these wards. In these circumstances it is not surprising to find that high mortality rates are generally found in the localities concerned.

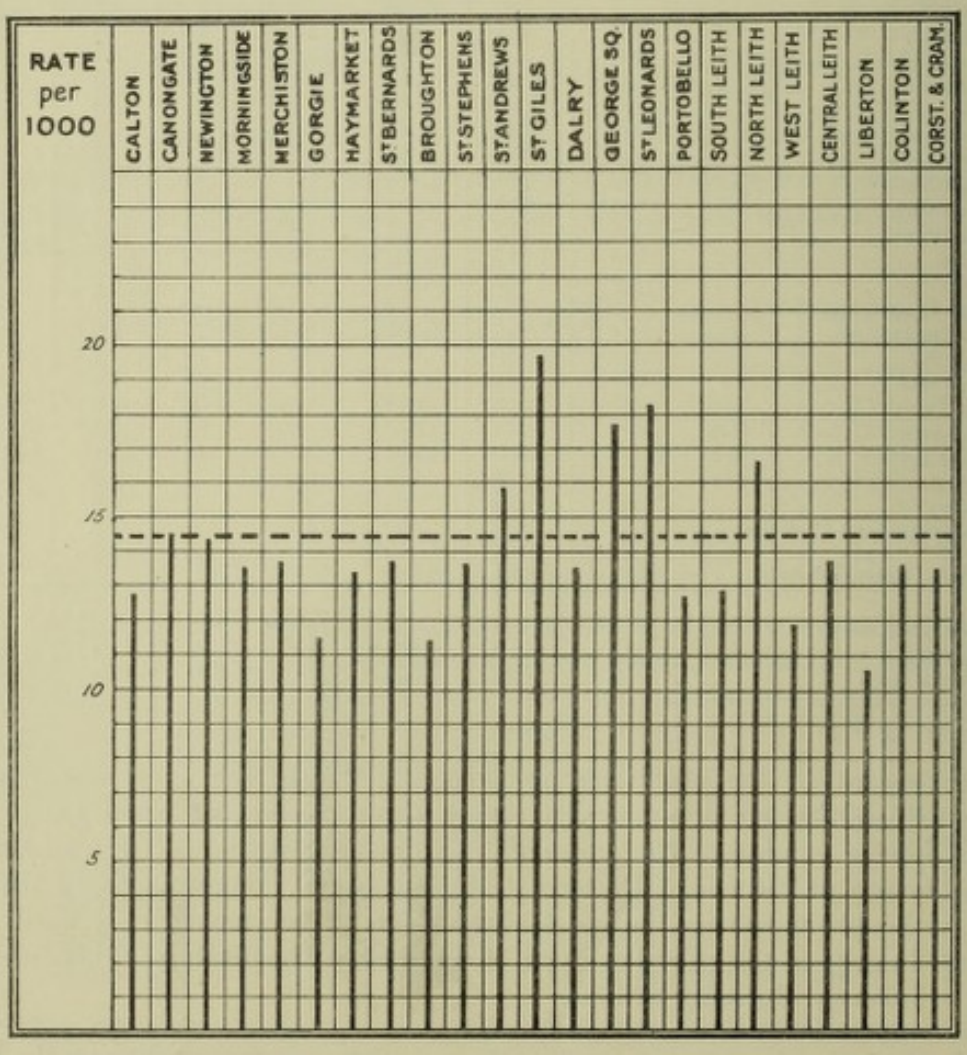
I find further that, taking the four wards together, the general death-rate for 1921 is 17·5 per 1,000, or 3·1 per 1,000 higher than that for the City as a whole. In regard to Pulmonary Tuberculosis—a disease which is unquestionably associated with overcrowding and bad housing conditions—no fewer than 27 per cent. of the cases notified to the Department during the year were received from homes situated in the four "Old Town" wards.

The Infantile Mortality in the four wards represents a rate of 120 deaths under one year per 1,000 births, or 24 per 1,000 higher than the rate for the whole City.

The following Line Diagram affords a ready comparison between the death-rate in the wards and that of the City as a whole. The Table on page 7 gives in detail the statistics relating to each ward.

DEATH-RATE—ALL CAUSES

Per 1,000 of Population.



----- *Death Rate for City.*

Table showing the Population, &c., also the Births and Deaths in each Ward during the year.

Ward.	Estimated Population.	Area in Acres.	Density of Population per Acre.	Births.		Infantile Mortality.		Deaths.							
								Pulmonary Phthisis.		Other Infectious Diseases.		Other Causes.		All Causes.	
				Number.	Rate per 1000.	Deaths.	Rate per 1000 Births.	Number.	Rate per 1000.	Number.	Rate per 1000.	Number.	Rate per 1000.	Number.	Rate per 1000.
Calton	22,888	228	100·3	489	21·3	39	79	18	·8	14	·6	263	11·5	295	12·9
Canongate	22,534	965	23·3	592	26·2	56	94	29	1·2	25	1·1	270	12·0	324	14·3
Newington	17,735	891	19·9	257	14·4	21	81	5	·2	8	·4	240	13·5	253	14·2
Morningside	21,196	1,358	15·6	251	11·8	6	24	15	·7	2	·1	267	12·6	284	13·4
Merchiston	21,297	677	31·4	317	14·8	21	66	8	·3	8	·3	276	12·9	292	13·7
Gorgie	20,490	676	30·3	471	22·9	39	82	20	·9	12	·5	201	9·8	233	11·3
Haymarket	13,655	959	14·2	202	14·7	14	69	6	·4	3	·2	171	12·5	180	13·2
St Bernard's	14,552	1,250	11·6	266	18·2	26	97	16	1·1	6	·4	178	12·2	200	13·7
Broughton	15,587	472	33·0	314	20·1	26	82	15	·9	8	·5	153	9·7	176	11·3
St Stephen's	17,303	190	91·0	343	19·8	25	72	13	·7	5	·3	218	12·6	236	13·6
St Andrew's	11,056	206	53·6	259	23·4	27	104	12	1·0	8	·7	156	14·1	176	15·9
St Giles	21,689	266	81·5	642	29·6	94	150	33	1·5	34	1·5	357	16·4	424	19·5
Dalry	22,102	187	118·2	519	23·4	52	100	16	·7	20	·9	273	12·3	309	13·5
George Square	21,710	248	87·5	447	20·5	42	93	30	1·3	17	·7	341	15·7	388	17·8
St Leonard's	22,826	104	219·4	638	27·9	85	133	29	1·2	23	1·0	364	15·9	416	18·2
Portobello	18,094	2,200	8·2	398	21·9	31	77	14	·7	6	·3	211	11·6	231	12·7
South Leith	27,678	819	33·8	653	23·5	55	84	23	·8	28	1·0	307	11·1	358	12·9
North Leith	20,931	218	96·0	601	28·7	74	124	21	1·0	34	1·6	290	13·8	345	16·4
West Leith	17,572	462	38·0	433	24·6	36	83	12	·6	9	·5	189	10·7	210	11·9
Central Leith	14,437	142	101·6	418	28·9	50	119	14	·7	16	1·1	170	11·7	200	13·7
Liberton	9,131	6,339	1·4	201	22·0	15	74	9	·9	6	·6	82	8·9	97	10·6
Colinton	6,178	5,602	1·1	75	12·1	4	53	2	·3	4	·6	78	12·6	84	13·6
Corstorphine and Cramond	8,336	8,067	1·0	127	15·2	10	78	3	·3	3	·3	106	12·7	112	13·4
Institutions	7,778	...	...	89	...	23	...	17	...	19	...	183	...	219	...
Military Quarters	3,509	...	...	26	...	...	...	1	...	...	...	5	...	6	...
Totals	420,264	32,526	12·9	9,028	21·5	871	96	381	·9	318	·7	5,349	12·7	6,048	14·4

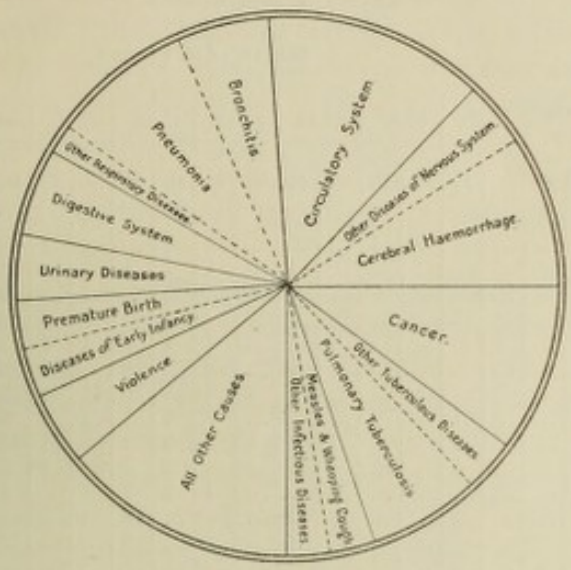
NOTE.—The ward populations have been adjusted by deducting the population resident in the principal institutions and military quarters. Births and deaths occurring in institutions are allocated to wards, except in cases where a permanent domicile cannot be established.

Table showing the number of Deaths (including Deaths transferred from other districts) and the Death-rates per 1,000 of the Population during 1921 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 1000	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	...	420,264	8,168	24,328	32,496	35,349	38,939	79,163	64,041	58,957	51,234	33,989	18,857	7,239	387,768
Deaths from all Causes	...	6,048	871	412	1,283	111	70	261	305	405	617	881	1,067	1,048	4,765
Annual Death-rate per 1000	14·4	14·4	106·6	16·2	39·4	3·1	1·8	3·3	4·7	6·8	12·0	25·9	57·6	144.7	12·3
Enteric Fever	·00	1	...	...	...	...	...	1	...	...	...	...	...	...	1
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	·18	77	25	51	76	...	...	1	...	...	...	...	...	...	1
Scarlet Fever	·10	43	...	17	17	14	6	2	1	1	...	1	1	...	26
Whooping-cough	·19	80	40	37	77	3	...	...	...	...	...	...	...	...	3
Diphtheria and Croup	·18	74	9	46	55	13	1	3	1	...	...	...	1	...	19
Influenza (Sole Cause)	·06	27	2	...	2	...	1	3	2	1	3	3	8	4	25
Erysipelas	·05	23	1	1	2	...	1	...	2	7	5	2	3	1	21
Encephalitis Lethargica	·02	10	...	.	...	2	1	...	2	2	3	...	...	...	10
Cerebro-Spinal Meningitis	·00	4	1	2	3	...	...	...	...	...	...	1	...	...	1
Tuberculosis of Respiratory System	·90	381	1	6	7	4	9	81	82	83	65	30	18	2	374
Tuberculous Meningitis	·14	59	7	35	42	3	3	8	3	...	...	...	...	...	17
Tuberculosis of Intestines and Peritoneum ...	·15	65	9	20	29	11	4	8	1	7	2	2	1	...	36
Other Tuberculous Disease	·14	59	7	7	14	6	5	6	2	4	10	5	6	1	45
Malignant Disease	1·48	625	...	...	...	...	1	5	13	36	111	180	183	96	625
Rheumatic Fever	·04	19	...	2	2	...	1	4	5	5	1	...	1	...	17
Meningitis	·10	43	12	12	24	7	2	4	2	...	1	2	1	...	19
Cerebral Hæmorrhage, Apoplexy, Hemiplegia .	1·35	569	6	1	7	...	...	2	3	17	49	145	179	167	562
Other Nervous Diseases	·50	211	23	7	30	1	1	11	16	28	38	29	33	24	181
Heart Disease	1·58	665	...	...	...	3	6	21	24	46	75	130	206	154	665
Other Diseases of Circulatory System ...	·29	125	6	...	6	...	1	...	...	5	10	24	33	46	119
Bronchitis	·82	346	59	9	68	1	...	...	4	13	26	48	86	100	278
Pneumonia (all forms)	1·22	519	151	91	242	5	6	27	18	28	33	54	49	57	277
Other Diseases of Respiratory System ...	·21	89	10	4	14	2	1	4	3	3	7	15	21	19	75
Diarrhœa and Enteritis	·25	111	75	12	87	1	...	...	2	1	2	1	9	8	24
Appendicitis	·07	30	1	2	3	2	2	3	7	4	5	3	1	.	27
Diseases of Liver (non-Malignant)	·07	31	1	...	1	...	...	1	1	3	3	7	9	6	30
Other Diseases of Digestive System	·33	142	20	7	27	4	3	3	10	12	24	22	24	13	115
Nephritis—Acute and Chronic	·48	203	1	2	3	4	2	11	10	20	34	49	41	29	200
Other Urinary Diseases	·12	54	3	2	5	...	...	...	1	3	7	8	13	17	49
Puerperal Sepsis	·04	16	...	...	...	...	...	4	10	2	...	...	...	...	16
Other Diseases and Accidents of Childbirth ...	·08	37	...	...	...	...	...	8	16	13	...	...	...	...	37
Diseases of Early Infancy and Malformations .	·80	340	337	3	340	...	...	...	...	...	...	...	...	...	...
Violent Deaths	·60	255	17	18	35	17	7	20	23	25	42	37	27	22	220
All Other Causes	1·70	715	47	18	65	8	6	20	41	36	61	83	113	282	650

CAUSES OF DEATH.

The Table on the preceding page shows the causes of death classified according to age periods and disease groups, with the death-rate per 1,000 for each group. The relation of the various causes of death to the total deaths is illustrated in the following diagram :—



Infectious Diseases.—There were 318 deaths from infectious diseases throughout the year, being equal to a rate of ·7 per 1,000 of the population. Whooping-cough accounted for 80 of the deaths, and all of these occurred in children under seven years, 40 being under one year. There were 77 deaths from Measles, all, with the exception of one, being children under the age of five years. Fuller details as to infectious diseases and their treatment in hospital will be found on pages 21-39.

Influenza.—Until the latter part of the year Influenza was not present in epidemic form, and in only 27 instances was it given as the sole cause of death. In 107 cases it was stated to be a contributory cause, and of this number 51 were complicated with Pneumonia, 25 with Bronchitis and other respiratory diseases, 3 with Phthisis, 2 with Childbirth, and 26 with other causes. Of the total deaths, 84 occurred in females and 50 in males. As regards age at death, 9 were children under ten years, 30 were between ten and thirty-five years, 39 between thirty-five and sixty-five, and 56 were over sixty-five.

Tuberculous Diseases.—The deaths under this group numbered 564, equal to a rate of 1·3 per 1,000 of the population. Of these deaths, 381 were attributed to Tuberculosis of the Respiratory System, 59 to Tuberculous Meningitis, 65 to Tuberculosis of the Intestines and Peritoneum, and 59 to other forms of the disease.

Of the deaths from Tuberculosis, 92 occurred in children under five years, 24 of these being under one year. The 59 deaths from Tuberculous Meningitis included 42 children under 5, and of the 65 deaths from Tuberculosis of the Intestines and Peritoneum, 29 occurred in children under five years, 9 of whom were under one year.

The death-rate from Respiratory Tuberculosis was ·9 per 1,000 of the population. This rate is based on the 1921 Census return of population, and is in keeping with the low rates which have been recorded in the City during recent years. In the Ward Table on page 7 will be found particulars regarding the Tuberculous deaths and death-rates in each ward of the City, while on page 25 the subject of Tuberculosis is fully dealt with in a report by Dr John Guy, Tuberculosis Officer.

Cancer.—During the year under report, 625 deaths were registered as being due to malignant disease. This corresponds to a rate of 1·5 per 1000 of the population. A Table is given on the next page showing the sex distribution, the organ affected, and the ages at which death occurred. Of the 625 deaths, only 55 were persons under the age of forty-five years, while 291 were between the age of

forty-five and sixty-five, and 279 were over sixty-five. In regard to the site of the disease, there were 128 deaths where stomach and œsophagus were affected, 124 where the intestines and rectum were involved, and 56 cases had the liver and gall-bladder as the site. The female breast was stated to be the organ affected in 70 instances, while 59 deaths were due to Cancer of the female genital organs.

CANCER DISTRIBUTION.

SITE.	SEX AND AGE PERIODS.																		TOTALS.
	Under 15.		15-20.		20-25.		25-35.		35-45.		45-55.		55-60.		60-65.		65-75.		75 and upwards.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Brain	...	...	...	...	...	1	...	...	...	...	1	...	...	2	...	...	...	...	1	...	5
Jaw, Face, and Ear	...	...	...	...	...	...	...	1	...	1	1	1	1	...	...	...	...	2	...	2	9
Tongue and Mouth	...	...	...	...	...	...	...	1	2	...	3	...	3	...	2	...	10	...	...	...	21
Larynx, Pharynx, and Neck	...	...	...	1	...	...	...	...	...	...	...	...	2	3	6	1	4	2	1	...	20
Thorax and Lungs	...	...	1	...	...	...	1	1	...	1	4	3	1	4	2	1	2	2	1	1	25
Breast	...	...	...	...	...	...	...	1	...	3	...	16	...	11	...	3	...	21	...	15	70
Stomach and Oesophagus	...	...	...	...	...	...	...	1	3	4	15	10	11	4	12	10	24	17	4	13	128
Liver and Gall Bladder	...	...	...	1	...	...	...	...	...	2	4	2	2	6	3	3	9	13	4	7	56
Intestines and Rectum	...	...	...	...	...	...	1	1	2	3	6	8	8	11	13	6	16	24	8	17	124
Pancreas	...	...	...	...	...	...	1	...	...	...	2	1	...	3	3	4	2	3	...	1	20
Pylorus	...	...	...	...	...	...	...	...	...	1	2	1	4	...	1	2	...	...	...	...	11
Uterus	...	...	...	...	...	...	...	1	...	4	...	18	...	6	...	5	...	6	...	4	44
Ovaries and Vagina	...	...	...	...	...	...	...	2	...	2	...	5	...	2	...	2	...	1	...	1	15
Penis and Scrotum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..
Abdomen and Pelvis	...	...	...	...	...	...	...	...	2	1	...	2	1	3	1	4	3	5	2	6	30
Kidney	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	2	1	1	1	1	8
Prostate and Bladder	...	...	...	...	...	...	...	...	...	...	3	...	...	...	1	...	10	...	2	3	19
Bones	1	...	...	...	...	...	...	...	1	1	...	...	1	...	...	...	1	1	...	...	6
Ductless Glands	...	...	...	...	...	...	...	...	1	...	...	2	...	...	2	2	...	1	...	1	9
Not specified	...	...	...	...	...	1	...	...	1	...	1	...	...	...	...	...	1	1	...	...	5
Totals M.	1	...	1	...	...	...	3	...	12	...	42	...	34	...	46	...	83	...	24	...	246
Totals F.	...	...	...	2	...	2	...	10	...	24	...	69	...	55	...	45	...	100	...	72	379
Totals																					625

The following Table shows the deaths and death-rates from Cancer in Edinburgh during the last 24 years :—

YEAR.	MALE.	FEMALE.	TOTAL.	RATE PER 1000 LIVING.
1898	104	163	267	·8
1899	112	164	276	·9
1900	116	181	297	·9
1901	110	183	293	·9
1902	127	185	312	·9
1903	130	186	316	·9
1904	125	206	331	1·0
1905	124	220	344	1·0
1906	132	198	330	1·0
1907	120	224	344	1·0
1908	123	230	353	1·1
1909	130	243	373	1·1
1910	167	220	387	1·2
1911	154	251	405	1·2
1912	139	261	400	1·2
1913	146	255	401	1·2
1914	172	277	449	1·4
1915	187	248	435	1·3
1916	190	256	446	1·4
1917	162	257	419	1·3
1918	189	265	454	1·4
1919	158	274	432	1·3
1920	194	277	471	1·4
1921	246	379	625	1·5

Diseases of the Nervous System.—The deaths under this heading numbered 823, of which Cerebral Hæmorrhage, Apoplexy, and Hemiplegia accounted for 569. As regards age incidence, 61 deaths related to children under 5 years, and of these 41 were children under 1 year. Among these 41 children Convulsions was the cause of death in 22 cases, and Meningitis in 12 cases.

Diseases of the Circulatory System accounted for 790 deaths. These included 291 due to Valvular Disease of the Heart, and 374 to other forms of Heart Disease. Diseases of the blood vessels accounted for the remaining deaths, 80 being due to Arterio Sclerosis.

Diseases of the Respiratory System.—The number of deaths classified under this group, exclusive of those connected with Influenza, was 954, of which 497 were males and 457 females. Pneumonia was certified as the cause of death in 519 cases, and Bronchitis in 346 cases. The deaths of children under 5 years due to Respiratory Diseases numbered 324, and of these 220 were infants under one year.

Diseases of the Digestive System caused 314 deaths. These included 111 due to Diarrhœa and Enteritis, 30 to Appendicitis, and 31 to Non-Malignant Diseases of the Liver. Of the 111 deaths from Diarrhœa, 87 were children under 5 years, of whom 75 were under 1 year.

Diseases and Accidents of Pregnancy and Childbirth.—These deaths numbered 53. 16 of the deaths were certified as being due to Puerperal Sepsis.

Deaths by Violence numbered 255, including 171 males and 84 females. Among the accidental deaths 37 were stated to have been caused by falls, 29 by burns and scalds, and 26 by drowning, while 27 were certified as having been caused by motor vehicles. There were 45 cases of suicide. 32 males and 13 females.

Ill-Defined Causes.—An ill-defined cause was attributed in the case of 49 deaths, 26 being certified simply as "Heart Failure" and 15 as "Syncope."

BIRTHS.

There was a tendency towards a decline in the birth-rate in the large centres of Scotland during 1921, and Edinburgh was no exception to the rule. During the year 9,394 births were registered as occurring in the City. Of these, 1,393 occurring in the various maternity institutions and homes in the City, fell to be transferred to the domicile of the parents, while 1,027 were included as transfers from districts outwith the City where Edinburgh mothers had been residing temporarily. As a result of this adjustment, the nett number of births allocated to the City was 9,028, and the birth-rate on this corrected figure is 21·5 per 1,000 of the population.

The following Table relates to the total number of births registered in the City during the year, irrespective of domicile :—

Quarter.	Number of Births Registered.	Sex.		Legitimate.	Illegitimate.	Percentage of Illegitimate to Total Births.
		Males.	Females.			
1st .	2274	1126	1148	2063	211	9·2
2nd .	2569	1281	1288	2327	242	9·4
3rd .	2315	1233	1082	2124	191	8·2
4th .	2236	1122	1114	2059	177	7·9
Total .	9394	4762	4682	8573	821	8·7

The following Table shows the births occurring in each quarter of the year after the adjustment for transfers had been made :—

Quarter.	Total Births.	Legitimate.	Illegitimate.	Percentage of Illegitimate to Total Births.
1st .	2183	2012	171	7·8
2nd .	2461	2259	202	8·2
3rd .	2234	2094	140	6·2
4th .	2150	2012	138	6·4
Total .	9028	8377	651	7·2

In regard to birth-rates in the wards of the City, the highest rates were recorded in those wards which, as a rule, return a high infantile mortality rate. Thus the highest birth-rate of 29·6 per 1000 was returned in St Giles Ward, which also had the highest infantile mortality rate. In Central Leith Ward the birth-rate was 28·9, in North Leith 28·7, in St Leonards 27·9, and in Canongate 26·2. The lowest rates were found in Morningside with 11·8 per 1,000, Colinton, 12·1, Newington, 14·4, Haymarket, 14·7, and Merchiston, 14·8.

Illegitimate births applicable to the City numbered 651, or 7·2 per cent. of the total births. In Aberdeen the illegitimacy rate was 9·2 per cent., in Dundee 7·7, and in Glasgow 6·5. For the whole of Scotland the rate was 7·1 per cent.

Below are given the corrected birth-rates for the eight large towns in Scotland :—

	Per 1000 of Population.		Per 1000 of Population.
Glasgow	28·7	Paisley	26·3
Edinburgh	21·5	Greenock	30·2
Dundee	26·4	Coatbridge	32·2
Aberdeen	26·8	Motherwell and Wishaw	31·5
	Scotland ... 25·2		

INFANTILE MORTALITY.

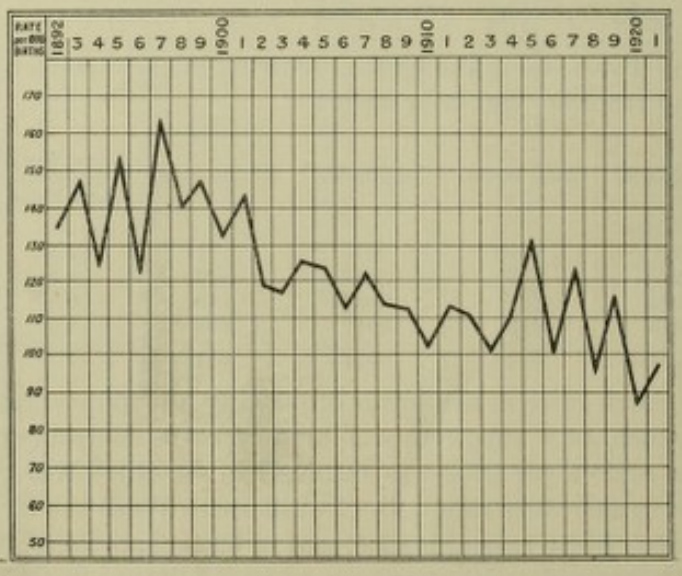
The deaths of children of less than one year numbered 871, equal to an infantile mortality rate for the extended City of 96 per 1,000 births. The rate for the Edinburgh area was 96 per 1,000; for the Leith area, 102; and for the suburban area, 68. The corresponding rates for 1920 in Edinburgh and Leith were 89 and 101 respectively.

Having regard to the industrial depression which prevailed during the year, and the consequent curtailment of the necessaries of life, the slight increase is not surprising. Apart from economic considerations, however, there still remains, as I have already indicated, the question of environment, and there cannot be much hope of a further reduction in Infantile Mortality until the clearing of slum properties has been seriously undertaken.

An analysis of the ward rates clearly demonstrates the evil effect on infant life of overcrowding and bad sanitary surroundings. In St Giles Ward the rate is equal to 150 deaths per 1,000 births; in St Leonard's Ward the rate is 133; and in North Leith Ward, 124. Notwithstanding these difficulties, however, there has been a continuance of the general improvement in Infantile Mortality, which has been noticeable since the introduction of the Notification of Births Act and the adoption of a Child Welfare Scheme. This is borne out by the following figures and by the line chart below :—

	Average for 10 years.
1890-1899 . . .	143 deaths per 1000 births.
1900-1909 . . .	122 ,, ,, ,,
1910-1919 . . .	110 ,, ,, ,,
1920 . . .	89 ,, ,, ,,
1921 . . .	96 ,, ,, ,,

INFANTILE MORTALITY
In Edinburgh during the last 30 Years.



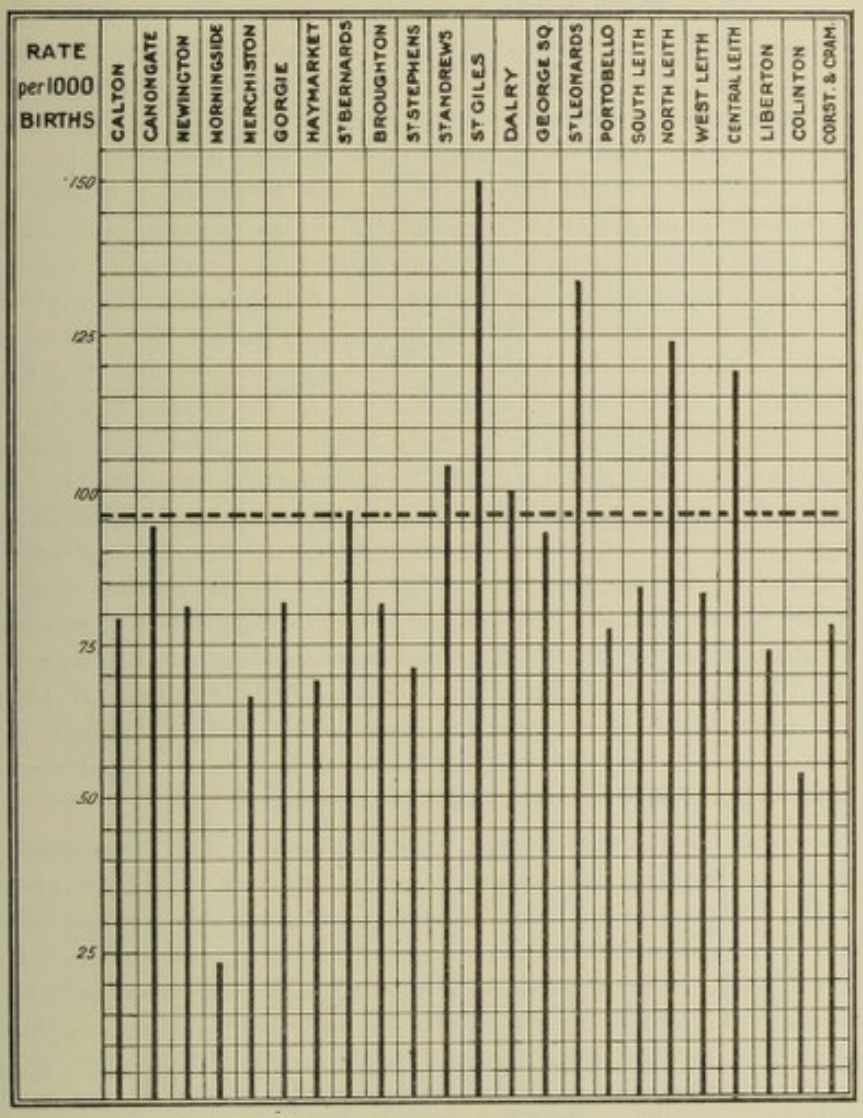
For the purpose of comparison the Infantile Mortality rates in the eight large towns of Scotland are shown :—

	Deaths per 1000 Births.		Deaths per 1000 Births.
Glasgow	106	Paisley	94
Edinburgh	96	Greenock	93
Dundee	114	Coatbridge	94
Aberdeen	108	Motherwell and Wishaw ...	79
Scotland	90		

From the following line diagram the incidence of Infantile Mortality in each of the wards of the City can be readily compared with the rate prevailing over the whole City.

INFANTILE MORTALITY.

Deaths per 1,000 Births.



------ *Infantile Mortality Rate for City.*

MATERNITY AND CHILD WELFARE.

The following Report in connection with Child Welfare has been prepared by Dr T. Y. Finlay, who is in charge of this branch of the Department's activities :—

I have the honour to submit the Annual Report of the Maternity and Child Welfare Department for the year 1921, incorporated in which, for the first time, are the details of the work carried on in the extended area of the City. This fact should be borne in mind when comparing figures with previous Reports.

The staff was increased in November 1920, by four of the five Health Visitors who formerly worked under the Leith Child Welfare Scheme, and who still continue

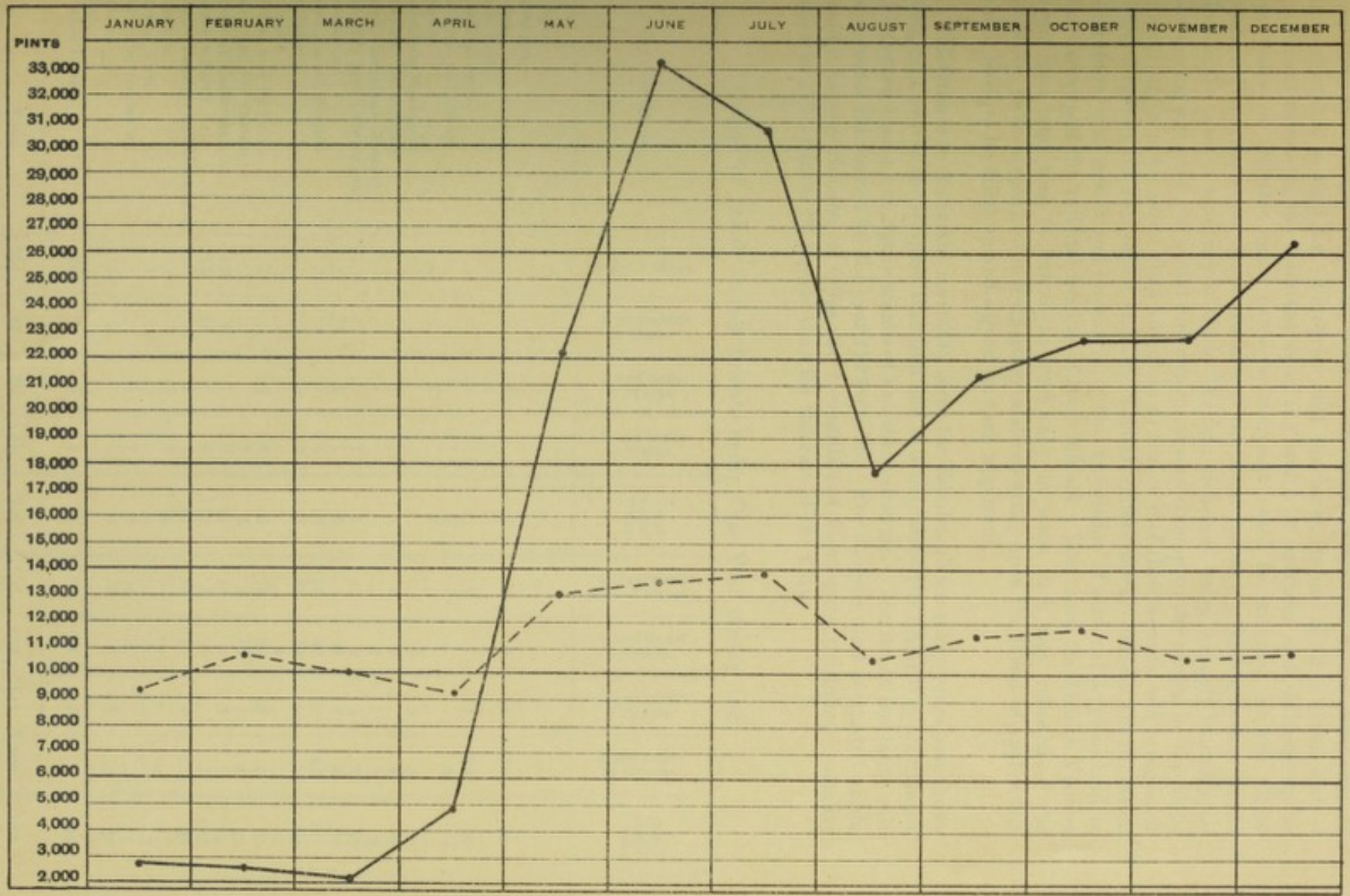
to work in the same area. The existing staff has undertaken the work in the rest of the extended area of the City without additional help.

Details of the various branches of work carried on by the Department were given in the Annual Report for 1920, and, therefore, need not be repeated here. The only new activity entered upon during the year has been the reopening, in the month of September, of the Victoria Park Home for Children, which was formerly under the supervision of the Leith Public Health Committee. This Home has been opened for the admission of infants suffering from general debility and malnutrition. It has accommodation for 20 children up to the age of two years. Gogarburn House being reserved for children between two and five years of age. The Department has been fortunate in securing the services as matron of Miss Holbech, who has had a large practical experience in the care of delicate infants.

When one realises the fact that many infants grow up to be a burden upon the State at a cost far out of proportion to that which is required to prevent disease in early infancy, the value of child welfare work is seen in its true perspective. Looked at from a strictly business point of view, it costs less for the State or a Local Authority to keep a child in health than to maintain it in chronic ill-health; for this reason, therefore, the main energies of the Child Welfare Department should be directed towards the prevention of disease. The cure of disease should properly be in the hands of the general practitioner, or where this is not practicable, should be dealt with at a Children's Hospital or at a dispensary. Edinburgh is fortunate in having a number of such dispensaries of which it is justly proud, so that curative cases should be left entirely in the hands of these institutions, and the Corporation centres restricted to the giving of medical advice on the proper hygiene of infancy, the treatment of simple symptoms at an early stage before they have developed into actual disease, and at a time when the mother considers the condition not sufficiently serious to call in her family doctor, also to the looking after of the unthriving baby. Many examples could be cited where the second baby in a family has benefited in its chances of a healthy life from the knowledge gained by the mother while attending a Child Welfare Clinic with her first baby. It is no exaggeration to say that a great deal of ill-health in after life results from the popular fallacy, so often preached, that a mother's own instinct will tell her what is best for her child, and will teach her the best way to rear her infant. Ignorance on the part of the mother is equally detrimental to a child's health as are bad housing conditions. It was to dispel such innocent ignorance that Baby Health Centres were first instituted.

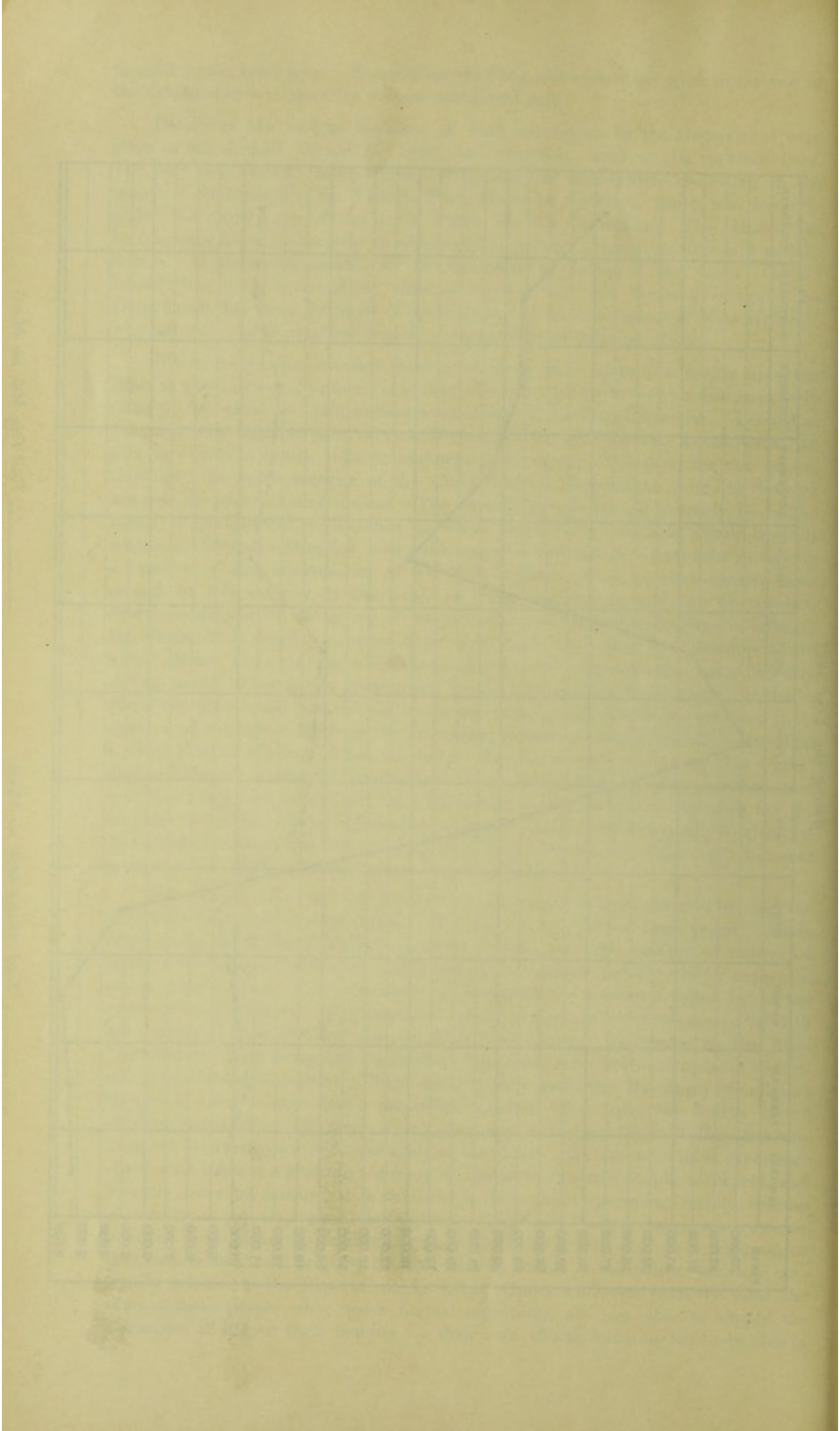
The miner's strike and the general unemployment which occurred during the year have been outstanding factors in the general work of the Department. As in other cities, the Public Health Committee decided that the families of miners on strike were to have the benefit of milk for their children, and dinners for expectant and nursing mothers. This decision, combined with the assistance called for as the result of the general unemployment, led to an unforeseen outlay as compared with the estimated cost for the year for milk and dinners. Reference to the Milk Distribution Chart facing this page shows in graphic form the sudden rise in the distribution of these necessities. There cannot be any doubt that the supply of milk and dinners in suitable cases has a markedly beneficial effect upon the health of the children and mothers, and forms a very necessary part of any Child Welfare Scheme. This has been seen over and over again at the clinics. At the same time, experience shows that there is a growing tendency on the part of certain people to expect, and in some cases to demand, milk or dinners from the Department merely because of inability to pay for them. One presumes that Child Welfare Schemes were never intended to supplant the existing agencies for relief work, and one would imagine that such cases should properly be dealt with by them; nevertheless, such are constantly referred to the Department for help. Under a different category come the cases of those people who, under normal conditions, are just able to supply the necessities of life to their families by their own efforts, but who fail to be able to

Chart showing Quantity of Milk per Month supplied either Assisted or Free from the Child Welfare Department during the Year 1921



---------- *Total Assisted Milk per Month*

_____ *Total Free Milk per Month*



do so when some added strain is put upon their slender resources, such, for example, as the special debility or temporary illness on the part of the mother (expectant or nursing), or of the children. It is in such cases as these that the Child Welfare Department should very properly assist with just the extra nourishment necessary to keep them in, or restore them to, health. If relieving agencies would grant part of their assistance in kind (*i.e.*—dinner or milk vouchers), instead of all in actual cash—a sufficient ration for the maintenance of the health of mothers and children up to five years—in suitable cases extra nourishment could be supplied by the Child Welfare Department on the production of the relief voucher. Such a system would obviate the present tendency of Child Welfare Schemes being wrongly looked upon as relieving agencies ; it would discourage persons coming to the clinics in the hope of receiving benefits other than advice as to the care of their infants, and bring back to the forefront the real object and aim of child welfare work—namely, the education of mothers, who seek it and require it, in the knowledge of personal hygiene and in the rearing and the rational feeding of their infants. This work the Health Visitors would have more time to devote to were they in some such way relieved of the necessity, as at present, of investigating and reporting upon the forms of application which have to be filled up and signed by each applicant.

Reference to the infant mortality rates for Edinburgh for many years past shows a constant yearly three-figure standard and it is only since the Child Welfare Scheme was started that a two-figure standard has been obtained. The infant mortality rate for Greater Edinburgh for the year 1921 was 96. For the four most congested wards, namely, George Square, St Giles, St Leonards and Canongate, the infant mortality rate was 120—that is 24 higher than for the rest of the City.

Causes of Death among Infants under One Year during 1921.

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 1 Year.
Smallpox	...	...	...	...	...	...	...	...	...	...
Chickenpox	...	...	...	...	...	...	...	...	...	...
Measles	...	...	1	...	1	...	3	8	13	25
Scarlet Fever	...	...	...	...	...	...	...	...	...	...
Whooping-cough	...	...	...	...	...	7	7	14	12	40
Diphtheria and Croup	...	...	...	1	1	2	...	...	6	9
Erysipelas	...	...	1	...	1	...	...	...	...	1
Tuberculous Meningitis	...	...	...	...	...	...	2	3	2	7
Abdominal Tuberculosis	...	...	1	...	1	2	2	...	4	9
Other Tuberculous Diseases	...	...	...	...	...	...	2	1	5	8
Meningitis (not Tuberculous)	...	...	...	1	1	2	5	2	2	12
Convulsions	2	1	2	1	6	1	2	7	6	22
Pneumonia (all Forms)	2	4	2	4	12	16	40	38	45	151
Bronchitis	...	1	3	3	7	22	19	4	7	59
Laryngitis	...	...	...	...	...	...	1	...	...	1
Diarrhœa and Enteritis	1	...	2	6	9	16	28	18	4	75
Other Digestive Diseases	...	...	...	3	3	4	10	1	4	22
Congenital Malformation	12	6	1	2	21	11	4	3	1	40
Premature Birth	143	16	8	9	176	5	1	..	1	183
Atrophy, Debility and Marasmus	28	8	4	7	47	19	15	4	...	85
Atelectasis	8	1	3	1	13	...	...	...	...	13
Injury at Birth	3	...	...	...	3	...	...	...	...	3
Suffocation, overlaying	1	..	1	1	3	4	..	..	..	7
Syphilis	4	3	...	1	8	7	2	9	...	26
Rickets	...	...	...	...	...	...	...	...	1	1
All other Causes	20	3	6	4	33	13	16	3	7	72
Total	224	43	35	44	346	131	159	115	120	871

Causes of Death among Illegitimate Children under Five Years during 1921.

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 under 5 Years.
Smallpox	...	...	..	..	...	...	...	...	...	...	...	...	...	...	...
Chickenpox	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	1	...	1	11	2	...	...	14
Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
Whooping-cough	...	...	...	.	...	...	1	2	2	5	1	2	...	...	8
Diphtheria and Croup	...	...	...	..	...	1	...	...	...	1	...	1	2	1	5
Erysipelas	...	...	..	...	...	...	...	..	..	...	.	...	.	...	...
Tuberculous Meningitis	...	...	...	...	...	...	...	..	...	...	1	...	1	..	2
Abdominal Tuberculosis	...	...	...	...	...	1	2	...	...	3	3	...	...	...	6
Other Tuberculous Diseases	...	...	...	...	...	...	2	...	...	2	...	...	1	...	3
Meningitis (not Tuberculous)	..	...	...	...	...	...	2	1	2	5	...	...	...	...	5
Convulsions	...	...	...	...	...	...	...	1	1	2	...	...	...	...	2
Pneumonia (all Forms)	1	...	...	...	1	4	9	5	7	26	13	...	1	1	41
Bronchitis	...	...	...	1	1	6	2	1	...	10	...	2	...	...	12
Laryngitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa and Enteritis	...	...	...	...	...	2	4	2	...	8	1	...	...	...	9
Other Digestive Diseases	...	...	...	1	1	1	...	...	...	2	...	1	...	..	3
Congenital Malformations	..	...	1	1	2	2	...	...	...	4	...	...	...	...	4
Premature Birth	15	1	1	1	18	...	1	...		19	...	...	...	...	19
Atrophy, Debility, and Marasmus	5	1	...	3	9	4	6	...	..	19	...	...	...	...	19
Atelectasis	1	...	2	...	3	...	...	...	...	3	..	...	...	...	3
Injury at Birth	1	...	...	...	1	...	...	...	...	1	...	...	...	...	1
Suffocation—Overlaying	...	...	1	...	1	...	...	...	...	1	...	...	...	...	1
Syphilis	1	2	...	1	4	1	...	7	...	12	...	...	.	..	12
Rickets	...	...	...	...	...	...	...	..	1	1	...	...	...	...	1
All other Causes	5	..	1	...	6	4	1	1	...	12	3	...	...	...	15
Total	29	4	6	8	47	26	30	21	13	137	33	8	7	2	18

The total number of deaths of children under the age of five years during the year was 1,283, and of these 1,096 were legitimate and 187 were illegitimate. The great majority of these deaths occurred before the children had reached the end of the first year. Thus, of 1,096 legitimate deaths, 734 or 67 per cent. died under one year, and 362 or 33 per cent. between the ages of one and five years. (In the previous year 77 per cent. died under one year.) Of the 187 illegitimate deaths in 1921, 137 or 73 per cent. occurred under one year, and 50 or 27 per cent. between one and five years. (In the previous year 89 per cent. died under one year.)

The total number of births (corrected) during the year was 9,028, made up as follows :—

Greater Edinburgh	Edinburgh	6,499
	Leith	2,105
	Suburban area	424
		9,028

Of the 9,028 births, 8,377 were legitimate and 651 or 7·2 per cent. were illegitimate. (In the previous year the percentage was 8·3.) The birth-rate for the year was 21·5 per thousand of the population. (In 1920 it was 24·7).

The percentage of deaths of legitimate infants under one year to the total legitimate births was 8·76, and the percentage of deaths of illegitimate infants under one year to the total illegitimate births was 21·04. The number of still births notified was 432 or 47·8 per 1000 live births.

The number of deaths of infants under one year was 871, and the following Table shows the deaths from Premature Birth, Pneumonia (all forms), Atrophy, Debility, and Marasmus. There has been a substantial reduction in the deaths from Atrophy, &c., as compared with 1920—the deaths of legitimate children showing a decrease of 2 per cent., and those of illegitimate children 5·5 per cent.

	Legitimate.		Illegitimate.		Total.	
	Number of Deaths.	Percentage Mortality.	Number of Deaths.	Percentage Mortality.	Number of Deaths.	Percentage Mortality.
Premature Birth . . .	164	22·34	19	13·86	183	21·01
Pneumonia (all forms) . .	125	17·03	26	18·97	151	17·33
Atrophy, Debility, and Marasmus	66	8·99	19	13·86	85	9·76

The following Table shows the number of deaths and the percentage mortality of legitimate and illegitimate infants under one year according to age periods. It will be seen from it that similar results to those noted in the last Annual Report are reproduced, namely that for the first four weeks, the percentage of legitimate deaths is in excess of the illegitimate percentage, but that for the period four weeks and under three months, the latter percentage becomes greater than the former. This appears to indicate that the chances of survival of the illegitimate infant are no more adversely affected by ante-natal conditions than are those of the legitimate infant, but that post-natal conditions are more inimicable to the illegitimate infant.

	Legitimate.		Illegitimate.	
	No.	Per Cent.	No.	Per Cent.
Under 1 week	195	26·57	29	21·16
1 and under 2 weeks . . .	40	5·45	4	2·92
2 and under 3 weeks . . .	27	3·68	6	4·38
3 and under 4 weeks . . .	37	5·04	8	5·84
Total under 4 weeks . .	299	40·74	47	34·30
4 weeks and under 3 months . .	104	14·17	26	18·98
3 and under 6 months . . .	129	17·57	30	21·90
6 and under 9 months . . .	95	12·94	21	15·33
9 and under 12 months . . .	107	14·58	13	9·49
Total under 12 months . .	734	100·00	137	100·00

The number of illegitimate children, up to five years, who died in Institutions is shown in the following Table.

City Hospital - - - -	18
Sick Children's Hospital - - -	19
Deaconess Hospital - - - -	2
Royal Maternity Hospital - - -	13
The Hospice - - - - -	2
Edinburgh Women's Hospital - -	1
Infant Homes - - - -	1
Craiglockhart Poorhouse - - -	27
Seafield Poorhouse - - - -	1
Chalmers Hospital - - - -	1
Royal Infirmary - - - -	1
Total - - -	86

The following Table shows the number of illegitimate children, up to five years, who died in each of the Wards of the City.

Calton - - - - -	13	George Square - - - -	11
Canongate - - - -	15	St Leonard's - - - -	14
Newington - - - -	4	Portobello - - - -	7
Morningside - - - -	5	South Leith - - - -	9
Merchiston - - - -	4	North Leith - - - -	16
Gorgie - - - - -	3	West Leith - - - -	3
Haymarket - - - -	2	Central Leith - - -	4
St Bernard's - - - -	5	Liberton - - - -	0
Broughton - - - -	2	Colinton - - - -	1
St Stephen's - - - -	8	Corstorphine and Cramond - -	3
St Andrew's - - - -	6	Institutions (not allocated in Wards) -	17
St Giles - - - -	25		
Dalry - - - - -	10	Total - -	187

The following Table gives the detailed figures with regard to the Ante-natal Clinics.

Centre.	Number of Clinics held.	Attendances.		
		New Cases.	Old Cases.	Total.
Cowgate	97	458	401	859
Gorgie	46	13	27	40
Torphichen Street	50	32	43	75
High Street	51	142	104	246
Marshall Street	41	57	52	109
Royal Maternity Hospital	208	816	1,582	2,398
Windsor Street	49	25	71	96
Leith	53	230	196	426
Stockbridge	39	41	37	78
Total	634	1,814	2,513	4,327

Preventive Clinics.—The following Table shows the number of Preventive Clinics held at the various centres, with the number of attendances at each.

Centre.	Number of Clinics held.	New Cases.			Total Attendances.		
		Under 1 year.	Over 1 year.	Total.	Under 1 year.	Over 1 year.	Total.
Canongate	97	163	14	177	1,976	990	2,966
Gorgie	93	142	36	178	1,370	888	2,258
Torphichen Street	99	223	22	245	1,651	913	2,564
High Street	103	113	45	158	1,603	1,095	2,698
Pleasance	91	134	53	187	1,812	1,108	2,920
Windsor Street	123	300	61	361	2,757	1,561	4,318
Stockbridge	51	137	30	167	1,157	774	1,931
Marshall Street	49	183	113	296	1,102	618	1,720
Total	706	1,395	374	1,769	13,428	7,947	21,375

Curative Clinics.—The following Table shows the number of Curative Clinics held at the various Centres and Dispensaries, with the number of total attendances at each.

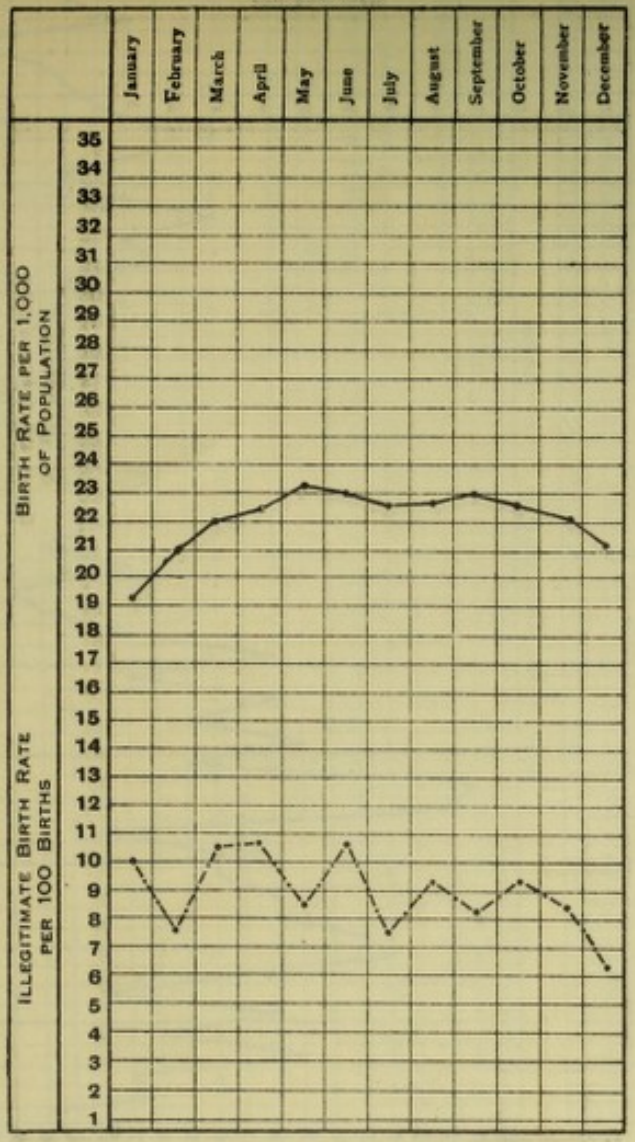
Centre.	Number of Clinics held.	Attendances.		
		Old Cases.	New Cases.	Total.
Canongate	50	513	331	844
*Cowgate	98	1,944	755	2,699
Gorgie	50	528	182	710
*Torphichen Street	50	145	145	290
High Street	50	83	145	228
*Marshall Street	44	265	204	469
Portobello	100	1,537	204	1,741
*Richmond Street	45	1,598	416	2,014
*Riego Street	52	2,400	334	2,734
Stockbridge	49	311	285	596
Windsor Street	49	266	245	511
Leith	201	2,115	1,914	4,029
Total	838	11,705	5,160	16,865

The Centres marked with an asterisk are Dispensaries which, with the exception of Richmond Street, are subsidised by the Corporation, the clinics being conducted by Doctors on the regular staff of these Dispensaries.

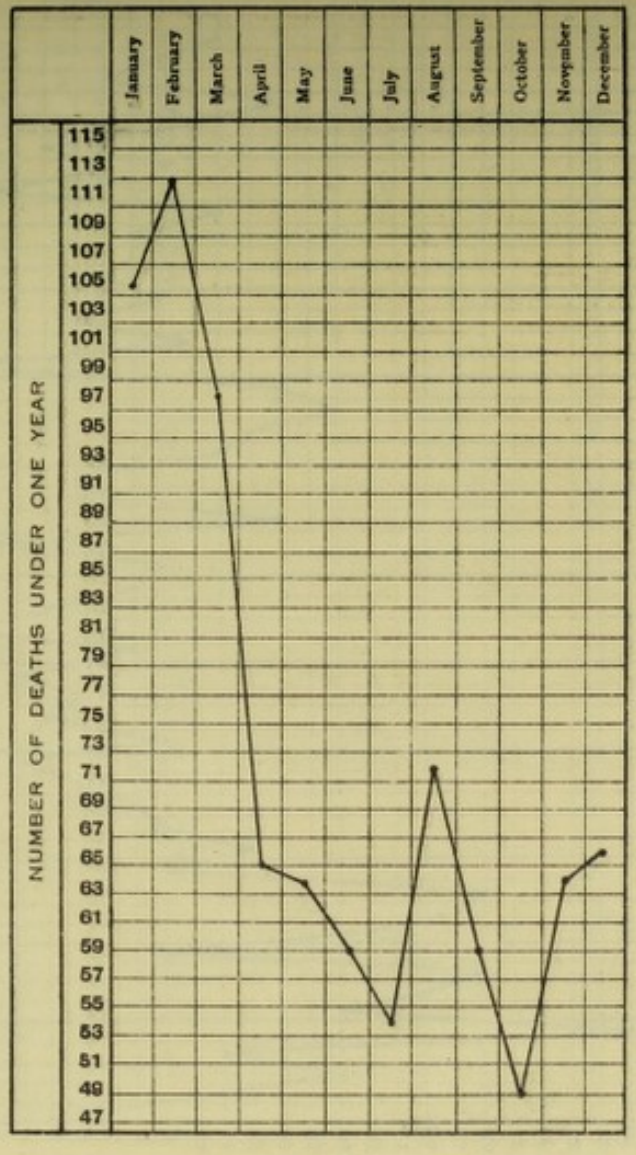
An exceedingly useful branch of voluntary work has been performed by the ladies who have assisted at these clinics—both in the Edinburgh and Leith areas—and I desire to express to them my high appreciation of their services.

Birth Rate per 1,000 of Population.

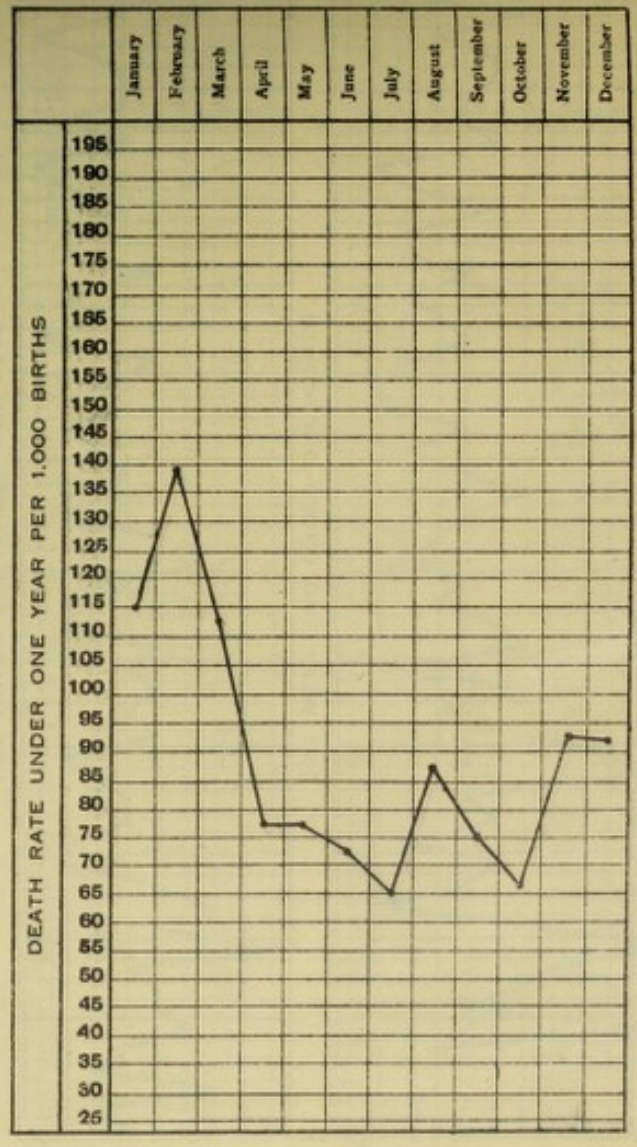
(Uncorrected)



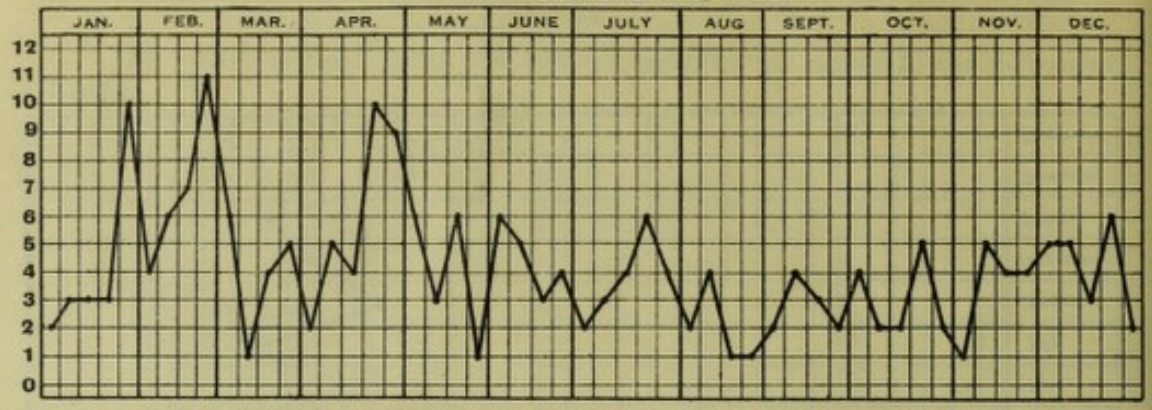
Deaths under One Year



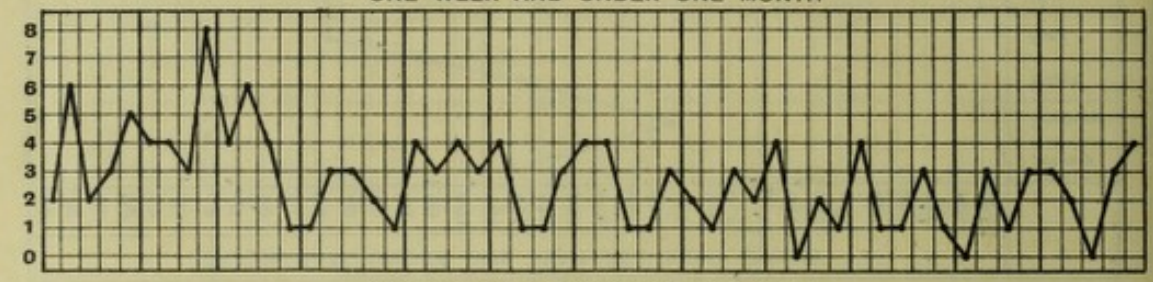
Infantile Mortality Rate



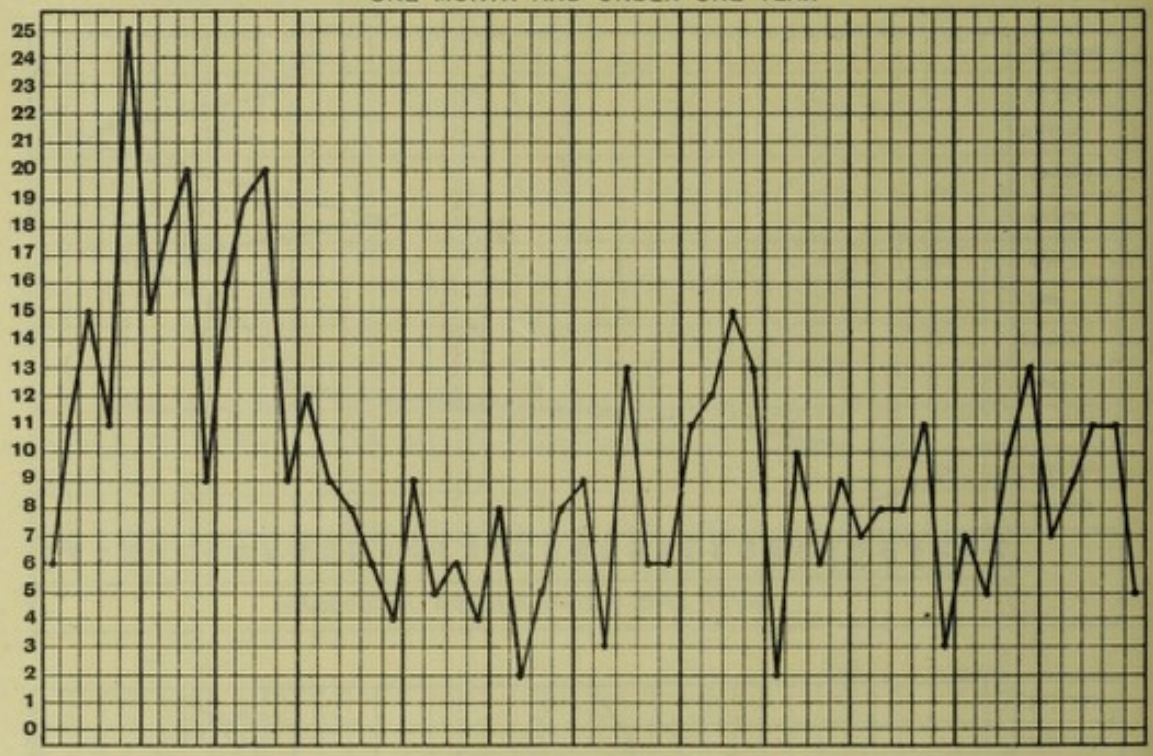
DEATHS UNDER ONE WEEK–1921



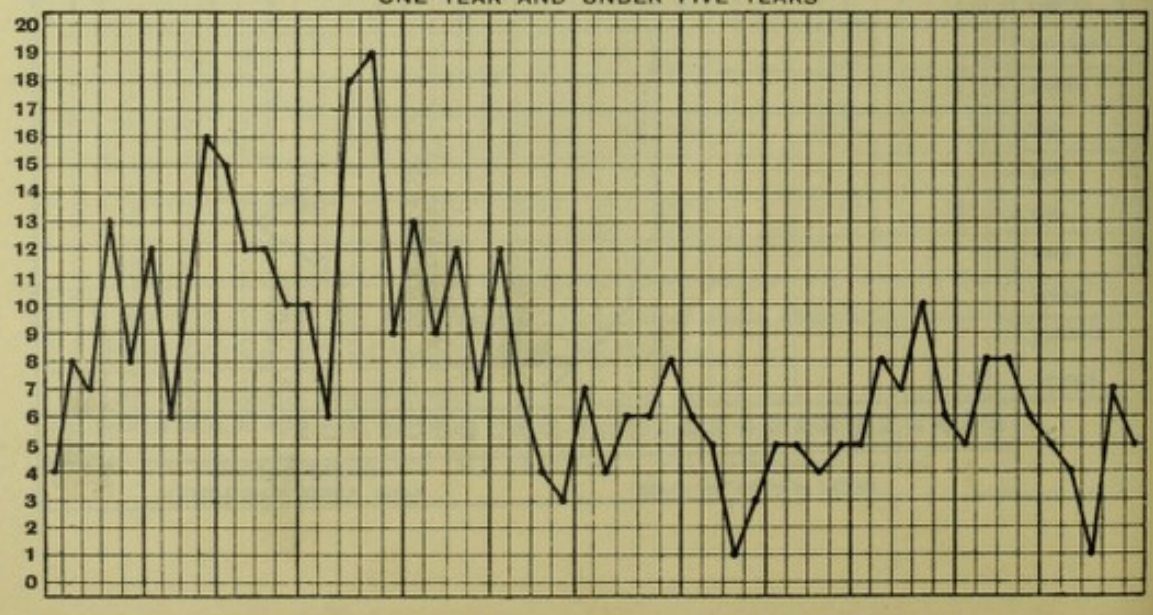
ONE WEEK AND UNDER ONE MONTH



ONE MONTH AND UNDER ONE YEAR



ONE YEAR AND UNDER FIVE YEARS



Health Visitors.—The official Health Visitors, during the year, paid 7,323 first visits and 61,914 subsequent visits, while 842 special visits were paid to expectant mothers. The Department is fortunate in having an experienced staff of Health Visitors, whose interest in their work is very real, and whose devotion to their duties is most admirable.

The Voluntary Health Visitors, who issue a separate Report of their own giving details of their work, undertook the fortnightly visitation of 2,645 individual cases, and referred back to the Department, for special reasons, 33 of these. I am grateful to these ladies for the time they have spared out of their leisure hours for this work. Especially useful has been the help received from those visitors who are also parish sisters.

The members of the Voluntary Committee of the Toddlers' Play Centres have directed the work of their six play centres with undiminished enthusiasm. The work carried on by the various Superintendents is a splendid piece of Child Welfare Work, and the benefit to the children is incalculable.

Child Gardens.—These institutions—four in number—are subsidised by the Corporation, and do useful work. The general health of the children attending shows an appreciable improvement upon that of last year.

Day Nurseries.—The following Table shows the attendance of children during the year :—

Day Nursery.	Attendances—Infants.	Attendances—Children.	Total Attendances.
Danube Street . . .	1,884	2,695	4,579
Dumbiedykes Road . .	3,114	3,564	6,678
Grove Street	1,581	2,018	3,599
South Fort Street, Leith .	1,408	3,770	5,178
	7,987	12,047	20,034

Children's Homes.—The total admissions to Gogarburn House, which is restricted to children between two and five years of age, was 187 ; but, in addition, there were resident in the Home, on the 1st January 1921, 43 children, thus making a total of 230 children for the year.

Victoria Park Home, which was opened in September for the reception of infants up to two years of age, had 50 admissions for the short period to the end of the year. All benefited in their general condition from the homely surroundings and kindly nursing which they received at the hands of the staff.

The Salvation Army Home for mothers with their first illegitimate babies, which is subsidised by the Corporation, has carried on its work during the year with undiminished success.

The number of cases recommended to Duddingston Home, which is under the control of the Edinburgh Medical Missionary Society, was as follows :—

Mothers (with children)	24	
Mothers (without children)	4	
	—	28
Infants	22	
Toddlers	9	
	—	31
		—
Total,		59
		—

Ophthalmia Neonatorum.—During the year the number of cases of Ophthalmia Neonatorum notified was 61. One of these was imported from another district; of the rest, some were under the care of private family doctors. The following facts bear upon the cases where particulars could be secured. According to information received, the interval in days between the birth and the onset of the disease was :—

Days .	1	2	3	4	5	6	7	8	9	10	11	12	13	27	3 Months	7 Months	10 Months	Total
Cases .	11	6	5	6	6	1	5	3	4	2	1	1	1	1	1	1	1	56

The confinement was attended by :—

A Doctor and Nurse in	31 cases.
A Doctor and Midwife in	4 cases.
A Doctor and Grandmother in	2 cases.
A Doctor and Neighbour in	1 case.
Nurses from Hospital in	11 cases.
Midwives in	5 cases.
In Hospital	7 cases.—Total, 61 cases.

Treatment was given :—

At Home in	30 cases.
At Home and at Welfare Centres in	12 cases.
At Home and Royal Infirmary in	9 cases.
At Hospital (out-patients)	9 cases.
No particulars	1 case.—Total, 61 cases.

Hospital treatment was given :—

In Royal Infirmary	3 cases.
In City Hospital	3 cases.
In Bruntsfield Hospital	2 cases.
In Craiglockhart Poorhouse	2 cases.
In Seafield Hospital	1 case.—Total, 11 cases.

Five women attended the Out Patient Department of the V.D. Clinics.

Result.—The eyes cleared up in 55 cases, in one case the right eye was damaged, and three children lost the sight of one eye. (No particulars in two cases.)

A Queen's Nurse or a Royal Maternity Nurse carried out treatment at home, and the Health Visitors paid 282 visits.

In 2 cases previous children had been affected by Ophthalmia Neonatorum.

To all workers—both official and voluntary—who have in various ways assisted me in the work of the Child Welfare Department, I extend my sincere thanks, and to Miss Turnbull, who has proved herself an ideal Lady Superintendent of Health Visitors, I cannot adequately express my gratitude for her constant loyalty and help to me in carrying out my duties as Medical Officer of the Child Welfare Department.

I have the honour to remain,

Your obedient Servant,

T. Y. FINLAY.

INFECTIOUS DISEASES.

The diseases dealt with under this heading include :—

(1) **Notifiable Diseases**, *i.e.*, those which are notifiable in terms of the Infectious Diseases Notification Act, 1889, and Orders which have from time to time been made by the Scottish Board of Health, and which are enumerated in the Table below ; and

(2) **Non-Notifiable Diseases**, in regard to which no particulars as to incidence are available, *e.g.*, Measles, Whooping-cough, Mumps, &c.

Chickenpox, which was added to the list of notifiable diseases in May 1920 ceased to be compulsorily notifiable from October 1921 in accordance with instructions from the Scottish Board of Health. The following Table contains particulars of the 5,952 cases of infectious disease which were intimated to the Public Health Department during the year :—

Disease.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	..	...	...	...	...	...
Diphtheria and Membranous Croup	110	108	111	63	89	82	83	64	57	71	65	88	991
Erysipelas	40	37	37	28	25	22	38	28	29	22	28	29	363
Scarlet Fever	207	169	126	120	103	104	529	166	140	160	163	176	2,163
Typhus	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhoid Fever	5	...	1	...	...	1	...	1	...	...	...	1	9
Relapsing Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever	...	..	...	...	...	...	1	...	...	...	...	...	1
Puerperal Fever	2	...	4	4	5	2	6	3	4	3	1	2	36
Plague	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Fever	1	1	2	...	1	...	...	1	1	...	...	...	7
Chickenpox	78	55	62	40	87	80	63	17	23	...	...	...	505
Acute Anterior Poliomyelitis	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculosis, Pulmonary	77	79	85	76	79	69	63	50	43	74	53	69	817
Tuberculosis, other forms	46	35	70	55	56	63	30	40	29	45	33	35	537
Ophthalmia Neonatorum	4	5	4	3	6	6	4	6	6	7	4	6	61
Malaria	3	5	6	7	6	6	7	...	3	6	1	5	55
Dysentry	...	1	...	...	1	...	...	...	1	1	1	2	7
Trench Fever	.	...	...	...	...	...	...	...	...	...	...	..	...
Acute Primary Pneumonia	31	44	21	16	20	16	22	8	12	28	38	28	284
Acute Influenzal Pneumonia	22	26	19	10	4	3	...	2	2	3	10	15	116
Total	626	565	548	422	482	454	846	386	350	420	397	456	5,952

The following Table shows the number of patients who have passed through the various Hospitals under the control of the Public Health Department during 1921. The Table includes patients admitted by arrangement with other local authorities, and patients who may have come to a City institution for treatment and who have then been found to be suffering from an infectious disease contracted previous to their leaving home. In such cases intimation is made to the Medical Officer of the district concerned, and no record of them appears in the returns applicable to the City.

Disease.	Remaining 31st December 1920			Year 1921.			Remained 31st December 1921.		
	Adults.	Children.	Total.	Admitted.	Discharged.	Died.	Adults.	Children.	Total.
City Hospital—									
Tuberculosis	156	18	174	412	384	111	61	30	91
Smallpox	...	...	...	...	...	...	...	...	...
Typhus	...	...	..	...	...	...	...	...	...
Enteric, Relapsing, and Continued Fever	3	2	5	7	10	1	...	1	1
Puerperal Fever	1	...	1	17	13	4	1	..	1
Diphtheria, Membranous Croup	51	94	145	908	905	63	19	66	85
Scarlet Fever	80	175	255	1983	1958	41	30	209	239
Erysipelas	11	3	14	163	153	14	9	1	10
Cerebro-Spinal Fever	...	1	1	8	4	5	...	...	...
Measles	2	22	24	261	251	29	1	4	5
Whooping-cough	...	2	2	141	98	32	...	13	13
Mumps	1	...	1	38	38	...	...	1	1
Chickenpox	...	1	1	40	36	...	1	4	5
Ophthalmia Neonatorum	...	1	1	4	5	...	...	...	...
Other Diseases and observation	13	10	23	581	544	48	8	4	12
	318	329	647	4563	4399	348	130	333	463
Pilton Hospital—									
Scarlet Fever	7	50	57	81	137	1	...	...	...
Diphtheria	3	23	26	45	68	3	...	...	...
Phthisis	...	...	...	*262	130	41	87	4	91
Portobello Hospital—									
Scarlet Fever	...	7	7	45	47	1	...	4	4
Royal Victoria Hospital—									
Phthisis	36	16	52	98	93	...	46	11	57
Polton Farm Colony—									
Phthisis	7	...	7	23	16	...	14	...	14
Total,	371	425	796	5117	4890	394	277	352	629

* Includes 72 Patients transferred from City Hospital.

The Table on page 23 gives details as to the number of cases of infectious disease occurring in the various wards of the City throughout the year, and the deaths resulting therefrom. It also shows the case-rate and death-rate per 1,000 of population for each of the diseases.

On page 24 the incidence of infectious disease in the City during the last forty-two years is shown in tabular form, while the Table on page 25 gives particulars regarding the percentage of cases removed to hospital. In this last Table the figures relating to the hospital treatment of Scarlet Fever and Diphtheria are particularly noteworthy. Over 97 per cent. of the Scarlet Fever cases, and more than 96 per cent. of the Diphtheria cases received hospital treatment during 1921, and there can be no doubt that the isolation in hospital of so many cases did much to minimise the spread of infection, besides being of very great value to the patients themselves and to the relatives who were relieved of the responsibility of nursing at home.

No.	Wards.	Smallpox.		Typhus.		Enteric.		Puerperal.		Diphtheria.		Scarlet.		Erysipelas.		Cerebro-Spinal Fever.		Measles.		Whooping-Cough.		Total.	
		Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.	Notifications.	Deaths.
1	Calton	...	...	...	...	2	...	2	2	46	3	140	2	14	...	...	...		1		6	204	14
2	Canongate	...	...	...	...	...	...	2	2	34	6	95	...	16	...	...	...		5		11	147	24
3	Newington	...	...	...	...	...	...	...	...	40	...	49	3	10	1	...	...		3		1	99	8
4	Morningside	...	...	...	...	1	...	1	...	49	...	73	1	11	1	...	...		...		...	135	2
5	Merchiston	...	...	...	...	1	...	...	...	51	1	64	3	5	1	...	...		...		3	121	8
6	Gorgie	...	...	...	...	...	...	1	1	60	6	66	2	22	...	...	...		2		1	149	12
7	Haymarket	...	...	...	...	...	...	...	...	23	3	36	...	3	...	...	...		...		...	62	3
8	St Bernard's	...	...	...	...	...	...	1	...	38	...	57	...	20	1	1	1		1		3	117	6
9	Broughton	...	...	...	...	...	...	4	3	39	4	84	...	13	...	...	..		...		1	140	8
10	St Stephen's	...	...	...	...	...	...	...	...	31	3	68	...	5	...	...	...		...		2	104	5
11	St Andrew's	...	...	...	...	...	...	2	...	16	1	31	2	11	1	...	...		1		3	60	8
12	St Giles	...	...	...	...	...	...	4	1	42	7	58	3	26	2	1	1		9		11	131	34
13	Dalry	...	...	...	...	...	...	4	2	56	5	60	3	15	...	...	...		1		10	135	21
14	George Square	...	...	...	...	...	...	2	1	57	5	45	1	16	1	2	1		6		3	122	18
15	St Leonard's	...	...	..	...	...	...	...	...	56	5	67	1	18	2	...	...		7		8	141	23
16	Portobello	...	...	...	...	1	...	2	1	54	1	84	1	6	1	...	...		1		...	147	5
17	South Leith	...	...	...	...	...	...	...	...	78	4	564	8	46	2	...	...		6		8	688	28
18	North Leith	...	...	...	...	...	...	1	...	48	5	136	3	20	2	1	1		19		4	206	34
19	West Leith	...	...	...	...	...	...	1	...	47	4	102	1	16	1	...	..		2		...	166	8
20	Central Leith	...	...	...	...	...	...	...	...	25	4	139	3	17	1	...	...		5		3	181	16
21	Liberton	...	...	...	...	1	...	1	1	24	3	46	...	8	1	...	...		...		1	80	6
22	Colinton	...	...	...	...	...	...	...	...	6	...	17	2	8	2	...	...		...		...	31	4
23	Corstorphine and Cramond	...	...	...	...	...	..	2	1	19	...	21	...	5	...	...	...		1		1	47	3
	Military Quarters	...	...	...	...	...	...	...	...	2	...	1	...	3	...	1	...		...		...	7	...
	Public Institutions (staff and country patients)	...	...	...	...	3	...	6	...	50	5	60	3	29	2	1	...		7		...	149	17
	Total	...	...	...	...	9	...	36	15	991	75	2163	42	363	22	7	4	...	77	...	80	3569	315
	Case- and Death-rates (per 1,000 population) for year 1921	...	...	...	...	·02	·00	·08	·04	2·36	·18	5·14	·10	·86	·05	·02	·01	...	·18	...	·19	8·49	·75

Notification not compulsory.

Notification not compulsory.

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

Table showing the number of Notifications and Deaths, together with Death-Rate per cent. of Cases of each Disease, during forty-two years, 1880-1921.

Year.	Smallpox.			Typhus Fever.			Enteric Fever.			Puerperal Fever.			Diphtheria, Membranous Croup.			Scarlet Fever.			Erysipelas.			Cerebro-Spinal Fever.		
	Cases.	Deaths.	Percentage of Deaths to Cases.	Cases.	Deaths.	Percentage of Deaths to Cases.	Cases.	Deaths.	Percentage of Deaths to Cases.	Cases.	Deaths.	Percentage of Deaths to Cases.	Cases.	Deaths.	Percentage of Deaths to Cases.	Cases.	Deaths.	Percentage of Deaths to Cases.	Cases.	Deaths.	Percentage of Deaths to Cases.	Cases.	Deaths.	Percentage of Deaths to Cases.
1880	5	...	...	18	7	39·0	336	49	14·5	...	...	...	172	35	20·3	1897	338	17·8	...	...	...	...	...	...
1881	4	...	...	23	14	60·8	413	47	11·3	...	...	...	171	37	21·6	1904	257	13·4	...	...	...	...	...	...
1882	1	1	100·0	45	10	22·2	639	70	10·9	...	...	...	217	33	15·2	2161	88	4·0	...	...	...	...	...	...
1883	...	...	...	50	16	32·0	346	42	12·1	...	...	...	214	34	15·8	1817	85	4·6	...	...	...	...	...	...
1884	1	...	...	42	16	38·0	591	70	11·8	...	...	...	183	44	24·0	1423	72	5·1	...	...	...	...	...	...
1885	12	...	...	58	10	17·2	589	62	10·5	...	...	...	149	43	28·8	1087	28	2·5	...	...	...	...	...	...
1886	26	3	11·5	12	4	33·3	224	31	13·8	...	...	...	212	51	24·0	1306	42	3·2	...	...	...	...	...	...
1887	...	...	...	38	11	28·9	332	38	11·4	...	...	...	256	57	22·2	2587	145	5·5	...	...	...	...	...	...
1888	1	..	...	23	5	21·7	245	27	11·0	...	...	...	245	65	26·5	618	20	3·2	..	...	...	...	...	...
1889	...	...	...	46	9	19·5	320	32	10·0	...	...	...	354	98	27·1	1255	29	2·3	...	...	...	...	...	...
1890	...	...	..	7	1	14·3	500	44	8·8	...	...	...	361	85	23·5	1197	46	4·0	...	...	...	...	...	...
1891	...	...	...	1	...	...	445	42	9·4	...	...	...	207	48	23·1	979	49	5·0	...	...	...	...	...	...
1892	8	...	...	18	3	16·6	238	28	11·7	...	...	...	203	42	20·6	1856	69	3·7	...	...	...	...	...	...
1893	51	1	1·9	6	1	16·6	274	36	13·1	...	...	...	251	62	24·7	1629	49	3·0	..	...	...	...	...	...
1894	537	56	10·4	3	1	33·3	310	38	12·2	...	...	...	362	86	23·7	1821	65	3·5	...	...	...	...	...	...
1895	109	16	14·6	...	...	...	417	54	12·9	...	...	...	314	65	20·7	2832	65	2·2	...	...	...	...	...	...
1896	...	...	...	10	3	30·0	328	36	10·9	...	...	...	251	52	20·7	2185	48	2·1	...	...	...	...	...	...
1897	...	...	...	3	1	33·3	254	24	9·4	...	...	...	214	44	20·5	2597	93	3·5	...	...	...	...	...	...
1898	7	...	...	79	9	11·2	241	27	11·2	...	...	...	269	38	14·1	2387	72	3·0	...	...	...	...	...	...
1899	...	...	...	12	3	25·0	289	39	13·4	...	...	...	279	28	10·0	1185	50	4·2	...	...	...	...	...	...
1900	5	...	...	35	3	8·5	249	25	10·0	...	...	...	483	52	10·0	991	27	2·7	...	...	...	...	...	...
1901	6	1	16·6	14	2	14·3	215	30	13·9	...	...	..	542	58	10·7	892	26	2·9	...	...	...	...	...	...
1902	7	...	...	10	1	10·0	192	27	14·0	26	18	69·2	408	32	7·8	812	30	3·6	513	25	4·8	...	...	...
1903	5	1	20·0	1	...	...	237	22	9·2	7	3	42·8	575	59	10·2	1415	53	3·7	434	15	3·4	...	...	...
1904	168	15	8·9	6	...	...	196	22	11·2	14	11	78·5	752	63	8·3	1070	31	2·8	353	15	4·2	...	...	...
1905	2	...	...	1	1	100·0	210	20	9·5	11	9	81·8	674	61	9·0	832	15	1·8	291	25	8·6	...	...	...
1906	...	...	...	...	...	...	144	11	7·6	11	9	81·8	667	48	7·1	987	34	3·4	337	25	7·4	...	...	...
1907	...	...	...	1	...	...	103	11	10·6	19	10	52·6	635	32	5·0	1110	24	2·1	300	10	3·3	206	135	65·5
1908	20	...	...	...	...	...	68	6	8·8	13	3	23·0	389	16	4·1	1993	32	1·6	260	11	4·2	53	23	43·4
*1909	2	...	...	...	...	...	39	5	12·8	23	12	52·1	423	38	8·9	1522	50	3·2	207	10	4·8	28	16	57·1
1910	...	...	...	...	...	...	43	6	13·9	19	7	36·8	511	60	11·7	1512	42	2·7	209	13	6·2	7	4	57·0
1911	...	...	...	...	...	...	31	3	9·7	15	7	46·6	605	49	8·0	1075	24	2·2	241	12	4·9	3	3	100·0
1912	...	...	...	...	...	..	29	4	13·7	8	5	62·5	426	29	6·8	893	10	1·1	239	10	4·1	4	4	100·0
1913	...	...	...	...	...	...	45	10	22·2	18	11	61·1	448	35	7·8	1675	43	2·5	223	6	2·6	3	2	66·6
1914	...	...	...	...	...	...	63	12	19·0	17	10	58·8	902	96	10·6	2270	36	1·5	278	11	3·9	6	2	33·3
1915	...	...	...	...	...	...	21	3	14·3	16	8	50·0	900	107	11·8	1748	58	3·3	280	10	3·5	72	44	61·1
1916	...	...	...	...	...	...	30	2	6·6	19	4	21·0	823	82	9·9	1411	31	2·1	171	4	2·3	42	23	54·7
1917	...	...	...	..	...	...	6	2	33·3	22	12	54·5	584	65	11·1	748	16	2·1	160	12	7·5	45	18	40·0
1918	...	...	...	...	...	...	14	1	7·1	10	5	50·0	627	60	9·5	852	26	3·0	126	5	3·9	30	11	36·6
1919	...	...	...	...	...	...	6	...	...	19	9	47·3	734	79	10·7	1459	39	2·6	177	10	5·6	15	7	46·6
1920	9	...	...	...	...	..	12	2	16·6	30	15	50·0	1014	63	6·2	1420	14	0·9	275	20	7·2	14	10	71·4
†1921	...	...	...	...	...	...	9	...	...	36	15	41·7	991	73	7·3	2163	42	1·9	363	22	6·0	7	4	57·1

Became notifiable in 1902.

Became notifiable in 1902.

Became notifiable in 1907.

Table showing the number of Cases of the undermentioned diseases admitted to Hospital since the year 1890 and the percentage of admissions to total notifications in each year.

Years.	Smallpox.		Typhus Fever.		Enteric Fever.		Puerperal Fever.		Diphtheria, Membranous Croup.		Scarlet Fever.		Erysipelas.	
	Admissions.	Rate per cent. to Total Cases Notified.	Admissions.	Rate per cent. to Total Cases Notified.	Admissions.	Rate per cent. to Total Cases Notified.	Admissions.	Rate per cent. to Total Cases Notified.	Admissions.	Rate per cent. to Total Cases Notified.	Admissions.	Rate per cent. to Total Cases Notified.	Admissions.	Rate per cent. to Total Cases Notified.
1890	...	...	9	100·00	241	48·02			122	29·59	480	40·10		
1891	...	...	1	100·00	227	51·01			82	39·61	433	44·12		
1892	8	100·00	16	88·88	115	48·31			66	32·51	862	46·44		
1893	51	100·00	5	83·33	144	52·55			85	33·86	780	47·88		
1894	533	99·25	3	100·00	176	56·77			122	33·70	958	52·60		
1895	109	100·00	...	...	288	69·06			146	46·49	1519	53·63		
1896	...	...	10	100·00	233	71·03	Not Notified		108	43·02	1381	63·20	Not Notified	
1897	...	...	3	100·00	175	68·89	until 1902.		109	50·93	1658	63·84	until 1902.	
1898	7	100·00	78	98·73	143	51·03			111	41·26	1350	56·55		
1899	...	...	11	91·66	207	71·62			136	48·74	816	68·86		
1900	5	100·00	35	100·00	181	72·69			309	63·97	676	68·21		
1901	6	100·00	14	100·00	166	76·85			364	67·15	601	67·37		
1902	7	100·00	10	100·00	153	79·68	5	19·23	297	72·79	605	74·50	207	40·35
1903	5	100·00	...	...	214	90·29	...	...	429	74·60	1187	83·88	154	35·48
1904	170	100·00	6	100·00	174	88·77	1	7·14	579	76·99	942	88·03	136	38·52
1905	2	100·00	1	100·00	179	85·23	4	36·36	581	86·20	740	88·82	126	43·29
1906	...	...	...	...	132	91·66	7	63·63	589	88·30	880	89·15	146	43·32
1907	...	...	1	100·00	91	88·34	12	63·15	546	85·98	1026	92·43	152	50·66
1908	17	85·00	...	...	61	89·70	9	69·23	338	86·88	1882	94·43	133	51·15
1909	2	100·00	...	...	35	90·00	14	60·86	371	87·70	1442	94·74	108	52·17
1910	...	...	...	...	39	90·69	11	57·89	476	93·15	1423	94·11	91	43·54
1911	...	...	...	...	29	93·55	8	53·33	556	91·90	1007	93·67	131	54·35
1912	...	...	...	...	27	93·10	4	50·00	396	92·95	848	94·96	132	55·23
1913	...	...	...	...	41	91·11	8	44·44	416	92·85	1612	96·23	108	48·43
1914	...	...	...	...	53	88·88	12	70·59	856	94·90	2206	97·18	146	52·50
1915	...	...	...	...	19	90·47	8	50·00	883	98·11	1659	94·90	144	51·42
1916	...	...	...	...	28	93·33	10	52·63	797	96·84	1383	98·01	57	33·33
1917	...	...	...	...	5	83·33	11	50·00	567	97·08	727	97·19	74	46·25
1918	...	...	...	...	11	78·57	6	60·00	606	96·65	841	98·70	69	54·76
1919	...	...	...	...	6	100·00	7	36·84	716	97·54	1435	98·35	75	42·37
1920	9	100·00	...	...	10	83·33	13	50·00	981	96·74	1382	97·32	152	55·27
† 1921	...	...	...	...	6	66·66	17	47·22	953	96·16	2103	97·22	163	44·90

† City Boundaries extended to include Leith and Suburban Area.

PHTHISIS.

The following Report has been prepared by Dr John Guy, Tuberculosis Officer :—

The total number of deaths which have occurred during the year from all forms of Tuberculous Disease is 564. Of these 381 were attributable to Pulmonary Tuberculosis, and 183 to the non-pulmonary forms of the disease. As the death-rate is always some indication of the extent of the disease, one looks forward with a

degree of interest to the conclusion of the year so as to ascertain, as far as can be done by the number of deaths, what progress has been made in the diminution of this scourge.

Last year I had to report on the phenomenally small number of 286 deaths from Pulmonary Tuberculosis, and this year the number, although slightly increased, is still relatively small in comparison with former years.

In the city, excluding for the moment the recent extension, there have been 296 deaths for the past year. This is 63 less than the average annual number of deaths for the last ten years. The number of deaths from the Pulmonary form of the disease in Leith amounts to 71 for the year, and in the recently annexed rural area to 14.

The following Table shows the annual number of deaths in Edinburgh and Leith for the past ten years :—

Year.	Edinburgh.	Leith.
1911	392	112
1912	406	83
1913	364	107
1914	379	88
1915	372	113
1916	356	91
1917	391	105
1918	321	101
1919	320	91
1920	286	93

Average for 10 years ... ... Edinburgh, 359 ... Leith, 98
Year 1921 ... ... Edinburgh, 296 ... Leith, 71

These figures are full of encouragement as showing the continuous decline of the disease.

The following Table shows the deaths from Tuberculosis in the City since the year 1900.

DEATHS FROM TUBERCULOSIS, 1900-1921.

YEAR.	Pulmonary Tuberculosis.			Other Tuberculous Diseases.			All Tuberculosis.
	Male.	Female.	Total.	Male.	Female.	Total.	
1900	302	246	548	141	129	270	818
1901	284	241	525	148	129	277	802
1902	262	215	477	120	95	215	692
1903	244	223	467	114	117	231	698
1904	223	185	408	121	125	246	654
1905	232	206	438	109	93	202	640
1906	193	180	373	108	110	218	591
1907	203	192	395	123	100	223	618
1908	197	198	395	123	92	215	610
1909	251	177	428	90	103	193	621
1910	223	166	389	82	83	165	554
1911	211	181	392	101	92	193	585
1912	226	180	406	93	87	180	586
1913	186	178	364	84	91	175	539
1914	213	166	379	89	101	190	569
1915	193	179	372	92	69	161	533
1916	198	158	356	81	82	163	519
1917	201	190	391	100	84	184	575
1918	141	180	321	74	89	163	484
1919	161	159	320	70	82	152	472
1920	161	125	286	69	62	131	417
*1921	187	194	381	96	87	183	564

* City Boundaries extended to include Leith and Suburban Area.

This Table shows distribution of the 381 deaths in the various Wards of the City, and the age periods in which death occurred :—

Wards.	Number of Deaths.	Rate per 1000.	Sex.		Age Periods.							
			Male.	Female.	Under 15 years.	15 and under 20 years.	20 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 years and upwards.
Calton	18	·8	11	7	...	4	3	5	3	2	...	1
Canongate	29	1·2	14	15	7	3	6	4	5	2	2	...
Newington	5	·2	1	4	...	...	1	...	3	...	...	1
Morningside	15	·7	6	9	...	2	1	4	3	3	...	2
Merchiston	8	·3	5	3	...	...	1	3	4	...	...	...
Gorgie	20	·9	12	8	...	1	5	3	7	2	...	2
Haymarket	6	·4	4	2	...	...	...	1	2	1	1	1
St Bernard's	16	1·1	9	7	...	2	5	1	1	6	...	1
Broughton	15	·9	6	9	1	...	1	6	2	4	1	...
St Stephen's	13	·7	5	8	...	2	...	3	3	2	3	...
St Andrew's	12	1·0	5	7	...	1	3	3	...	2	2	1
St Giles	33	1·5	19	14	3	...	5	7	7	5	3	3
Dalry	16	·7	12	4	1	4	4	1	2	3	1	...
George Square	30	1·3	15	15	1	...	6	8	3	7	2	3
St Leonard's	29	1·2	12	17	3	2	4	3	9	6	1	1
Portobello	14	·7	3	11	...	...	...	1	4	5	3	1
South Leith	23	·8	12	11	1	1	1	7	7	2	3	1
North Leith	21	1·0	11	10	1	...	1	8	4	6	1	...
West Leith	12	·6	4	8	1	...	1	1	3	4	1	1
Central Leith	14	·7	7	7	...	5	3	2	2	1	1	...
Liberton	9	·9	2	7	1	1	1	1	2	1	1	1
Colinton	2	·3	2	...	...	...	...	1	...	...	1	...
Corstorphine & Cramond	3	·3	2	1	...	1	...	...	1	1	...	...
Institutions (other than Sanatorium)	17	...	8	9	...	1	...	7	6	...	3	...
Military Quarters	1	...	...	1	...	...	...	1	...	...	...	...
Total—Extended Area	381	·9	187	194	20	30	52	81	83	65	30	20
Edinburgh Area	296	1·0	146	150	16	22	45	60	64	50	22	17
Leith Area	71	·9	35	36	3	6	6	19	16	13	6	2
Suburban Area	14	·5	6	8	1	2	1	2	3	2	2	1

The following Table shows the deaths in 1921 in relation to notification :—

Year.	Under 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.
1921	45	47	29	60	43	21	7	19	110

Attention is again directed to the numbers who are notified after death.

Notifications.—During the year there have been notified 817 cases of Pulmonary Tuberculosis, and 537 cases of non-pulmonary forms of the disease.

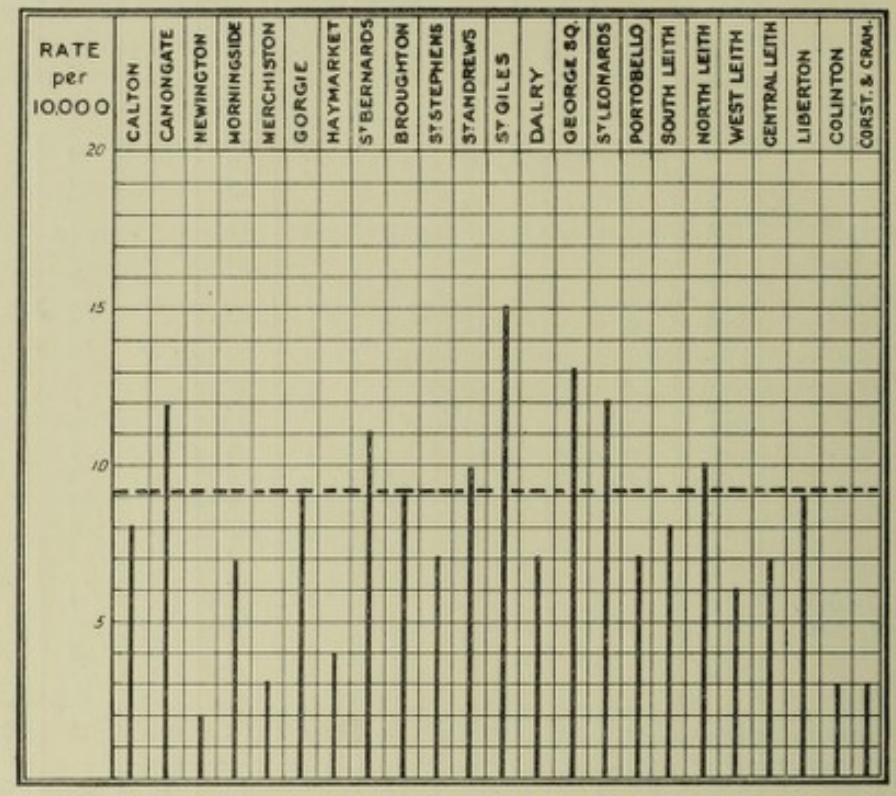
In 1907, the notification of the Pulmonary form of the disease became compulsory, and the following Table shows the actual number notified since that time :—

1907	651	or 2·0	per 1000
1908	713	„ 2·2	„ „
1909	744	„ 2·3	„ „
1910	763	„ 2·3	„ „
1911	1052	„ 3·3	„ „
1912	1255	„ 3·8	„ „
1913	1010	„ 3·1	„ „
1914	808	„ 2·4	„ „
1915	690	„ 2·1	„ „
1916	628	„ 1·9	„ „
1917	655	„ 1·9	„ „
1918	643	„ 1·9	„ „
1919	602	„ 1·7	„ „
1920	616	„ 1·8	„ „
1921	817	„ 1·9	„ „

The following line diagram shows in a graphic way the mortality experienced in each ward, and in this way a comparison can at once be made with the death-rate for the City as a whole.

DEATH-RATE—PULMONARY TUBERCULOSIS.

PER 10,000 OF POPULATION.



-----Death Rate for City.

The age distribution of the Pulmonary cases is set out in the following Table:—

	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 . .	5	14	12	41	45	59	46	42	43	43	32	16	15	15	9	437
Female .	7	21	20	44	41	45	49	36	32	28	20	20	8	5	4	380
Total .	12	35	32	85	86	104	95	78	75	71	52	36	23	20	13	817

The incidence of Phthisis in the several wards of the City is shown in the following Table:—

	Notifications.	Rate per 1000.		Notifications.	Rate per 1000.
Calton - -	53	2·3	St Leonard's - -	60	2.6
Canongate - -	50	2·2	Portobello - -	23	1·2
Newington - -	11	0·6	South Leith - -	78	2·8
Morningside - -	20	0·9	North Leith - -	79	3·7
Merchiston - -	20	0·9	West Leith - -	34	1·9
Gorgie - -	36	1·7	Central Leith -	46	3·2
Haymarket - -	13	0·9	Liberton - -	19	2·0
St Bernard's - -	18	1·2	Colinton - -	6	0·9
Broughton - -	17	0·9	Corstorphine and Cramond - -	7	0·8
St Stephen's - -	31	1·7	Institutions (other than Sanatorium) -	29	...
St Andrew's - -	21	1·9	Military Quarters -	1	...
St Giles - -	75	3·4			
Dalry - -	30	1·3			
George Square -	40	1·8			

Edinburgh Area, 540 = 1·7; Leith Area, 245 = 3·0; Suburban Area, 32 = 1·1.

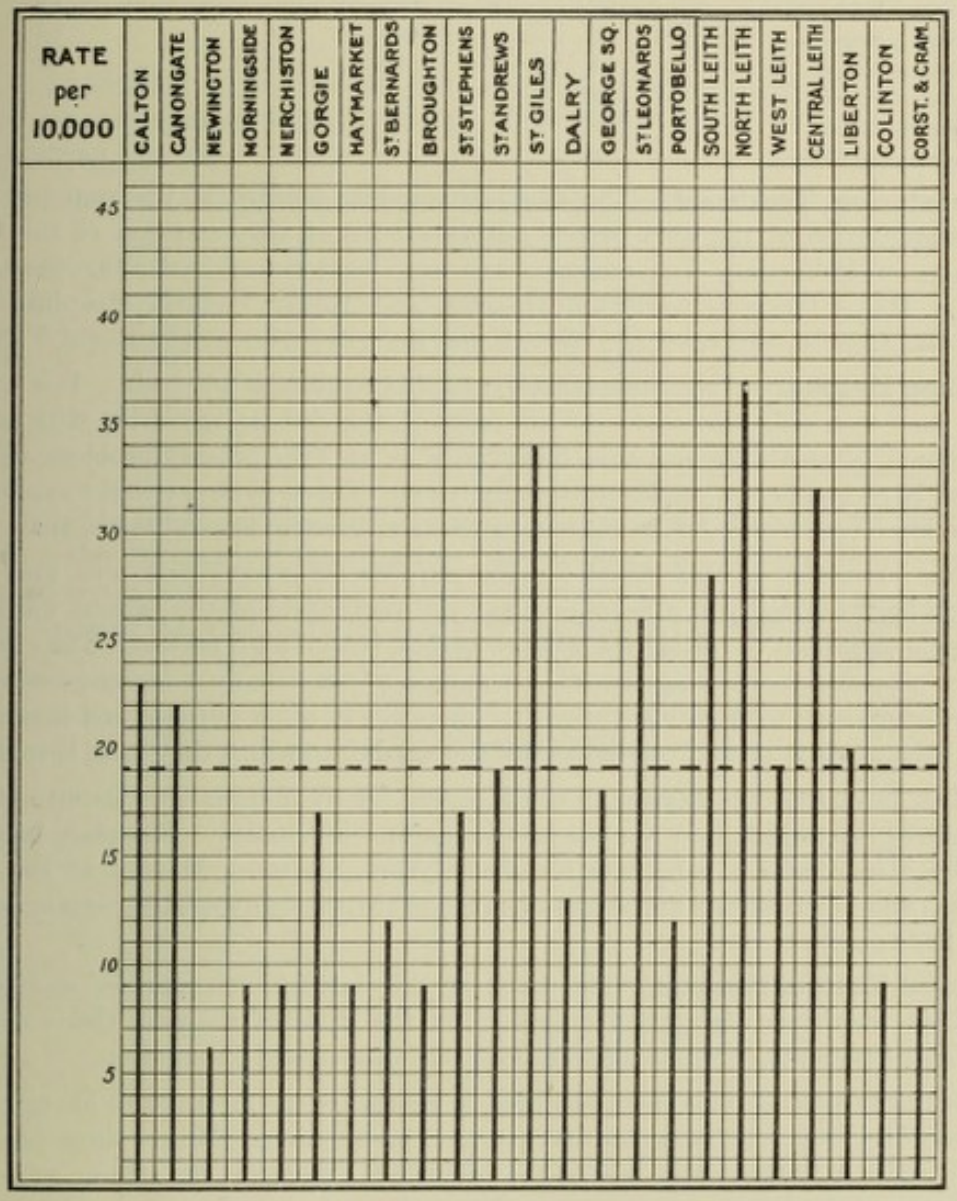
The type of home from which patients are notified is always of interest. The following Table shows the notifications in relation to the size of the house :—

1-roomed house.	2-roomed house.	3-roomed house.	4 rooms and over.	Lodging-Houses.	Institutions.	Total.
75	269	220	174	38	41	817

The following Chart has been prepared in order that comparison can be readily made as regards the incidence of Phthisis in the respective wards of the City, and shows again the well-known fact that the disease abounds chiefly where faulty and bad housing conditions prevail :—

PULMONARY TUBERCULOSIS.

Notifications per 10,000 of Population.



----- *Notification Rate for City.*

Non-Pulmonary Tuberculosis.—During the year there have been 537 cases of Non-Pulmonary Tuberculosis notified. The age distribution of these is as follows :—

	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. .	86	43	34	30	18	12	5	6	7	7	3	3	5	5	2	266
Female .	80	43	31	33	18	12	9	13	9	7	2	4	8	4	3	271
Total .	166	86	65	63	36	24	14	19	16	14	5	7	8	9	5	537

As an indication of the economic status of the persons notified, I show the distribution of the cases as regards housing :—

1 Room.	2 Rooms.	3 Rooms.	4 Rooms and over.	Institutions.	Total.
20	204	204	85	24	537

The various regions affected amongst those notified during 1921 are shown in the following Table :—

	Notifications.		Notifications.
Glands	193	Abdominal	109
Bones—(except Spine)	25	Meninges and Brain	68
Spine	34	Kidney	4
Joints—Hip	16	General	17
Joints—Knee	8	Others	39
Joints—Ankle	3	Skin	13
Joints—Wrist	3		
Joints—Elbow	3	Total	537
Joints—Shoulder	2		

Sanatorium Treatment.—The most outstanding feature of the year has been the reorganisation of the work carried out as a result of the extension of the City. The cases of Pulmonary Tuberculosis have now been transferred altogether from Colinton Mains Hospital to Pilton Hospital and Royal Victoria Hospital. At Pilton the more severe cases are treated, and the less severe at the Royal Victoria.

Pilton Hospital.—The accommodation at this hospital is 100 beds. It is a well-known fact that only the more serious cases of the disease are dealt with at this institution. Notwithstanding this, however, it is an ever-present problem to deal with the large numbers of applicants for admission. This is contrary to the experience of some local authorities, but it has been a problem here for several years now.

The institution is well fitted for the purpose for which it is now used, and although built originally as a fever hospital, the ventilation of the various wards, by the simple expedient of raising the window sashes, is well-nigh perfect. The example could be copied with advantage by other hospitals. Occasionally it becomes necessary to transfer patients to other institutions for operation or other purpose, and invariably, these patients speak of the "closeness" of the wards into which they have been taken.

Miss Edis, who was Matron in the Hospital for six months after its opening for its present purpose, left for a similar post in another institution. Her place has been filled by Miss Halliday, who was for many years Assistant Matron at the City Hospital, and to whose care and attention much of the smoothly working arrangements of the institution are due.

Royal Victoria Hospital.—The work at this institution continues unchanged. It is kept for the earlier type of disease. At the close of the year there were in residence 57 patients of whom 14 were men, 32 women, and 11 children.

In this institution also there has been a change in the matronship owing to the death of Miss Guy, who occupied that post for many years. This position has been filled by Miss M'Intyre, who has had a prolonged experience in similar work, and was matron of the Staffordshire County Sanatorium

Colinton Mains Hospital.—The outdoor shelters in Colinton Mains, formerly used for Pulmonary Tuberculosis, are now utilised for the treatment of Non-Pulmonary cases of the disease. The treatment is purely conservative, that is, non-operative, and consists in fixing the diseased joints, spines, &c., in immobile positions by means of plaster of Paris, splints, &c. The treatment is of a prolonged character, but satisfatory results are often achieved.

The accommodation at present sanctioned is 63 beds, and this limit has already been reached.

Dispensaries.—The work at the Royal Victoria Dispensary, Spittal Street, Edinburgh, which is open every afternoon from Monday to Friday, and also on Thursday evening, continues unabated.

Owing to the extension of the city boundary, it was found necessary to undertake the conduct of the Dispensary formerly used by the Leith authority at South Fort Street. The success of the work there may be in some manner gauged by the fact that it is open on three afternoons per week. The numbers attending during the year give an indication of the work done. The figures were as follows :—

	New Cases.		Old Cases.	
	Edinburgh.	Leith.	Edinburgh.	Leith.
Men . . .	573	85	4,789	957
Women . . .	544	114	2,648	594
Children . .	956	301	2,963	1,270
Total . .	2,073	500	10,400	2,821

The visitation of patients at their homes by doctors and nurses from the Dispensaries continues as before. The following Table shows the number of visits made during the year.

Number of visits paid by Doctors and Nurses, 1921.

	Insured.	Not Insured.	Total.		Insured.	Not Insured.	Total.
January .	730	832	1,562	August .	402	499	901
February .	617	713	1,330	September	607	602	1,209
March .	558	707	1,265	October .	640	758	1,398
April .	728	852	1,580	November	623	637	1,260
May . .	685	766	1,451	December .	718	726	1,444
June . .	751	714	1,465				
July . .	594	504	1,098		7,653	8,310	15,963

I wish to record my thanks to the nurses and assistant doctors for their untiring efforts in the discharge of their duties. It has been my privilege to receive during the year several letters from patients and friends of patients expressing their high appreciation of the work done for them by members of the outdoor staff.

I remain,

Yours faithfully,

JOHN GUY,

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

ENTERIC FEVER.

Nine cases of this disease were notified in the City during the year. In view of the extended area to which these statistics now refer, this must be considered very satisfactory. There were no deaths among the nine cases notified, the death from Enteric Fever, which is recorded in another Table, referring to the case of a Japanese sailor who was removed from a ship at Leith Docks, and whose illness was notified in December 1920.

The accompanying diagram is submitted with the object of showing the extraordinary decline which has taken place in the death-rate from Enteric Fever during the last thirty years. Although the diagram relates to the City prior to extension in 1920, the experience of the year under report would appear to indicate that the almost complete immunity from this disease, which the City has enjoyed, is likely to continue under the new conditions.

ENTERIC FEVER MORTALITY

In Edinburgh During the Last 30 Years.

Of the nine cases notified, six were removed to the City Hospital for treatment, and in regard to them, Dr Ker, the Resident Physician, reports as follows :—

Twenty-one patients were admitted to hospital as "Enteric Fever," or as "observation" for that disease. Only six, however, in reality suffered from it, and all of these made good recoveries. In five instances the causative micro-organism proved to be the Typhoid bacillus, the remaining case being one of "Paratyphoid B" infection. There was one case of Hæmorrhage, but otherwise no complications of importance.

The remaining fifteen patients suffered from a variety of diseases, among which were three examples of Tubercular Meningitis, two acute Lobar Pneumonias, and one Dysenteric Abscess of the Liver.

Table showing sex and age of Enteric Fever patients treated in hospital :—

		0-5 yrs.	5-10 yrs.	10-15 yrs.	15-20 yrs.	20-30 yrs.	30-40 yrs.	40-50 yrs.	Totals.
Recovered	Males	1	...	...	...	1	...	...	2
	Females	...	...	...	1	3	...	...	4
Died	Males	...	...	...	...	...	...	...	...
	Females	...	...	...	...	...	...	...	...
		1	...	...	1	4	...	...	6

DIPHTHERIA.

There were 991 cases of Diphtheria notified during the year, representing a case-rate of 2·3 per 1,000 of the population. As the figures relate to the newly-extended City, no accurate comparison with previous years is possible. It is, however, interesting to note that in 1920 there were 1,014 cases reported in the City, as it then existed. In view of this, the figure for 1921 would indicate that the disease has not at any time been present in epidemic form.

The case-mortality was equal to 7·5 per cent., and when it is borne in mind that in the 80's the mortality varied from 20 to 28 per cent., the extraordinary progress made in grappling with this disease will be readily realised. The low case-mortality now returned may in large measure be attributed to hospital treatment. In the past year 96·16 per cent. of the notified cases were removed to hospital, 908 being treated at Colinton Mains Hospital and 45 at East Pilton Hospital, which was taken over by the City under the Extension Act. In regard to the cases removed to Colinton Mains, Dr Ker reports as follows :—

In all, 1,210 patients were admitted to the wards, and of these 908 were finally diagnosed as true Diphtheria. Of the others, 203 were carriers, and 99 suffered from other conditions, chiefly various forms of Tonsillitis and Laryngitis. Sixty deaths, a percentage of 6·6, were due to Diphtheria, a figure about the same as that of the previous year and considerably lower than has been common recently.

The laryngeal cases, which numbered 85, were responsible for a large proportion of the deaths, and proved more fatal than those in which the naso-pharynx was involved. The latter numbered 123, and seemed to be hardly so severe as usual.

Paralysis occurred in 56 cases, the percentage incidence, 6·2, being slightly higher than that of the previous year. Rashes, the result of the serum injections occurred in 66, or 7·3 per cent., of the patients.

Broadly speaking, the chances of recovery diminished with each day that the first dose of antitoxin was delayed. Thus, of the patients admitted in the first 48 hours of their illness, only 3 per cent. died ; of those first injected on the third and fourth days of illness, 6·6 per cent. died ; of those who first came under treatment at a later date, 11·1 per cent. died. The sixth day showed the highest percentage mortality, 8 deaths occurring in 53 cases, a fatality rate of 15·9 per cent. Patients who are not sent to hospital until the seventh day or after are not, as a rule, likely to be suffering from a very severe attack, and the percentage tends to decline again, although it still remains about 10 per cent.

Table showing sex and age of Diphtheria Patients.

		0-1 yr.	1-2 yrs.	2-3 yrs.	3-4 yrs.	4-5 yrs.	5-10 yrs.	10-15 yrs.	15-20 yrs.	20-30 yrs.	30-40 yrs.	40-50 yrs.	50-60 yrs.	60-70 yrs.	70-80 yrs.	Totals.
Recovered	Males.	8	14	25	24	33	150	64	20	21	9	6	3	...	1	378
	Females.	4	12	18	25	24	153	71	52	64	31	10	5	...	1	470
Died	Males.	5	3	4	3	4	7	1	0	0	0	0	0	...	0	27
	Females.	2	11	6	4	2	5	0	1	1	0	0	0	...	1	33
Totals . .		19	40	53	56	63	315	136	73	86	40	16	8	...	3	908

Hospital death-rate, 6·6 per cent.

SCARLET FEVER.

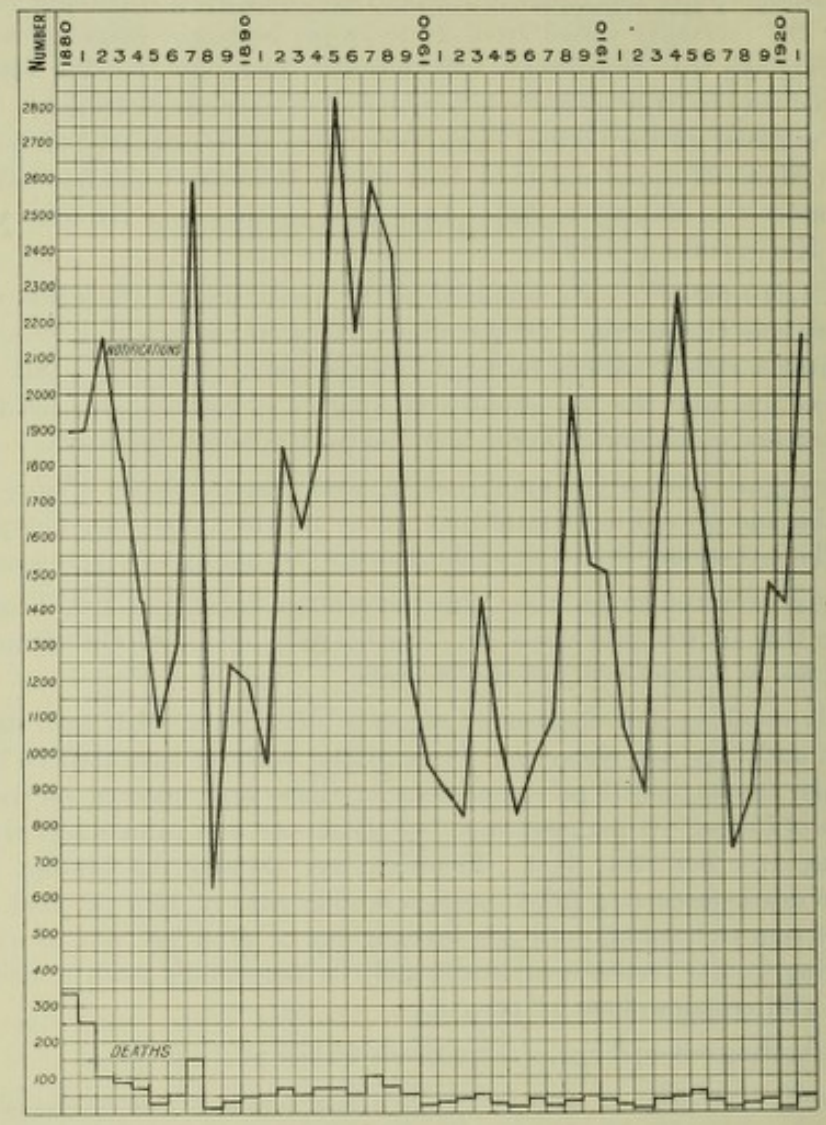
During the year, 2,162 cases of Scarlet Fever were notified, being equal to a case-rate of 5·14 per 1,000 of the population. The maximum number of notifications was received during the month of July, when no fewer than 529 cases were reported. The large majority of these were the result of an outbreak which occurred in Leith, a detailed account of which will be found in the introductory pages of this Report.

Notwithstanding the serious nature of this outbreak, it is gratifying to be able to report that, of the 2,163 cases notified during the year, only 42 proved fatal, being

equal to 1·9 per cent. of the cases. The following Chart is introduced to show that, even with the large number of cases accruing from the outbreak in Leith, the total notifications of Scarlet Fever for 1921 are considerably below the maximum reached in years prior to the extension of the City.

SCARLET FEVER.

NOTIFICATIONS AND DEATHS, 1880-1921.



In regard to Hospital treatment of Scarlet Fever, no fewer than 2,103 cases, or 97·2 per cent. of those notified, were removed to one or other of the City hospitals. Regarding the cases in Colinton Mains Hospital, Dr Ker reports as follows :—

In all, 2,113 cases (including those from other districts) were admitted to the Scarlet Fever wards, and of these 1,983 were recognised as Scarlet Fever. The death-rate was 2·1 per cent., or more than double the exceptionally low figure of last year.

The incidence of the complications was as follows : Arthritis was much more common than usual, affecting no less than 7·1 per cent. of the patients, as against the usual percentage of 4 or thereby. Nephritis, on the other hand, dropped to the astonishingly low figure of 1·3 per cent. Otorrhœa with a percentage incidence of 8·0, and Rhinitis of 12·9, occurred in about the usual average of the patients. Glandular enlargements were unduly common, an interesting fact being that the victims of the milk epidemic in the summer nearly all suffered from glands. Thirteen Mastoid operations were performed in the course of the year.

Table showing sex and age of Scarlet Fever patients in hospital.

		0-1 yr.	1-2 yrs.	2-3 yrs.	3-4 yrs.	4-5 yrs.	5-10 yrs.	10-15 yrs.	15-20 yrs.	20-30 yrs.	30-40 yrs.	40-50 yrs.	50-60 yrs.	60-70 yrs.	Totals.
Recovered	Males	4	32	38	53	43	327	190	66	70	25	10	2	...	860
	Females	5	36	39	69	49	380	240	92	102	53	11	4	1	1081
Died	Males	0	4	2	...	1	10	2	...	...	1	...	1	1	22
	Females	1	2	3	4	...	6	2	...	1	1	...	...	...	20
Totals		10	74	82	126	93	723	434	158	173	80	21	7	2	1983

Hospital mortality, 2·1 per cent.

ERYSIPELAS.

There were 363 notifications of Erysipelas during the year. Deaths from the disease numbered 23, representing a death-rate of ·05 per 1,000 of the population.

To the hospital wards 181 patients were admitted, of whom 163 were cases of Erysipelas, the remaining 18 suffering from Cellulitis, Erythema, Dermatitis and similar conditions. The fatality-rate of the Erysipelas patients was again much above the average, being 9·2 per cent. Forty-nine patients, or about one-third of the whole, had suffered from previous attacks. Only 7 relapses were observed, an unusually low figure. In 149 cases the inflammation primarily affected the face, ear, or scalp, in 10 the extremities, and in 4 the trunk.

Table showing age and sex of Erysipelas patients treated in hospital.

		Under 5 yrs.	5-10 yrs.	10-20 yrs.	20-30 yrs.	30-40 yrs.	40-50 yrs.	50-60 yrs.	60-70 yrs.	70— yrs.	Totals.
Recovered	Males	5	2	3	4	6	16	8	3	4	51
	Females	2	1	14	19	12	20	16	9	4	97
Died	Males	1	...	..	...	1	1	5	1	1	10
	Females	1	...	1	...	...	1	1	...	1	5
Totals		9	3	18	23	19	38	30	13	10	163

Hospital death-rate, 9·2 per cent.

MEASLES.

During the year there were 77 deaths from this disease, the death-rate being ·18 per 1,000 of the population. As notification in the case of Measles is not compulsory, it is impossible to state the incidence accurately. With a view to minimising the high death-rate from this disease, and also of preventing the spread of infection, it has been the practice of the Department to remove to hospital cases where complications have arisen, or where the home circumstances are such as to preclude the possibility of efficient nursing being provided, special attention being given to the case of children living in overcrowded districts. In all 298 patients (including those from other districts) were admitted to the Measles wards, and of these 261 proved to be suffering from Measles. Of these, 29 died, the mortality rate—11·1 per cent.—a not unsatisfactory figure when allowance is made for the type of case admitted. Broncho-Pneumonia was the most frequent cause of death. The complications may be tabulated as follows :—

Broncho-Pneumonia.	45	cases, or	17·3 per cent.
Otitis	27	,,	13·4 ,,
Adenitis	7	,,	2·6 ,,
Purulent Conjunctivitis	15	,,	5·7 ,,
Enteritis	17	,,	6·5 ,,

Table showing sex and age of Measles patients in hospital.

		0-1 yr.	1-2 yrs.	2-3 yrs.	3-4 yrs.	4-5 yrs.	5-10 yrs.	10-15 yrs.	15-20 yrs.	20-30 yrs.	30-40 yrs.	Over 40yrs	Totals.
Recovered	Males	11	23	19	16	10	15	3	2	6	1	1	107
	Females	10	27	17	15	8	14	2	4	23	4	1	125
Died	Males	8	7	0	1	1	...	...	...	...	...	...	17
	Females	2	8	1	1	...	...	...	...	...	...	...	12
Total		31	65	37	33	19	29	5	6	29	5	2	261

Hospital death-rate, 11·1 per cent.

RUBELLA.

Table showing sex and age of Rubella patients in hospital.

		Under 5 yrs.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	Totals.
Recovered	Males	10	14	5	6	3	2	0	40
	Females	7	11	6	7	16	5	1	53
Total		17	25	11	13	19	7	1	93

CEREBRO-SPINAL MENINGITIS.

Seven cases of this disease were notified in the City during the year, and all of them where removed to hospital for isolation and treatment. In addition, one case was admitted to the hospital from Berwickshire by arrangement with the authorities there. Three of the eight cases recovered. All the fatal cases had been ill more than a week prior to admission. There were five other cases of Meningitis under treatment, three being Tubercular and two Pneumococcal.

Table showing ages of Cerebro-spinal Meningitis patients treated in hospital.

		0-1 year.	1-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	Totals.
Recovered	Males	...	...	...	...	...	...	...	...	...	...
	Females	...	...	...	...	...	1	...	2	...	3
Died	Males	...	1	1	...	...	1	...	...	1	4
	Females	1	...	...	..	..	...	...	...		1
Total		1	1	1	...	...	2	...	2	1	8

CHICKENPOX.

As already stated, Chickenpox ceased to be notifiable as from October 1921, up to which time 505 cases had been intimated. In only 40 cases was removal to hospital found necessary.

Table showing sex and age of Chickenpox patients.

		0-1 year.	1-2 years.	2-3 years.	3-4 years.	4-5 years.	5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	Totals
Recovered	Males	1	6	0	2	1	6	1	1	1	...	19
	Females	1	3	2	2	2	6	1	2	2	...	21
Total		2	9	2	4	3	12	2	3	3	...	40

WHOOPING-COUGH.

Eighty deaths from this disease occurred in the extended area of the City during the year. In regard to hospital treatment, the same practice is followed as in the case of Measles, a judicious selection being made of cases of a serious type, and of those where the home circumstances are unfavourable.

Of 141 cases admitted to hospital, 32 died., a case-mortality of 22·5 per cent.—an unusually high figure, but accounted for by the fact that the great majority of the patients were seriously ill on admission.

Table showing age and sex of Whooping-cough patients treated in hospital.

		Under 1 year.	1-2 years.	2-3 years.	3-4 years.	4-5 years.	5-10 years.	10 and over.	Totals.
Recovered	Males	7	14	11	5	6	7	...	50
	Females	10	14	11	12	4	8	...	59
Died	Males	3	7	2	...	...	1	...	13
	Females	7	6	4	...	1	1		19
		27	41	28	17	11	17	...	141

Hospital death-rate, 22·6 per cent.

MUMPS.

There were only 42 patients admitted to these wards. Four suffered from simple glandular enlargements, the remaining 38 being instances of Mumps. Two adult males suffered from Orchitis.

Table showing sex and age of Mumps patients.

		5-10 years.	10-15 years.	15-20 years.	20-30 years.	30-40 years.	40-50 years.	50-60 years.	60-70 years.	Total.
Recovered	Males	4	8	3	3	..	1	...	...	19
	Females	6	2	3	7	1	...	...	...	19
		10	10	6	10	1	1	...	..	38

OTHER DISEASES.

(Patients from other Districts included.)

There were 17 patients treated for Puerperal Septicæmia, and of these 4 terminated fatally. Four children were admitted with Ophthalmia Neonatorum, and were treated with satisfactory results. Ten patients, several of whom had been sent in as Cerebro-spinal Meningitis, Enteric Fever or Influenza, were treated for Encephalitis Lethargica—6 deaths occurred. These cases presented considerable varieties in type. Fifty-six patients suffered from Influenza, Pneumonia being present as a complication in the majority of the cases. There were 8 deaths.

The following Table contains a summary of the Laboratory Examinations at the City Hospital by the Medical Staff there during the year 1921.

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Examinations for Diphtheria :—													
Total Examinations	1397	1069	1068	968	761	790	777	736	559	450	465	510	9550
Positive	*631*	*415*	*442*	*367*	*267*	*313*	*305*	*316*	*215*	*138*	*146*	*189*	*3744*
Negative	*766*	*654*	*626*	*601*	*494*	*477*	*472*	*420*	*344*	*312*	*319*	*321*	*5806*
Examinations of Blood for Widal's Re-action :—													
Total Examinations	4	4	...	1	2	2	2	4	1	2	3	2	27
Positive	*4*	...	...	*1*	*2*	*1*	...	*2*	...	...	*1*	*1*	*13*
Negative	...	*4*	...	...	...	*1*	*2*	*2*	*1*	*2*	*2*	*1*	*14*
Examinations of C.S. Fluid for Meningococci :—													
Total Examinations	24	17	20	3	13	2	8	2	3	6	2	...	100
Positive	*23*	*12*	*8*	...	*7*	...	*2*	*1*	...	*1*	...	...	*54*
Negative	*1*	*5*	*12*	*3*	*6*	*2*	*6*	*1*	*3*	*5*	*2*	...	*46*
Examinations of Sputum for Tubercle Bacillus :—													
Total Examinations	275	235	287	281	122	149	20	92	82	112	70	46	1771
Positive	*143*	*129*	*175*	*166*	*78*	*99*	*14*	*81*	*34*	*64*	*40*	*26*	*999*
Negative	*132*	*106*	*112*	*115*	*44*	*50*	*6*	*61*	*48*	*48*	*30*	*20*	*772*
Miscellaneous	14	9	9	10	6	1	6	4	7	7	1	4	78
Total for the Year													11,526

CITY HOSPITAL.

REPORT BY RESIDENT PHYSICIAN.

I have the honour to submit the Annual Report of the City Hospital for the year 1921. During the year there were admitted 4,563 patients, which includes those from districts outwith the City. The greatest number in hospital on any one day was 851, and the daily average number was 558.

The general health of the staff was in every way satisfactory. As usual, a certain number of the nurses contracted the infectious diseases with which their duties brought them in contact. It is hoped that immunisation against Diphtheria may in future diminish the number who take that disease, but as regards Scarlet Fever and Measles no means of prevention are likely to be available.

During the year, 36 nurses completed their three years training and obtained the Fever Nursing Certificate of the Scottish Board of Health. Of these, 26 went to other hospitals for general training, 4 to be married, and 6 were appointed staff-nurses in other fever hospitals or sanatoria.

I conducted the usual classes for students, and 327, of whom 113 were women, attended. These were divided into 11 sections. Three classes were held during the year for graduates entering for the Diploma of Public Health, and 53 ladies and gentlemen attended them.

During the summer and autumn the advanced and early cases of Pulmonary Tuberculosis were transferred to Pilton and the Royal Victoria Hospital respectively. This has restored all the original buildings of the hospital to the use for which they were designed. That the pavilions occupied by the Tuberculosis patients are really necessary for infectious diseases, especially now that the boundaries of the City have been extended, was proved during the milk epidemic of Scarlet Fever in July, and also during that of Influenza in the current year, as on both occasions every bed in them had to be filled, and a certain amount of overcrowding had to be tolerated in order to meet the rush of cases.

In my last Report I mentioned the appointment of Dr Gardiner as Otologist, and was able to speak hopefully of the results of his very valuable work. During 1921 he performed 17 mastoid and 82 tonsil and adenoid operations. Of the latter, 8 were undertaken for the cure of persistent Diphtheria carriers with encouraging results, and 74 for the cure of Otorrhœa. In this last group the effects of the interference have been, in my opinion, remarkably good, the discharge ceasing completely, and apparently permanently, in the vast majority of the cases within a fortnight. The detention in hospital of patients suffering from ear discharges has been much reduced. In 1919, before Dr Gardiner's appointment, it was 68 days on the average. In 1920, during the last eight months of which he was responsible for the cases of Otorrhœa, the number fell to 62. In 1921 the average detention was only 52 days, a still more remarkable reduction.

I have as usual to express my best thanks to the matron and nursing-staff, on whom a considerable strain was thrown during the Scarlet Fever epidemic. The steward, also, and the heads of the various Departments—the kitchen, the laundry and the dispensary—were very helpful during a somewhat exacting year. As regards the medical staff, Dr James made his usual daily visits to the hospital, and his experience was invaluable to us. Dr W. T. Benson, the Senior Medical Officer, did much good work both in the hospital and the laboratory, and the Table printed at the end of this Report gives some idea of his labours as Bacteriologist.

I have the honour to be,

Sir,

Your obedient Servant,

CLAUDE B. KER, M.D.

The following Table shows the cost per occupied bed per annum in the City Hospital during the last eight years. The particulars apply in each case to the financial year to 15th May, and are based on the gross ordinary expenditure.

Year to 15th May.	Daily Average Number of Occupied Beds.	* Cost of Food.	† Cost of Maintenance.	Total Cost of Occupied Bed per annum.
1914	469	£21 12 6	£44 0 8	£65 13 2
1915	596	21 0 0	34 9 9	55 9 9
1916	557	24 8 11	36 15 9	61 4 8
1917	497	31 16 0	43 1 10	74 17 10
1918	471	37 14 8	47 10 9	85 5 5
1919	521	40 1 0	55 2 2	95 3 2
1920	585	39 10 4	59 0 0	98 10 4
1921	543	44 5 10	79 4 10	123 10 8

* Includes food for Staff.

† Includes salaries, heating, lighting, upkeep of buildings and grounds, taxes, &c.

The expenditure for provisions is detailed below :—

Butcher Meat	£5,848 18 4
Fish, Fowls, &c.	1,820 15 10
Butter, Cheese, and Bacon	1,515 2 11
Eggs	2,282 12 9
Groceries	3,324 10 5
* Milk	5,553 14 0
Bread	2,318 4 5
Oatmeal and Flour	343 19 1
Potatoes and Vegetables	890 16 6
Aerated Waters, &c.	150 18 1
	£24,049 12 4

* The total quantity was 43,455 gallons, an average of 119 gallons per day, equal to 1½ pints per head per day.

The total cost of stimulants for the year amounted to £125, 4s. 3d., as against £166, 12s. 6d. in 1920, and was expended as follows :—

Diphtheria Patients	£48 1 6
Scarlet Fever Patients	24 2 3
Whooping-cough „	2 18 0
Measles Patients	10 9 0
Enteric „	5 3 9
Phthisis „	16 9 4
Influenza „	9 3 0
Erysipelas „	6 16 3
Other Diseases	2 1 2
	£125 4 3

The cost of serums during the year amounted to £782, 1s. 8d.

VENEREAL DISEASES.

The following Report in regard to the Venereal Diseases Scheme has been prepared by the Clinical Medical Officer :—

I have the honour to submit to you my report of the work carried out during the year 1921, under the Venereal Diseases Scheme.

The number of new cases of infection treated at the Royal Infirmary during 1921 reached 2,726—a slight decrease from 1920, and it is noteworthy that the decrease is altogether in male patients. This is rather more evident in cases from outside the Edinburgh area, and occurred chiefly in the Spring and early Summer.

During this time the coal strike was responsible for the inability of many patients to travel from outlying districts for treatment, and subsequent to this, the lower wages prevailing accounted for the diminution of numbers more than any marked lessening in the incidence of the diseases. With the lower wages prevailing during the year under review, there has been less travelling by provincial workers into the larger centres of population, less money to spend on alcohol, and, as a sequel, less tendency to run the risk of acquiring Venereal Disease.

Apart from the slight decrease mentioned, the work at the Royal Infirmary Clinic has increased progressively during the year, the total of attendances for treatment being 87,798 in 1921, as compared with 68,532 in 1920.

In dealing with this large amount of clinical material, the new Out-Patient Department for Males, and the alterations to the Female Wards, which were completed in May, have been fully utilised, and at all times have been taxed to their utmost capacity. Rather more cases required in-patient hospital treatment, 419 as compared with 387 in 1920, and the number who would have benefited by indoor treatment, had beds been available, is considerably greater. This is especially apparent in the case of married women and children, the beds available for these and for all other types being constantly filled up. In Gonococcal infection of the female especially, in-patient treatment during the early acute stages is essential if the best results are to be obtained.

As a result of the increased attendances, the amount of treatment given has increased—14,515 injections of Salvarsan substitutes and 11,452 injections of Mercury being given, as compared with 9,357 of Salvarsan and 10,368 of Mercury in 1920.

The amount of pathological work carried out by Dr Logan and his assistants in diagnostic work and in tests of cure shows a record of 16,533 specimens examined, rather more than 4,000 specimens in excess of the work performed in 1920. This work has been consistently good, and is of inestimable value in the management of a venereal clinic.

In comparing the prevalence of the various types of Venereal Disease in the patients attending for treatment, Syphilis bulks largest with 52·5 per cent. of the cases. Gonorrhœa is responsible for 37·5 per cent. and Chancroid for 5·7 per cent. The remaining 3 per cent. are cases who had suffered from either of these diseases and were subjected to tests of cure. This ratio of prevalence between Syphilis and Gonorrhœa is not a true one, the discrepancy being accounted for by the fact that Gonorrhœa lends itself more readily to self-treatment and to treatment by quacks, and is not looked on by the average layman as so serious in its after-results as Syphilis.

In considering the curative work carried out under the scheme in Edinburgh, account must also be taken of the patients receiving treatment in the hospitals and dispensaries subsidised for this work.

In the Ante-Natal and Neo-Natal Department at the Royal Simpson Memorial Hospital, this work is under the able supervision of Dr Ballantyne; 138 new patients were examined, 152 mothers were confined, and mother and child kept under supervision and treated subsequently at the Out-Patient Clinic of this Institution, to which 1,053 visits were paid by patients for specialised treatment.

In the Edinburgh Hospital for Women and Children and at the various dispensaries, valuable work has been done by Dr M'Nicol; 545 new patients reported for treatment, and 4,652 attendances were made during the year by mothers and children for special treatment.

The total number of new cases treated under the Edinburgh Scheme is thus 3,409, and by these 93,503 visits were paid to the various hospital and dispensary clinics by those attending for treatment.

On the surface these figures would appear to be satisfactory, in that a large number of sufferers are reporting for treatment and that more continuous attendance

is being put in than previously by the patients. While this is true in many cases, it cannot be denied that there are many others who only obtain temporary relief from the grosser surface symptoms of disease, and then cease to attend. There are several factors which contribute to this apparent weakness in the Scheme, the chief being the rapid disappearance of the active symptoms of disease on the body. Many patients and not a few doctors look on the relief of symptoms as a completed cure, with fatal subsequent results. Another factor which tends to swell the numbers of those failing to complete treatment is the difficulty of explaining absence from work or from home in attending a clinic over a prolonged period. In other cases, carelessness accounts for the failure to attend until complete cure can be assured.

Under the present system the only method the clinician has of dealing with these factors is by personal appeal to the patient and constant reiteration of, and insistence on, the' importance of long-continued observation and treatment. These methods are valuable and can and should be practised at the first visit of every patient. At subsequent visits, however, there is not time for them in a busy clinic, and the clinician is not always the person best adapted for this work and endowed with the necessary tact and patience to carry it out.

The method of following up the defaulting patient by letter or by a visit from a social worker is full of difficulties, and breaks at once the promise of secrecy held out to attract patients to attend. To cope with this failing in a scheme of voluntary treatment, several of the Colonies have adopted measures of notification and compulsory treatment, and there is no doubt that something on these lines is required in this country if we are to get full value from the existing clinics. Patients are automatically notifying themselves by number when they report for treatment, and nothing more is known of their condition than that No. ... has a Venereal Disease. As long as the patients continue to take steps to render themselves free from infection nothing more need be done than at present. Once they cease to do so the Health Authority must be given the power to protect the community from them, and themselves from their own carelessness.

Known sources of infectivity should also come within the power of the Health Authority, as for example, a father and a mother whose child is found to be suffering from Ophthalmia Neonatorum or Congenital Syphilis. If such power were vested in the Medical Officer of Health and used with tact and discretion, I do not believe that it would frighten many sufferers from coming for treatment. Still less would it do so if the advertisement of patent remedies were suppressed and unqualified practise, which is still prevalent in Edinburgh, stamped out. The knowledge that the Health Authority had the power to enforce treatment would of itself in most cases be sufficient to ensure continuous attendance for treatment. Notification would, in addition, impress both the profession and the community with the importance of prolonged treatment. It would bring disease and morals and promiscuity into their proper perspective, and would educate people to the fact that treatment does not mean the condonation of vice, and through its agency they would realise the serious meaning of Venereal Infection.

There is one apparent difficulty in any scheme of notification, viz.:—the provision of accommodation for those requiring compulsory detention during the contagious stages, and for those known cases who have no suitable home. Among female patients especially, there are a number who require in-patient hospital treatment daily, over long periods. Once they are discharged to attend as out-patients they do not or cannot, from the nature of their employment, get permission to attend for treatment, even once weekly. The indoor servant is an example of this. If she informs her employer of her condition, the chances are that she will be dismissed. A rather different example is the prostitute, who, on being discharged from hospital to attend as an out-patient, at once resorts to her old habits as the easiest means she has of earning her livelihood.

There are few if any clinics which have a sufficient number of beds to enable them to keep such patients under indoor treatment over long periods, and still fewer patients who, when they feel and are fit for work, will consent to stay as in-patients. The establishment of hostels or homes, where these girls could earn their living and yet be under medical observation until they are cured, seems the only method of dealing with this difficulty, and there is great need for such an institution as an annex to the work of a Venereal Clinic. The existing homes in many cases are little better than prison life, and do not attract the sufferers from Venereal Disease. There is no reason why such a Home, under tactful management, should not be run on self-supporting lines. It would give these girls a chance to make good, and enable them to feel that they were doing something to help themselves while still in touch with a clinic and under medical supervision. A somewhat similar provision is required to deal with the cases of infected merchant seamen.

The cost of these measures is at present, and will be in the future, a heavy one, and there is no doubt that better value will be obtained for the money spent on treatment if and when that treatment can be carried out under conditions which will ensure ultimate cure.

Only by effective control of the diseased person and of known sources of infection can this be done, and the best results obtained both for the patient and the community at large.

The work necessitated in dealing with patients suffering from Venereal Disease in such large numbers as are apparent from the statistical returns, could not be carried out without the willing and loyal assistance of both medical and nursing staff.

In dealing with patients suffering from Venereal Disease a great deal of tact and enthusiasm for the work are essential, and the staffs of the various Departments have contributed largely to the success of this pioneer work.

To all of them I must express my indebtedness for the excellent manner in which they have carried out their work during the past year.

DAVID LEES, D.S.O., M.A., M.B., F.R.C.S.E.,
Clinical Medical Officer, Edinburgh Corporation Venereal Diseases Scheme.

EDINBURGH CORPORATION VENEREAL DISEASES SCHEME.

ROYAL INFIRMARY CLINIC.

ANNUAL REPORT FOR THE YEAR ENDING 31st DECEMBER 1921.

Number of New Cases Attending :—

	EDINBURGH.			OTHER AREAS.		
	Males.	Females.		Males.	Females.	
January	100	44		93	27	
February	94	42		69	29	
March	90	25		89	28	
April	93	40		80	12	
May	95	35		89	20	
June	148	36		53	12	
July	111	33		33	13	
August	145	49		43	28	
September	120	41		37	16	
October	134	52		38	11	
November	104	47		39	20	
December	94	30		31	14	
	1328	474	= 1802	694	230	= 924

Total New Cases Attending :—

	Males.	Females.	
Edinburgh	1328	474	
Other Areas	694	230	
Totals ...	2022	704	= 2726

Of the New Cases Attending there were :—

EDINBURGH.

	Males.				Females.			
	Syphilis.	Gonorrhœa.	Soft Sore.	No V.D.	Syphilis.	Gonorrhœa.	Soft Sore.	No V.D.
January ...	44	46	6	4	33	11	...	...
February ...	35	52	4	3	28	14	...	...
March	48	34	5	3	19	6	...	...
April	45	32	4	12	30	10	...	...
May	39	43	8	5	27	8	...	...
June	70	59	12	7	27	9	...	...
July	49	40	14	8	21	11	1	...
August	56	58	18	13	32	15	2	...
September ...	46	51	11	12	32	7	2	...
October ...	60	57	6	11	45	5	2	...
November ...	41	42	14	7	31	16	...	...
December ...	48	30	11	5	20	8	2	...
	581	544	113	90	345	120	9	...

OTHER AREAS.

	Males.				Females.			
	Syphilis.	Gonorrhœa.	Soft Sore.	No V.D.	Syphilis.	Gonorrhœa.	Soft Sore.	No V.D.
January ...	43	47	2	1	19	8	...	...
February ...	31	35	1	2	25	4	...	...
March	47	58	2	2	19	9	...	...
April	48	26	2	4	10	2	...	..
May	40	43	4	2	13	7	...	...
June	29	19	3	2	9	3	...	...
July	15	14	3	1	8	5	...	...
August	16	21	2	4	26	2	...	...
September ...	14	16	4	3	10	6	...	...
October ...	18	13	3	4	7	4	...	...
November ...	17	15	5	2	15	5	...	...
December ...	14	12	3	2	12	2	...	...
	332	299	34	29	173	57	...	...

Admissions to Hospital :—

	MALES.				FEMALES.			
	Edinburgh.		Other Areas.		Edinburgh.		Other Areas.	
	Syphilis.	Gonorrhœa.	Syphilis.	Gonorrhœa.	Syphilis.	Gonorrhœa.	Syphilis.	Gonorrhœa.
January	7	6	6	6	5	1	9	3
February	4	6	6	3	5	4	3	1
March	8	5	5	8	3	2	5	...
April	3	5	8	4	6	2	3	1
May	8	5	10	5	4	2	3	3
June	10	6	6	5	6	1	3	1
July	14	2	4	1	3	1	2	2
August	11	4	10	9	3	2	6	1
September	9	3	6	9	1	2	1	2
October	10	7	6	5	6	2	3	1
November	9	1	5	4	2	2	3	1
December	4	4	3	1	2	3	6	...
	97	54	75	60	46	24	47	16

Total Cases admitted to Hospital :—

	Males.	Females.	
EDINBURGH	151	70	
OTHER AREAS	135	63	
	286	133	= 419

Discharges from Hospital :—

	MALES.				FEMALES.			
	Edinburgh.		Other Areas.		Edinburgh.		Other Areas.	
	Syphilis.	Gonorrhœa.	Syphilis.	Gonorrhœa.	Syphilis.	Gonorrhœa.	Syphilis.	Gonorrhœa.
January	6	3	9	2	4	2	4	1
February	5	4	11	1	5	2	3	1
March	7	5	5	5	3	3	5	1
April	5	6	5	5	7	3	1	3
May	6	4	10	5	4	1	4	3
June	8	5	11	6	5	4	2	...
July	12	5	3	...	6	...	4	1
August	15	6	9	5	2	...	2	3
September	9	4	9	5	3	3	1	1
October	7	5	6	6	3	3	2	1
November	7	5	2	3	3	3	4	2
December	4	3	5	4	3	...	4	1
	91	55	85	47	48	24	36	18

Total Cases Discharged from Hospital :—

	Males.	Females.	
EDINBURGH	146	72	
OTHER AREAS	132	54	
	278	126	= 404

SPECIAL TREATMENT ADMINISTERED.

Number of Intravenous and Intramuscular Injections given :—

MALES.

	Novarsenobillon.						Sulfarsenol.						
	·2	·3	·6	·45	·15	·75	6	12	18	24	30	36	48
January	...	150	274	201	28	...	...	17	...	8	...	6	...
February	...	138	280	178	24	...	...	14	...	10	...	4	...
March	...	177	321	196	40	...	...	18	...	22	...	10	8
April ...	...	182	289	193	34	...	...	22	...	19	...	18	7
May ...	...	168	272	201	28	...	...	24	...	21	...	16	12
June ...	...	172	291	206	26	...	...	22	...	26	...	18	14
July ...	...	180	269	201	21	...	...	26	...	25	...	22	16
August	...	197	263	252	18	...	...	30	...	22	...	30	18
September	...	185	247	263	14	...	...	33	...	21	...	27	16
October	...	203	268	247	12	...	...	28	...	45	...	39	18
November	...	175	223	138	10	...	28	57	...	69	...	30	3
December	...	319	249	98	6	...	22	48	..	98	...	26	2
	...	2246	3246	2374	261	...	50	339	..	386	..	246	114

FEMALES.

	Novarsenobillon.						Sulfarsenol.						
	·2	·3	·6	·45	·15	·75	6	12	18	24	30	36	48
January	2	81	61	101	16	4	...	4	...	...	...	...	...
February	2	82	64	96	14	2	...	6	...	...	...	...	...
March	...	108	83	139	81	...	...	20	...	12	...	16	...
April ...	2	94	82	97	87	4	...	19	...	11	...	18	...
May ...	8	107	81	111	85	...	...	23	...	23	...	9	2
June ...	...	102	85	102	94	8	...	14	...	11	...	14	1
July ...	...	88	84	90	69	...	...	10	...	18	...	11	...
August	...	111	146	106	45	...	...	28	...	25	...	38	...
September	...	113	115	133	87	4	...	18	...	16	...	9	...
October	...	161	78	143	92	...	...	25	...	28	...	23	5
November	...	128	106	145	133	...	...	39	...	37	...	23	...
December	...	119	67	104	90	...	...	27	...	21	...	7	...
	14	1294	1052	1367	893	22	...	233	..	202	...	168	8

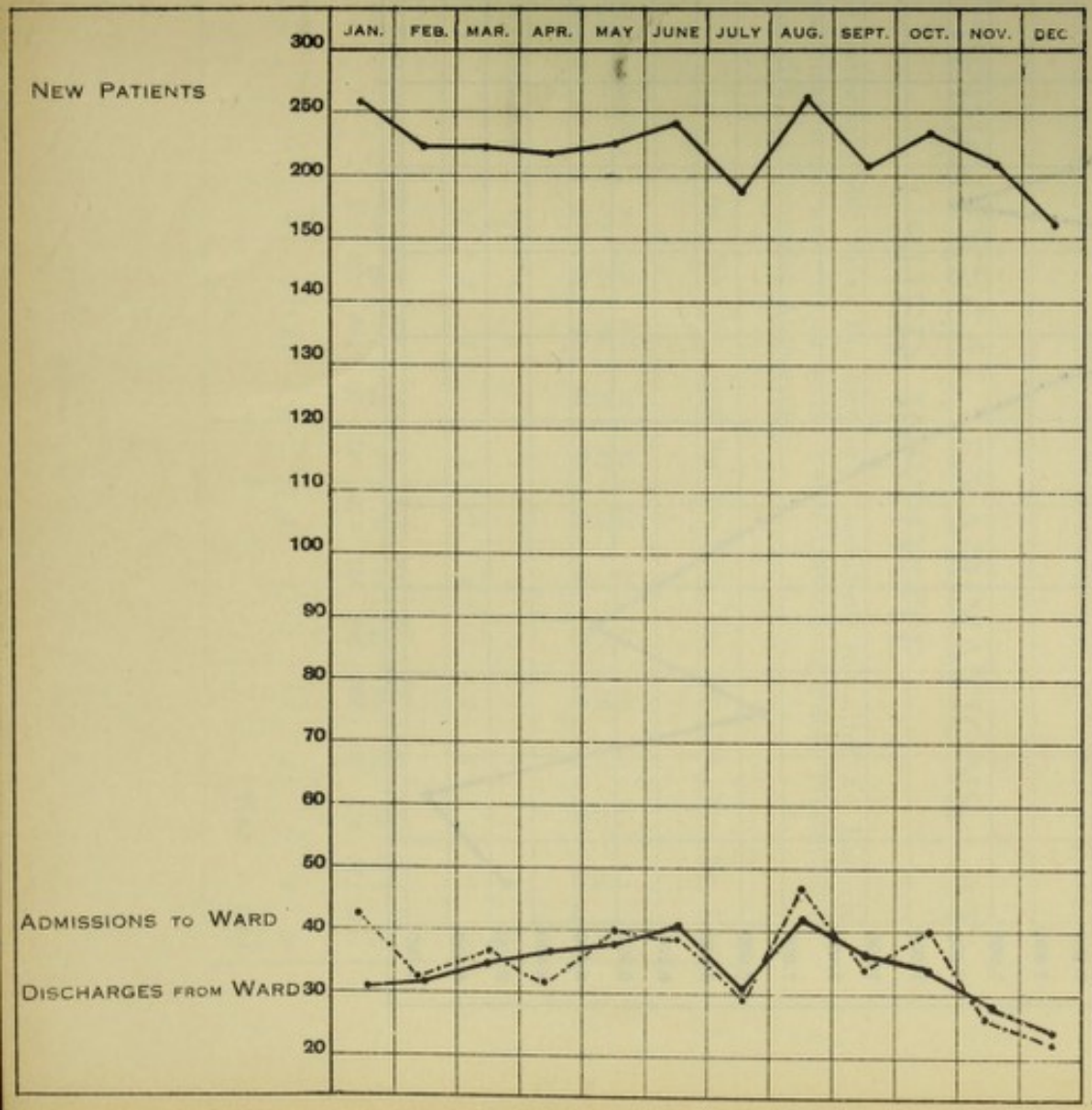
Total Injections :—

MALES	9262
FEMALES	5253
	14,515

Mercury.

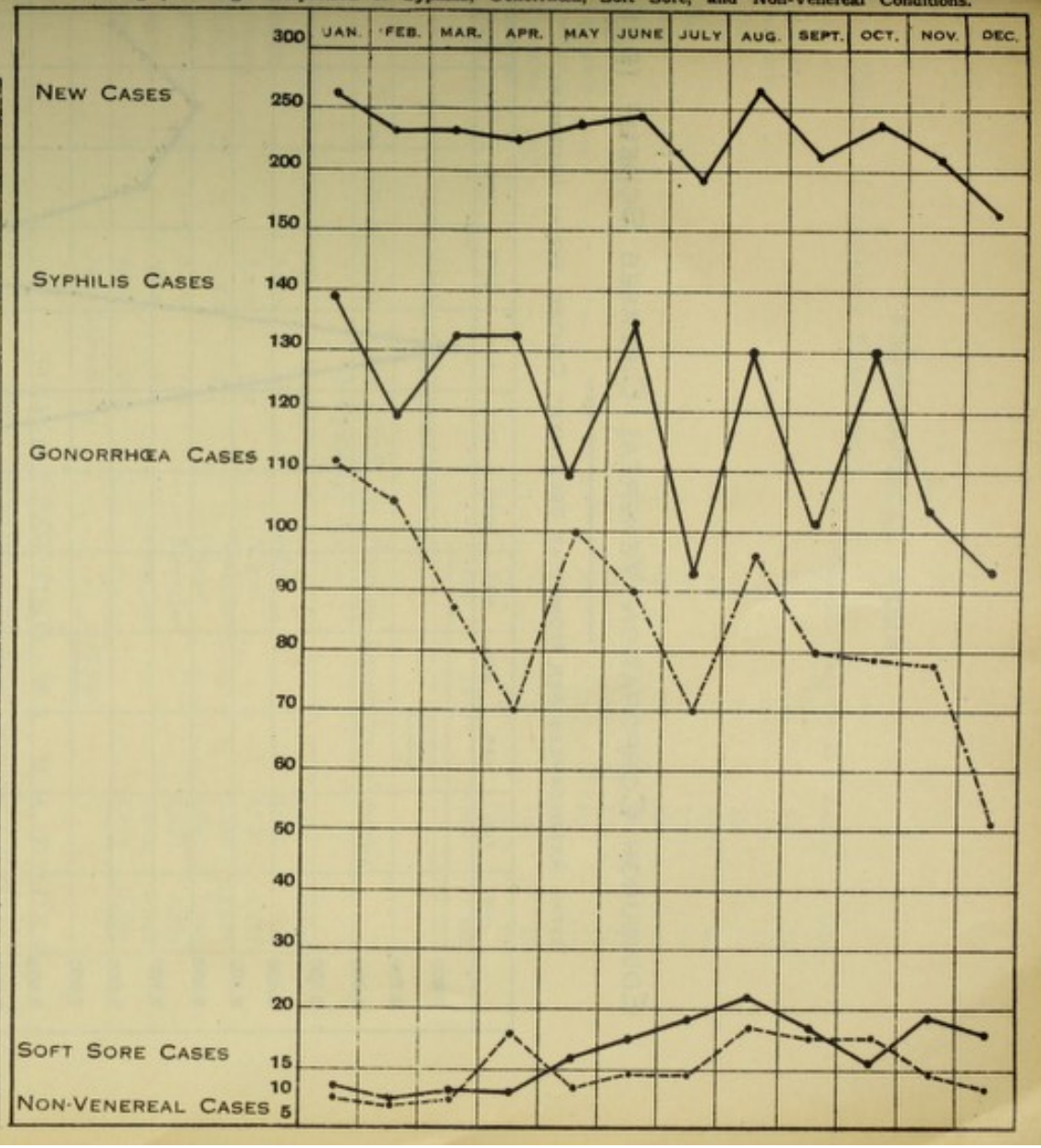
MALES	Injections of Gr. i	=	5731
,, ...	Injections of Grs. i½	=	5448
,, ...	Injections of Grs. ii	=	59
FEMALES	Injections of Gr. i	=	214
	Total, ...		11,452

Showing number of New Patients and the number requiring Inpatient Hospital Treatment at Royal Infirmary Clinic.



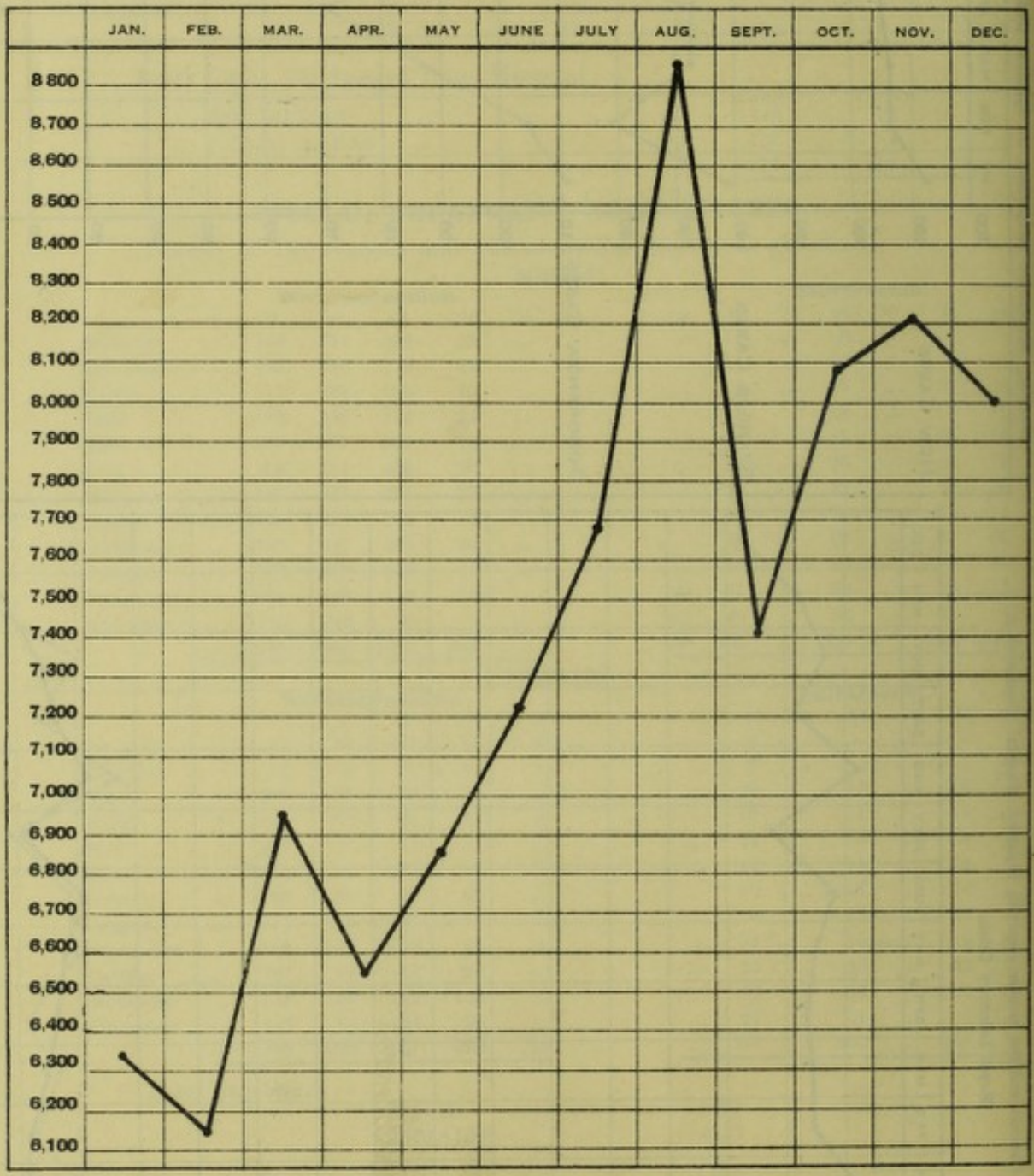
Disease Incidence among New Patients at Royal Infirmary Clinic.

Showing percentage comparison of Syphilis, Gonorrhœa, Soft Sore, and Non-Venereal Conditions.



Edinburgh Corporation Venereal Diseases Scheme, 1921

Total Attendances per Month at Treatment Centre, Royal Infirmary.



PATHOLOGICAL WORK.

Number of Specimens Examined :—

	Wassermann Test.	Dark Ground Test.	Smears.	Others.
January	488	110	521	51
February	478	98	526	48
March	584	94	551	52
April	534	87	562	48
May	648	114	553	23
June	620	167	631	17
July	582	145	584	12
August	674	138	732	24
September	701	131	627	27
October	694	127	668	24
November	704	126	730	33
December	626	129	651	39
	7333	1466	7336	398

Total Number of Specimens Examined . . . 16,533

Total Attendances at the Clinic for Routine Dressings, Vaccines, Irrigations, &c. :—

	Males.	Females.		Males.	Females.
January	5,658	689	July	6,847	843
February	5,428	723	August	7,000	1,261
March	6,073	877	September	6,339	1,094
April	5,790	776	October	6,947	1,140
May	5,940	927	November	6,950	1,270
June	6,314	906	December	6,683	1,323
				75,969	11,829

Total Attendances 87,798

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Clinical Medical Officer, Edinburgh Corporation V.D. Scheme.

BACTERIOLOGICAL EXAMINATIONS AT USHER INSTITUTE.

The following Table shows the number of specimens submitted for Bacteriological examination and reported on by the Usher Institute of Public Health under agreement with the University Authorities.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
For Tubercle :—													
Number of Examinations .	94	88	107	94	81	62	46	54	66	95	75	72	934
Positive . . .	*9*	*18*	*15*	*13*	*14*	*13*	*9*	*9*	*16*	*22*	*17*	*12*	*167*
Negative . . .	*85*	*70*	*92*	*81*	*67*	*49*	*37*	*45*	*50*	*73*	*58*	*60*	*767*
For Enteric :—													
Number of Examinations .	13	3	3	...	2	1	2	3	4	7	7	5	50
Positive . . .	*2*	...	...	...	...	...	...	...	...	...	...	...	*2*
Negative . . .	*11*	*3*	*3*	...	*2*	*1*	*2*	*3*	*4*	*7*	*7*	*5*	*48*
For Diphtheria :—													
Number of Examinations .	493	450	425	294	417	447	500	318	331	473	439	400	4987
Positive . . .	*68*	*63*	*71*	*47*	*77*	*70*	*72*	*42*	*50*	*63*	*66*	*86*	*775*
Negative . . .	*425*	*387*	*354*	*247*	*340*	*377*	*428*	*276*	*281*	*410*	*373*	*314*	*4212*
Other Specimens :—													
Negative . . .	*6*	*7*	*10*	...	...	*1*	*2*	...	*1*	*1*	...	*2*	*30*
											Total	-	6001

DISINFECTION.

Particulars as to the disinfection of dwelling-houses, hotels, &c., during the last three years are given in the Table below.

	1919		1920		1921	
	Number	Apartments	Number	Apartments	Number	Apartments
Dwelling-houses, Hotels, &c.:—						
After Tuberculous Diseases	827	945	766	824	930	983
,, other ,, ...	4,778	9,825	4,395	8,507	5,560	13,467

The articles removed last year from the above dwellings for steam disinfection are detailed in the next Table.

Description.	No. of Articles.		Description.	No. of Articles.	
	After Tuberculous Diseases.	After Other Diseases.		After Tuberculous Diseases.	After Other Diseases.
Mattresses and Palliasses .	723	5,060	Body Clothes	1,073	38,566
Blankets, Sheets, Quilts, &c.	4,252	28,428	Carpets and Rugs ...	14	692
Beds, Pillows, Bolsters, &c .	2,113	11,905	Miscellaneous	157	16,259
Curtains, Table Covers, Wraps, &c. . . .	287	2,328	Destroyed by request...	110	178
Table Napery, Toilet Covers, Towels, &c. . . .	221	1,762	Total ...	8,950	105,178

RECEPTION HOUSE.

It was not found necessary to use the Reception House for quarantine purposes during the year. At the Disinfecting Station, which is situated in premises adjoining the Reception House, 696 persons attended for the purpose of getting baths and having their clothing disinfected by steam. Of these, 171 adults and 68 children were in a verminous condition, while 63 adults and 394 children were treated for Scabies.

CITY MORTUARY.

During the year 146 bodies were removed to the Mortuary. In only a few cases was the Department called upon to conduct the removal, the expense to the Local Authority amounting to £8, 12s.

The following Table shows the number removed to the Mortuary during the last eight years, together with the expenditure incurred in connection therewith.

Year.	Number.		
	Males.	Females.	Total.
1914	98	52	150
1915	96	51	147
1916	112	41	153
1917	90	55	145
1918	74	40	114
1919	82	44	126
1920	68	46	114
1921	104	42	146

INTERMENTS UNDER THE PUBLIC HEALTH ACT.

In terms of the Public Health Act, the funerals of 54 deceased persons—34 adults and 20 children—were carried out by the Department, the nett cost being £163, 3s. 4d. In all, there were 65 applications where the relatives of deceased persons represented their inability to meet the expenses of burial. On enquiries being made by the Department as to the *bona fides* of the applicants, it was found that four of the deceased persons had been in receipt of parish relief; three of the other applicants had sufficient means; and in four cases the applications were withdrawn.

Appended is a Table showing the total expenditure in connection with the removal of bodies and interments during the last eight years.

Year.	Number.	Total Cost of Interments and Removals.	Sums Recovered from Relatives.	Nett Expenditure.
1914	101	£126 0 0	£5 1 3	£120 18 9
1915	71	128 13 0	10 5 11½	118 7 0½
1916	61	132 6 0	23 8 6	108 17 6
1917	61	141 6 0	16 6 8	124 19 4
1918	72	201 6 6	14 1 0	187 5 6
1919	63	177 12 0	33 8 9	144 3 3
1920	39	124 7 0	7 18 0	116 9 0
1921	54	190 2 6	26 19 2	163 3 4

DAIRIES.

As a result of the inclusion of Leith and suburban areas within the City boundary, 84 dairies and milkshops were added to the Register of Dairies at the beginning of 1921, making the total in the extended City at that time 436. In the course of the year, 9 new businesses were opened, 36 were transferred, and 21 were given up, leaving 424 milk-sellers on the Register at 31st December. Each of the dairies was visited by the Inspector several times during the year, the total number of inspections being 1,879. A summary of the improvements effected as a result of these visits appears in the Table which is appended.

As in former years, the Inspector's attention was directed principally to the supervision of the small milkshop. It is found that firms handling large quantities of milk daily are, as a rule, well equipped for the business, and have no difficulty in maintaining their premises in such a manner as will reduce to a minimum the possibility of impurities reaching the milk. In the case of the small shop, however, constant vigilance is required to ensure that the City regulations are carried out. The fact that a small shop is stocked with a varied collection of commodities, and that the milk is regarded merely as a side line may involve a risk of contamination from dust and other impurities, and the dairy-keeper is called upon to combat this by observing the utmost cleanliness in every part of his premises.

The Inspector at all times insists on milk being kept covered, and requires that milk vessels shall be thoroughly scalded and stored in a clean place. In almost all cases his recommendations are loyally observed, but the periodic visit is not without its effect in preventing laxity. During the year the premises in 104 shops were ordered to be painted, papered, or limewashed.

A recent innovation in the milk-selling trade has been the appearance on the streets of small vans and hand-carts from which sweet milk and butter milk are retailed. In some cases discharged soldiers were responsible for the enterprise, but cowfeeders also have resorted to the practice with a view to cutting out middleman's profits. So long as the source of the milk supply is satisfactory, and the carts and the milk vessels are maintained in a clean state, no objection can be taken to the procedure.

In addition to the supervision of milkshops, the Inspector made regular visits to railway stations, where large quantities of milk arrive daily. The rail-borne trade has now assumed considerable proportions, and as a rule the condition of the milk cans is generally satisfactory. On the Register at present there are 236 farms beyond the City boundary from which milk is sent daily, almost every county south of the Forth being represented. The number of outlying farms on the Register was even larger than in 1920, despite the fact that a considerable number were transferred to the City list as a result of the extended boundary. In all cases the cowherds are subjected to inspection by the City's Veterinary Inspector, and frequent tests for the presence, or otherwise, of tubercle are made.

Table showing the Distribution of Dairies, the Visits paid, and Results.

	I. Calton.	II. Canongate.	III. Newington.	IV. Morningside.	V. Merchiston.	VI. Gorgie.	VII. Haymarket.	VIII. St Bernard's.	IX. Broughton.	X. St Stephen's.	XI. St Andrew's.	XII. St Giles.	XIII. Dairy.	XIV. George Square.	XV. St Leonard's.	XVI. Portobello.	XVII. South Leith.	XVIII. North Leith.	XIX. West Leith.	XX. Central Leith.	XXI. Liberton.	XXII. Colinton.	XXIII. Corstorphine and Cramond.	Total.
Dairy-keepers on Register at beginning of year	29	20	22	27	27	22	16	13	20	24	10	23	29	27	28	15	24	22	11	13	2	4	8	436
Number added	1	...	1	1	1	...	2	...	...	...	...	1	...	...	...	...	2	...	...	...	...	...	...	9
Number given up	...	...	1	...	1	1	1	...	1	...	...	...	1	...	1	...	2	4	1	4	...	...	2	21
Businesses transferred	3	2	2	1	5	3	...	...	1	1	1	1	6	2	2	1	1	1	1	1	...	1	...	36
Dairy-keepers on Register at end of year	30	20	22	28	27	21	17	13	19	24	10	23	28	27	27	15	24	18	10	9	2	4	6	424
Other Dairy keepers registered from beyond the City	..	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	236
Number of visits paid	120	80	90	140	138	104	85	64	92	121	51	111	105	111	108	64	100	74	40	35	6	16	24	1,879
Premises ordered to be papered, painted, or limewashed	5	3	7	4	9	2	4	4	6	11	1	5	11	10	2	3	5	6	2	2	...	...	2	104
Contraventions :—																								
Drying body clothing in Dairy	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Establishing communication with dwelling	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	2	1	1	...	...	1	1	8
Water-closets removed	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	2	2	...	...	...	...	...	5
Washing Facilities provided	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	4	1	...	...	...	...	6

ICE-CREAM SHOPS.

The improved condition of ice-cream shops, which has been noted in recent years, was steadily maintained during 1921. The proprietors of these establishments have come to recognise that the cleaner and brighter they make their premises the more customers they are able to attract. Considerable enterprise has been shown by many of the ice-cream dealers, and in various parts of the City are now to be found large saloons and restaurants in which the ice-cream is not only manufactured in a thoroughly hygienic manner, but is served to the public in comfortable and well-fitted apartments.

Table showing the Distribution of Ice-Cream Shops, the Visits paid, and Results.

	I. Calton.	II. Canongate.	III. Newington.	IV. Morningside.	V. Merchiston.	VI. Gorgie.	VII. Haymarket.	VIII. St. Bernard's.	IX. Broughton.	X. St. Stephen's.	XI. St. Andrew's.	XII. St. Giles.	XIII. Dalry.	XIV. George Square.	XV. St. Leonard's.	XVI. Portobello.	XVII. South Leith.	XVIII. North Leith.	XIX. West Leith.	XX. Central Leith.	XXI. Liberton.	XXII. Colinton.	XXIII. Corstorphine and Cramond.	Total.
Number of shops at beginning of year	9	7	1	1	...	5	3	1	6	1	4	12	7	12	6	11	7	9	4	6	.	2	5	119
Number closed during the year	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2
Number of premises opened during the year	1	...	...	1	...	...	...	...	...	...	...	3	1	2	1	2	...	1	...	...	...	...	...	13
Businesses transferred during year	...	1	1	...	...	...	2	...	1	...	...	5	1	3	1	2	...	1	1	...	...	...	...	19
Number of persons on Register at end of year	9	7	1	2	...	5	3	1	6	1	4	15	8	14	7	13	7	10	4	6	...	2	5	130
Number of Visits	38	27	4	10	...	25	16	6	29	5	20	77	32	60	29	55	28	41	16	28	...	6	15	567
Premises ordered to be papered and painted	2	1	...	...	...	3	...	...	2	1	1	3	3	4	2	3	3	1	2	4	...	...	1	36
Contraventions:— Hanging body clothing to dry	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	3
Water-closets removed	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	1	1	1	...	...	...	...	6
Premises not in a cleanly condition	...	1	...	...	...	...	...	...	...	...	...	2	...	2	...	...	...	...	...	...	...	...	...	5
Washing facilities provided	...	...	...	...	...	...	1	1	...	...	...	...	...	3	...	...	...	1	1	2	...	...	2	11

At the beginning of the year, there were 119 ice-cream shops on the Department's Register, including 33 transferred from Leith and suburban areas as a result of the extension of the City boundary. Thirteen new retailers of ice-cream were placed on the Register in the course of the year, 2 shops were closed, and 19 businesses changed hands. The number registered at the end of the year was 130. During the year the Inspector made 567 visits, and in only five instances was it found necessary to warn the proprietor regarding a lack of cleanliness. In 36 cases the Inspector required premises to be papered or painted, while in 11 cases washing facilities were introduced.

Inspections have been made of premises used by street traders for making ice-cream. The dwellings of these traders have also been kept under supervision, and in no case was ice-cream being made in a dwelling-house.

WORKSHOPS AND BAKEHOUSES.

During 1921 an important alteration was effected in the administration of regulations relating to workshops and bakehouses, involving the transfer of certain duties from the Home Office to the Scottish Board of Health. In a circular, dated 14th November 1921, the Scottish Board of Health outlined the new provisions, and requested local authorities to administer the undernoted Sections of the Factory and Workshops Act, 1901 :—

Section 61.—Prohibition of Employment of Women after Childbirth.

Sections 97 to 100.—Provisions relating to Bakehouses.

Section 109.—Making of Wearing Apparel where there is Scarlet Fever or Smallpox.

Section 110.—Prohibition of home work in places where there is infectious disease.

The following is a brief summary of the main provisions contained in the Sections referred to :—

1. **Prohibition of Employment of Women after Childbirth.**—The Factory Act provides that an employer shall be liable to prosecution if he knowingly allows a woman to be employed within four weeks after she has given birth to a child. The enforcement of this Section has, in the past, been vested in the hands of H.M. Inspector, and the transfer of power now granted will enable the local authority to take advantage of the early information obtained by the Medical Officer of Health through the Notification of Births under the Maternity and Child Welfare Scheme. The Inspector will thus be in a position to assist occupiers of factories and work shops to comply with this Section of the Act.

2. **Provisions relating to Bakehouses.**—In the past, the local authority has been responsible for the sanitary inspection of bakehouses only where no form of mechanical power was used in the process of manufacture—factory premises (*i.e.*, premises where mechanical power is in use) being under the jurisdiction of H.M. Inspector. The new Order places the supervision of all bakehouses in the City under the control of the local authority. This alteration is a desirable and welcome one, and the enforcement of the special regulations applicable to bakehouses under the Factory Act will now be wholly exercised by the Public Health Department.

3. **Home Work in places where there is Infectious Disease.**—The Order in this case transfers the power and duties of the Secretary of State under the Factory and Workshop Act to the Board of Health, but the local authority is not affected by the transfer of jurisdiction to the Board. Attention is drawn, however, by the Board to the fact that the Section of the Factory Act covering the prohibition of home work in places where there is infectious disease may be applied, by special order of the Board of Health, to other classes of work not already included in the various Home Work Orders already issued.

WORKSHOPS.

For the extent and importance of the conditions dealt with during the year, and the improvements effected, reference must be made to the Table which is appended. It may be mentioned, however, that dull trade, financial difficulties, the increased cost of labour and materials as compared with pre-war years, and the general feeling of uncertainty caused by extensive unemployment and short time in a large number of workshops, have militated, to some extent, against important alterations and improvements being carried out in workshops.

The principal consideration in workshop hygiene is cleanliness. Requests to have workshops limewashed were well responded to, and the general cleanliness of the places visited is steadily improving. The treatment of wall surfaces is an important factor in the workshop, and now-a-days quite a number of progressive employers are treating the walls of their establishments with "Duresco" and other washable paints of agreeable shades, in preference to the less pleasing surroundings of limewashed walls. This has much to commend it, and workshop life must profit very considerably by the addition of a more attractive and inspiring environment.

The provision of lighting suitable to the work to be performed is also a matter of great importance in workshops. Good sight and good light are dependent one upon the other. It is to the advantage of both the employer and employee that operations should be conducted in the clear light of day as far as possible. Where work is performed in rooms with low ceilings, natural light is bad, and the afternoon hours are largely wasted on account of the dim light or the necessity of using artificial light. More important still, all windows should be kept thoroughly clean. There are many workrooms to-day from which daylight is kept out by dirty windows. The windows are there in ample area, but they are so grimy that the light is subdued as it enters. This point has been urged on many occasions in the course of inspection, yet it is annoying to find how often it is overlooked as altogether unworthy of attention. At the same time, credit must be given to some of the better class establishments in the City where windows are as clean as in the best dwellings. In such cases it is generally found that the employers engage the services of a window cleaner at regular intervals.

The ventilation of workrooms also calls for much attention. Long experience has shown that the hotter a room becomes, after a certain point, the less work is done in it. In the more modern workroom, where double-hung sash windows are provided on both sides, very good natural ventilation is obtained, while in others the provision of fresh air inlets and foul air outlets, independent of window openings, has contributed to improved atmospheric conditions. It is, however, a matter of regret to state that during the course of inspection windows have been found with opening arrangements, but have been secured in such a way that all efforts to open them are futile. Much depends on the personal factor for satisfactory ventilation by natural means. Employers may do their best in providing suitable means of ventilation, but nothing can be done without the willing co-operation of those who are employed, in seeing that rules are enforced and appliances properly used.

The use of gas stoves for heating irons in tailors' workrooms is still a matter which requires constant attention. Sometimes these stoves are found without any arrangement for carrying off fumes. To remedy this defect, employers are asked to have a correctly shaped and proportioned canopy constructed over the stove, with a flue pipe to conduct the fumes into the chimney of the fireplace, or to the external air. When provision of this nature is made the danger of gas fumes escaping into the air of the room and depreciating the atmosphere is entirely obviated.

The sanitary accommodation in workshops continues to be fairly well kept, but defects in cleanliness and carelessness in the maintenance of the apparatus are frequently found where the closets are shared by more than one tenant, and particularly

in the smaller workshop situated in tenements where tenants come and go frequently. One class of improvement which received considerable attention throughout the year. was the removal of "pan" water-closets and the substitution of the modern pedestal closet. This improvement was effected in 22 instances. Individual water-closets of first class quality prove the most suitable form of sanitary convenience in factories and workshops. They can be maintained in a clean state, are successful in their action, and with due care are not provocative of nuisance. It is also an advantage when teak inset rings are provided in place of the lift-up hinged seat. This provision permits of greater cleanliness, as it reduces the woodwork to a minimum, and the rings can be kept in a clean condition with the smallest amount of attention.

EMPLOYMENT OF OUTWORKERS.

Firms employing outworkers have, in terms of the Act, forwarded lists in February and August. The class of work was chiefly wearing apparel. Thirty addresses included in the lists were forwarded to other districts where the home workers resided, while 15 addresses of workers who resided in the City were received from other local authorities. At the close of the year the Register contained 175 effective entries of home workers. Of these, 25 entries comprises "homes" which ranked as workshops, and 150 were "homes" of single workers. In one instance exception was taken to the conditions under which work was being carried on. The conditions were neither desirable nor suitable, and on representation being made to the employer the work was immediately discontinued.

BAKEHOUSES.

The statistical information regarding bakehouses and other matters which have received attention will be found in the Table which is appended. Bread-making is one of the most important of all industries connected with the preparation of human food, and on this account a high standard of sanitation is imperative. A feature of the trade in the last few years has been the way in which bakers with small businesses have been installing labour-saving machines. With the present-day improvements in the design of breadmaking plant, there is an increasing tendency to produce bread in bulk, and efficient automatic appliances for dividing, proving, and moulding the dough in large quantities, as well as ovens for dealing with the bread in batches, are fast superceding the old order of production.

The necessary limewashing of interior wall surfaces, staircases, store-rooms, &c., has been in the majority of cases carried out with regularity, but again it has to be recorded that the cleaning of floors does not appear to receive the attention it merits, and it is only by close surveillance on the part of the Inspector that a proper degree of cleanliness is maintained.

The attention of occupiers, in some cases, has had to be drawn to the unsatisfactory method of storing a great deal of material within the bakehouse instead of utilising the storerooms. This practice has the effect of rendering the bakehouse so congested at times that the free movement of employees is a matter of physical difficulty, while it has also the further disadvantage of harbouring dust and dirt and rendering the proper cleaning of floors extremely difficult.

In no sphere is absolute cleanliness more essential than in the baking trade, and every endeavour is made, by enlisting the active sympathy and co-operation of employers and employed, to promote all that tends to hygienic perfection throughout the entire bread-making process.

Table showing the Visits paid to Workshops and the Improvements effected.

	I. Calton.	II. Canongate.	III. Newington.	IV. Morningside.	V. Merchiston.	VI. Gorgie.	VII. Haymarket.	VIII. St Bernard's.	IX. Broughton.	X. St Stephen's.	XI. St Andrew's.	XII. St Giles.	XIII. Dalry.	XIV. George Square.	XV. St Leonard's.	XVI. Portobello.	XVII. South Leith.	XVIII. North Leith.	XIX. West Leith.	XX. Central Leith.	XXI. Liberton.	XXII. Colinton.	XXIII. Corstorphine and Cramond.	Total.
Number of Workshops on Register at end of year	68	38	42	58	61	30	95	34	60	70	221	154	32	114	58	28	46	40	8	27	14	12	21	1,332
Number of Visits paid	5	3	1	...	3	2	5	5	4	10	78	177	40	140	68	34	60	52	12	39	15	18	19	790
Premises found dirty and subsequently cleansed	...	...	...	...	...	1	...	...	...	...	11	14	3	18	4	4	7	5	2	10	5	3	1	88
Sanitary Conveniences dirty or neglected	1	...	...	...	...	...	...	...	...	...	2	5	1	6	1	...	4	4	...	2	...	..	1	27
Walls of water-closets limewashed	...	...	...	...	...	...	...	...	...	...	3	4	...	3	2	...	...	...	1	...	...	..	1	14
Ventilation of Workshops improved	...	...	...	...	..	...	1	...	...	1	...	1	...	1	...	...	1	1	...	...	...	...	...	6
Gas Stoves for heating Irons—Laundry collar ironing machines, &c., provision made for carrying off fumes	1	...	...	...	...	...	..	...	...	...	3	2	1	...	...	1	1	1	...	...	...	1	..	11
Floors of Laundries drained or repaired	...	...	...	...	...	...	...	...	...	...	.	1	...	...	...	...	...	...	...	...	...	1	...	2
Repairs to roofs, ceilings, walls, floors, doors, and windows of Workshops	...	1	...	...	...	..	...	1	1	...	2	2	...	2	...	..	1	...	1	...	...	...	...	11
Sink accommodation defective, and earthenware sinks substituted for old iron appliances	...	...	...	...	..	...	...	...	...	...	...	3	3	...	...	...	.	...	...	1	...	...	...	7
Sanitary accommodation introduced	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	1	...	...	...	1	...	5
Separate sanitary accommodation provided for sexes, or access arranged	...	...	...	...	...	..	...	...	...	...	...	1	1	...	...	...	...	1	...	...	...	...	...	3
New apparatus substituted	...	...	...	...	1	...	...	...	...	1	1	6	2	3	...	...	...	...	...	1	1	...	...	16
Insufficient light and ventilation—improvements effected	...	...	...	...	...	...	...	...	...	...	...	1	1	3	...	1	...	...	...	...	...	1	...	7
W.C.'s disconnected from Workshops—intervening ventilated space provided	...	...	...	...	...	...	...	..	...	...	...	...	...	1	...	...	...	...	...	1	..	...	1	3
Choked and defective water-closets, surface traps, fractured soil pipes, rhones, &c., cleared or repaired	...	...	...	...	1	...	...	1	...	2	...	7	...	3	1	...	2	2	...	3	...	...	...	22
Other Nuisances—accumulation of refuse, smells from adjoining premises &c., abated	...	...	...	...	...	...	...	...	...	1	1	2	1	2	...	...	2	...	...	...	...	...	...	9
Apartments measured during the year	...	...	...	...	...	...	...	...	...	2	7	...	1	...	...	...	9	10	6	..	...	...	...	35
Failure to affix Abstract (Sec. 133), reported to H.M. Inspector	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	2

Table showing the number of Bakehouses, the Visits paid, and the results.

	I. Calton.	II. Canongate.	III. Newington.	IV. Morningside.	V. Merchiston.	VI. Gorgie.	VII. Haymarket.	VIII. St Bernard's.	IX. Broughton.	X. St Stephen's.	XI. St Andrew's.	XII. St Giles.	XIII. Dairy.	XIV. George Square.	XV. St Leonard's.	XVI. Portobello.	XVII. South Leith.	XVIII. North Leith.	XIX. West Leith.	XX. Central Leith.	XXI. Liberton.	XXII. Colinton.	XXIII. Corstorphine and Cramond.	Total.	
Bakehouses—Including Factory Premises:—																									
On Register at end of year:— Underground	4	3	3	8	6	2	3	1	4	7	8	7	6	11	7	7	4	3	1	1	...	...	...	96	200
On Register at end of year:— Level	2	7	4	1	4	5	3	5	4	5	6	8	4	8	9	4	3	7	4	4	2	2	3	104	
On Register at end of year:— Factories	4	2	5	6	5	4	4	3	7	4	4	6	6	10	5	4	3	4	2	5	...	2	...	95	200
On Register at end of year:— Workshops	2	8	2	3	5	3	2	3	1	8	10	9	4	9	11	7	4	6	3	...	2	...	3	105	
Number of Visits paid	8	16	11	12	13	11	6	8	16	28	42	30	23	54	37	27	16	30	13	10	4	3	3		421
Limewashing overdue or not satisfactory	1	...	...	...	1	...	1	1	...	2	5	1	1	3	2	3	1	3	1	...	...	...	...		26
Dirty Floors or refuse allowed to accumulate	...	4	1	1	...	...	...	..	...	2	...	2	1	3	2	4	...	1	1	1	.	...	1		24
Water-closets in dirty condition and cleansed	...	2	...	...	...	...	...	...	...	1	...	...	..	1	1	...	...	1	..	...	1	...	...		7
Storing Baking Materials or Utensils where liable to contamination	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...		2
Light and Ventilation improved	...	...	...	...	...	...	...	...	...	1	2	...	...	...	...	...	...	1	1	...	...	...	...		5
Defective Roofs, Walls, Ceilings, Floors, Windows, Doors, &c., repaired	...	2	...	...	...	...	...	1	1	1	4	4	2	5	3	3	2	5	3	2	2	...	...		40
Choked and Defective Water-closets, Fractured R.W. Conductors. Waste Pipes and Water Pipes—cleared and repaired	1	...	...	1	...	1	...	...	...	...	1	...	...	1	...	1	...	2	1	...	2	...	1		12
New apparatus substituted	...	...	...	...	...	...	...	...	...	...	1	...	2	1	1	...	1	...	...	...	...	...	...		6
Insufficient Light and Ventilation—improvements effected	...	2	...	1	...	...	..	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	..		4
Water-closet apartment reconstructed	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...		1
Water-closet removed to more sanitary situation	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		1
Insufficient Sanitary Accommodation—W.-C.'s introduced	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	1	...	...	...	...	...		3
Defective Sinks—Earthenware Sinks substituted and Sinks repaired	...	...	...	...	...	...	...	...	...	1	1	1	...		2	...	...	..	...	...	...	...	...		5

HAIRDRESSING SALOONS.

The inspection of Hairdressing Saloons shows that a high standard of cleanliness still prevails. The proprietors of these establishments as a rule are fully alive to the importance of maintaining their premises in such a condition as will attract customers, and any suggestion made by the inspector regarding improvements, from a hygienic point of view, are generally carried out willingly.

SHOPS ACT, 1912, 1913, and 1920.

Each year the duties in regard to this Act are ever increasing, and the period now reported on is no exception ; indeed, it constitutes a record over any previous term, there having been no fewer than 55 prosecutions, while a total sum of £27, 10s. was imposed in fines. While this may not appear a formidable amount, it must be borne in mind that the fines are usually of a rather trivial amount, seldom exceeding the sum of 10s. This penalty is quite inadequate with a certain class of offender who finds it a paying proposition to ignore the Act, thus taking an unfair advantage of his fellow tradesman.

At the beginning of the year a considerable amount of extra work was entailed to the Department owing to the transference of what was termed "Regulation 10B" of the Defence of the Realm Act, formerly enforced by the Police, to what is now known as the Shops (Early Closing) Act 1920.

The closing hours fixed by this new Act are 8 p.m. on every day except Saturday, and 9 p.m. on Saturday, but paragraph 5 of the Act provides that the Order "shall not affect any obligation to comply with the provisions of the Shops Acts of 1912 or 1913 or any Order made thereunder." Consequently, where a shop is already required by any Order under the Shops Act to close on any day at an earlier hour than 8 p.m. (9 p.m. on Saturdays), it will still be required to observe the earlier hour. Unfortunately, this seems to have created some ambiguity, as it has led to considerable confusion among shopkeepers, especially at the Christmas and New Year season.

An interesting point which may be mentioned is that the principal offenders appear to be the ice-cream dealers. This class of business, as is well-known, has a very considerable trade in cigarettes and confections, and is allowed to keep open till a very late hour for the sale of refreshments, consequently there is a great temptation to infringe the Act by selling the former articles after the prohibited hours, and this very obviously calls for special supervision, with the result that no fewer than 12 convictions were procured during the year.

A peculiar situation has arisen in regard to the tobacconists in the City who, it will be remembered, applied for and were granted a special Half-Holiday Closing Order in 1919.

From its inception the greatest difficulty was encountered in endeavouring to enforce the terms of this Order, due chiefly to the enormous number of Multiple Shops holding a tobacconist's licence, this being further aggravated by the behaviour of the tobacconists themselves, who split up into two factions, one favouring the Order, the other desirous of rescinding it. The latter section eventually became openly defiant and refused to close their premises on the Weekly Half-Holiday, with the result that a test case was taken to the Court, but the decision there given left matters still on an unsatisfactory basis. Finally a new Register was prepared, containing only the names of those whose sole business was that of Tobacconist, and a Petition was framed by them and presented to the Local Authority asking that the present Order be annulled. This, meantime, remains in abeyance pending a decision by the Secretary for Scotland.

Subjoined is the list of prosecutions during the year :—

Date.	Class of Business.	Offence.	Result.
1921.			
January . 4	Hardware Dealer .	Failing to obey half-holiday order .	Fined 5s.
Do. . 14	Ice-cream Dealer .	Failing to obey closing order .	Fined 10s.
Do. . 14	Do. .	do. do. .	Fined £1.
Do. . 26	Fruiterer . . .	do. do. .	Fined 7s. 6d.
Do. . 27	Confectioner . .	do. do .	do.
Do. . 28	Multiple Shop . .	do. do. .	do.
February 1	Ice-cream Dealer .	do. do. .	do.
Do. . 1	Confectioner . .	do. do. .	do.
Do. . 2	Ice-cream Dealer .	do. do. .	Fined 10s.
Do. . 10	Confectioner . .	do. do. .	Fined 7s. 6d.
Do. . 12	Ice-cream Dealer .	do. do. .	Fined 5s.
Do. . 14	Do. .	do. do. .	Fined 10s.
Do. . 22	Do. .	do. do. .	Fined £2.
Do. . 22	Fruiterer . .	do. do. .	Fined 10s.
Do. . 22	Fishmonger . .	do. do. .	Fined £1.
Do. . 22	Grocer . . .	do. do. .	do.
Do. . 28	Fruit Hawker . .	do. do. .	Fined 5s.
April . 28	Ice-cream Dealer .	do. do. .	Fined £1.
May . 12	Grocer . . .	do. do. .	Fined 10s.
June . 20	Confectioner . .	do. do. .	Admonished
Do. . 29	Ice-cream Dealer .	do. do. .	Fined £1.
July . 5	Fruit Hawker . .	do. do. .	Fined 5s.
Do. . 5	Confectioner . .	do. do. .	Admonished
Do. . 25	Grocer . . .	do. do. .	Fined 5s.
August . 13	Ice-cream Dealer .	do. do. .	Fined £1.
Do. . 30	Butcher . . .	do. do. .	Admonished
September 7	Ice-cream Dealer .	do. do. .	Fined £1.
Do. 21	Grocer . . .	do. do. .	Admonished
October . 7	Fruiterer . . .	do. do. .	Fined 10s.
Do. . 7	Do. . . .	do. do. .	do.
November 7	Do. . . .	do. do. .	do.
Do. 7	Do. . . .	do. do. .	do.
Do 7	Ice-cream Dealer .	do. do. .	do.
Do 29	Butcher . . .	do. do. .	Fined 5s.
December 7	Pork Butcher . .	do. do. .	Fined 10s.
Do. . 7	Do. . .	do. do. .	do.
Do. . 7	Butcher . . .	do. do. .	do.
Do. . 7	Do. . . .	do. do. .	do.
Do. . 7	Fruiterer . . .	do. do. .	do.
Do. . 7	Fishmonger . .	do. do. .	do.
Do. . 7	Do. . .	do. do. .	do.
Do. . 7	Do. . .	do. do. .	do.
Do. . 7	Do. . .	do. do. .	do.
Do. . 7	Do. . .	do. do. .	do.
Do. . 7	Do. . .	do. do. .	do.
Do. . 7	Do. . .	do. do. .	do.
Do. . 7	Do. . .	do. do. .	do.
Do. . 7	Do. . .	do. do. .	do.
Do. . 7	Fruiterer . .	do. do. .	do.
Do. . 7	Do. . . .	do. do. .	do.
Do. . 7	Do. . . .	do. do. .	do.
Do. . 7	Do. . . .	do. do. .	do.
Do. . 7	Do. . . .	do. do. .	do.
Do. . 7	Tobacconist . .	do. do. .	Admonished
Do. . 27	Chemist . . .	do. do. .	Fined 5s.

SALE OF FOOD AND DRUGS ACTS.

The proceedings now reported on involved the procuring, by purchase or otherwise, of 202 official samples, in addition to 899 which were obtained for preliminary or test purposes, and which are not included in this Report.

In regard to the 202 official samples taken, 50 of these were certified by the City Analyst as being adulterated, and 19 prosecutions were instituted against offenders. These proceedings were successful in 18 cases, and a total amount of £116. 17s. imposed in fines.

The following Table gives a detailed statement showing the number and variety of the official samples taken, and the condition of these as subsequently determined

by analysis. As in former years, milk demands and continues to receive, by far, the greatest amount of supervision, for the very obvious reason that it occupies such an important place among the necessaries of life, and is so amenable to the process of adulteration.

An unusual feature—indeed, one absolutely unique in the history of this Department—has been the number of prosecutions which required to be instituted against retail shopkeepers for selling adulterated milk, these representing exactly 50 per cent. of the whole. Formerly, the great majority of the cases have been against the wholesale dealer—in fact, these, in practically every year, have amounted to about 80 per cent. of the total. It is all the more puzzling when one bears in mind that the procedure in regard to sampling has been identical with previous years, *i.e.*, samples have been procured on delivery from the wholesale dealer—in order to safeguard the interests of the retailer—this always being precedent to the forwarding of a prosecution.

It might not be amiss at this time to direct attention to the manner in which the efforts of the authorities are handicapped by the paltry amount of the fines imposed for contraventions of these Acts—fines so trivial indeed as to have practically become a byword among a certain class of offender. That the legislature realised the gravity of these offences is perfectly evident, when it is borne in mind that a Sheriff is empowered to inflict maximum fines as follows :—£20 for a first offence ; £50 for a second offence ; and £100 for a third or subsequent offence. Keeping this in view, the following instances, which occurred, during the year under review, in prosecutions for adulteration of milk, are highly illuminating.

Amount of Adulteration.	Previous Convictions.	Amount of Fine.
Deficient in fat, 31 per cent. . .	...	£ 2
Deficient in fat, 22 per cent., and mixed with 7 per cent. water . . .	...	£ 2
Mixed with 3 per cent. water . .	...	£ 2
Mixed with 3 per cent. water . .	1	£ 1
Mixed with 8 per cent. water . .	4	£10
Mixed with 5 per cent. water . .	7	£25

SALE OF FOOD AND DRUGS ACTS.

Article.	Number of Samples taken.	Genuine	Adulterated.	Extent and Form of Adulteration.	Reported to Prosecutor.	Acquitted.	Convicted.	Fines Inflicted. £	s.	d.	Remarks.
Arrowroot	1	1	...	.....	...	...	...				
Barley	3	3	...	.....	...	...	...				
Butter	11	11	...	.....	...	...	...				
Cheese	3	3	...	.....	...	...	...				
Cinnamon	1	1	...	.....	...	...	...				
Cocoa	1	1	..	.....	...	...	...				
Coffee	1	1	...	.....	...	...	...				
Cream of Tartar	1	1	...	.....	...	...	...				
Ginger (Ground)	1	1	...	.....	...	...	...				
Jam	1	...	1	Contained 5 % apple pulp ...	...	...	...				
Lard	3	3	...	.....	...	...	...				
Margarine	3	3	...	.....	...	...	...				
Milk (Sweet)	154	108	...	.....	...	...	...				
Do.	...	...	1	Deficient in fat 5 % and mixed with 9 % water	1	...	1	5	0	0	
Do.	...	...	1	Deficient in fat 5 %	...	...	...				
Do.	...	...	1	Mixed with 4 % water	1	1	...				Not Guilty.
Do.	...	...	1	Deficient in fat 7 %	...	...	...				
Do.	...	...	1	Mixed with 11 % water	1	...	1	5	0	0	
Do.	...	...	1	Deficient in fat 7 %	...	...	...				
Do.	...	...	1	Deficient in fat 4 %	...	...	...				
Do.*	...	...	1	Deficient in fat 11 %	...	...	...				
Carry forward	184	137	9	Carry forward ...	3	1	2	10	0	0	

* Cases withdrawn, in order that samples be taken from the Wholesale Dealers.

SALE OF FOOD AND DRUGS ACTS—continued.

Article.	Number of Samples taken.	Genuine.	Adulterated.	Extent and Form of Adulteration.	Reported to Prosecutor.	Acquitted.	Convicted.	Fines Inflicted. £	s.	d.	Remarks.
Brought forward	184	137	9	Brought forward ...	3	1	2	10	0	0	
Do.	...	...	1	Mixed with 3 % water	1	...	1	1	0	0	
Do.	...	...	1	Deficient in fat 3 %	...	...	...				
Do.	...	...	1	Deficient in fat 41 % and mixed with 7 % water	1	...	1	5	0	0	
Do.	...	...	1	Deficient in fat 20 %	1	...	1	25	0	0	
Do.	...	...	1	Deficient in fat 22 % and mixed with 7 % water	1	...	1	2	0	0	
Do.	...	...	1	Deficient in fat 7 %	...	...	...				
Do.	...	...	1	Deficient in fat 7 %	...	...	...				
Do.*	...	...	1	Mixed with 7 % water	...	...	...				
Do.	...	...	1	Deficient in fat 7 %	...	...	...				
Do.	...	...	1	Mixed with 5 % water	1	...	1	25	0	0	
Do.	...	...	1	Deficient in fat 8 %	...	...	...				
Do.	...	...	1	Deficient in fat 16 %	1	...	1	7	0	0	
Do.*	...	...	1	Mixed with 5 % water	...	...	...				
Do.	...	...	1	Deficient in fat 31 %	1	...	1	2	0	0	
Do.*	...	...	1	Deficient in fat 8 % and mixed with 12 % water	...	...	...				
Do.	...	...	1	Mixed with 3 % water	1	...	1	2	0	0	
Do.	...	...	1	Deficient in fat 4 %	...	...	...				
Do.*	...	...	1	Mixed with 4 % water	...	...	...				
Do.*	...	...	1	Mixed with 3 % water	...	...	...				
Do.	...	...	1	Deficient in fat 7 % and mixed with 9 % water	1	...	1	5	0	0	
Do.	...	...	1	Deficient in fat 8 %	...	...	...				
Do.	...	...	1	Deficient in fat 10 %	...	...	...				
Do.	...	...	1	Deficient in fat 8 %	...	...	...				
Do.	...	...	1	Deficient in fat 11 %	...	...	...				
Do.	...	...	1	Mixed with 5 % water ...	...	...	...				
Do.	...	...	1	Deficient in fat 17 % and mixed with 2 % water	1	...	1	10	0	0	
Do.	...	...	1	Mixed with 2 % water	...	...	...				
Do.*	...	...	1	Mixed with 4 % water	...	...	...				
Do.	...	...	1	Deficient in fat 5 %		...	...				
Do.*	..	...	1	Mixed with 4 % water	...	...	...				
Do.	...	...	1	Deficient in fat 10 % and mixed with 4 % water	1	...	1	7	0	0	
Do.	...	...	1	Deficient in fat 5 %	...	...	...				
Do.*	...	...	1	Mixed with 5 % water	...	...	...				
Do.	...	...	1	Mixed with 5 % water	...	...	...				
Milk (Sweet)	...	...	1	Mixed with 6 % water	1	...	1	5	0	0	
Do.*	...	...	1	Mixed with 2 % water	...	...	...				
Do.*	...	...	1	Mixed with 5 % water	...	...	...				
Do.	...	...	1	Mixed with 9 % water	1	...	1	7	7	0	
Pepper (White)	4	4	...	.....	...	...	...				
Rice	3	3	...	.....	...	...	...				
Rice Flour	2	2	...	.....	...	...	...				
Vinegar	3	3	...	.....	...	...	...				
Whisky	6	3	..	.....	...	...	...				
Do.	...	...	1	46·56 degrees under proof ...	1	...	1	2	0	0	
Do.	...	...	1	47·20 do. ...	...	...	...				
Do.	...	...	1	51·92 do. ...	1	...	1	1	0	0	
				Case for refusal to sell ...	1	...	1		10	0	
Number of Samples taken	202			Cases reported to Prosecutor	19						
Number found Genuine		152		Number acquitted		1					
Number found Adulterated			50	Number convicted			18				
				Total Amount of Fines ...				£116	17	0	

* Cases withdrawn, in order that samples be taken from the Wholesale Dealer

Sanitary Department,
Public Health Chambers,
Edinburgh, *May* 1922.

To

The Scottish Board of Health and
The Right Honourable the Lord Provost,
Magistrates and Council of the City of Edinburgh.

My Lord Provost and Gentlemen,

I have the honour to present the Annual Report of the Sanitary Department of the City of Edinburgh for the year 1921.

The year under review is the first complete one under the new conditions caused by the passing of the Edinburgh Boundaries Extension Act, 1920, which by the inclusion of the Burgh of Leith, and the Parishes of Cramond, Corstorphine, Colinton and Liberton within the City area has added very considerably to the responsibilities of the Department.

SANITARY CONDITION OF THE CITY.

Until comparatively recent times Edinburgh, largely on account of the congested and overcrowded nature of the old City, resulting from its unique position in Scottish history, had a most unenviable reputation for filth and disease. From small beginnings, however, during the early and middle parts of last century, rapid progress has been made in the work of sanitary reform, and to-day the sanitary and health record of Edinburgh compares favourably with that of any other large City.

It may be difficult for the present inhabitants of Edinburgh to realise the great difference in the condition of the City to-day as compared with what it was two or three generations ago, but the mention of such items of modern necessity as a plentiful and pure supply of water, sanitary conveniences, drainage, sewerage, public cleansing, street paving, &c., will indicate some of the lines along which vast improvements have been made. Such a comparison gives cause for thankfulness, and should also give encouragement as well as impetus for the task that still lies ahead.

While the conditions to-day are certainly much improved, they are by no means perfect, and much yet remains to be done. There are aspects of the City's housing accommodation, for example, that are a blot upon her fair name. The unsatisfactory conditions that have yet to be dealt with are not confined to the former City area, but are also to be found in various parts of the extended area, particularly in the villages where, in not a few instances, the sanitary arrangements are of a very primitive nature.

HOUSING.

Attention has been directed in former Reports to the undesirable conditions resulting from the shortage of houses. Although to some extent the situation has been eased by the provision of a large number of new houses in connection with the various Housing Schemes of the Corporation at Gorgie, Willowbrae, Wardie, &c., and the erection of a further small number of houses under private enterprise, as well as the reconstruction of various tenements in the centre of the City, the shortage problem remains acute.

Later in this Report reference is made to the overcrowding that is at present quite unavoidable, and to the physical as well as moral results of such conditions. This state of things can be improved only by the provision of sufficient and suitable housing accommodation.

It requires to be emphasised once again that there is very great urgency for providing accommodation for the occupiers of the smaller class of houses, and this is particularly clamant in the central districts where the amount of overcrowding is greatest, and where the affects are bound to be more aggravated. These occupiers require houses of small rental within easy reach of their employment. The provision of such houses is also necessary in order to permit the work of reconstruction in the various unhealthy areas to be proceeded with.

WATER SUPPLY.

The City is exceptionally well provided with a plentiful and pure water supply. This is very important from a sanitary point of view, as it gives every encouragement for the observance of hygienic principles, and is thereby a valuable aid in the securing of health conditions. In the interesting historical account of the various water works of the City, given in the Annual Report by the Water Works Engineers, it is observed that the average quantity supplied daily including trade and shipping in the year 1920-1921 was 21,741,000 gallons, and the total consumpt per head per day was 48·3 gallons.

The examination of the domestic water cisterns, through which in a large number of cases the water must pass in supplying the needs of the household, is a matter that still occupies a large amount of attention. The examination continues to reveal defects which make the conditions of supply to be far from satisfactory. The cisterns are often found in very faulty situations, especially in the older tenements, and the close relation to, and communication between the sanitary conveniences is frequently such as to cause the water supply to be distinctly liable to pollution.

The number of cisterns inspected was 8,324, and no less than 3,000 cisterns were found in a dirty condition ; 181 were found without covers, while 12 had their waste pipes connected direct to the drains. The defects were brought to the notice of the owners and attended to.

SEWERAGE.

The physical characteristics of the City have enabled a satisfactory sewerage scheme to be evolved, and this has been maintained and improved upon by the Corporation as necessity has arisen.

A commencement was made with the construction of a large new sewer for the conveyance of the sewage which hitherto passed along the Craigentinny Burn and over the Craigentinny Meadows, and which besides being a source of foul smells was also the means of attracting large numbers of rats. On the completion of this work a great improvement will have been effected.

SCAVENGING.

The scavenging arrangements of the City are undertaken by the Corporation Cleansing Department. Various improvements have been made from time to time in the methods of removal and disposal of the household refuse, and also in the cleansing of the public thoroughfares. The work of this Department is a great factor in connection with the sanitation of the City. Besides the benefits in health resulting from the speedy and frequent removal of the household refuse, and the cleansing of the streets, there can be no doubt, also, that clean external conditions have a reflex effect upon many householders and act as an incentive to domestic cleanliness.

One matter that calls for improvement is the putting out of the domestic refuse in the mornings by householders in uncovered buckets or other utensils. On windy mornings a very considerable amount of dust, paper, &c., is on that account permitted to blow about the streets. This would be avoided if the refuse were properly covered, or a uniform type of covered ashbin adopted. An improvement in the condition of the streets could also be effected if householders and shopkeepers would refrain from sweeping dust, &c., on to the streets.

NUISANCES.

Most of the nuisances brought to the notice of the Department had reference to matters affecting the occupation of dwelling-houses, and consisted of defects of structure or of the sanitary fittings requiring the attention of the owners. There were many items, too, of neglect in domestic hygiene, both within and outside the dwellings, for which the occupiers were responsible. Other nuisances consisted of foul smells from business premises where the business carried on was of an objectionable nature, or from offensive accumulations, or from the keeping of animals and poultry in an insanitary manner.

A large amount of time is occupied in dealing with nuisances caused by the carelessness or neglect of a fairly large section of the population. It is remarkable to what extent insanitation is due to the careless habits and the wilfulness of a certain class of citizens. One evidence of this is to be found in the habit of many people, suggestive of a legacy from the historic era of "gardy loo," of casting garbage over windows into the back areas, courts and other odd corners. Another form of this carelessness is to be seen in the neglect to take the regular turn of cleaning the stairs, passages, sanitary conveniences, &c. A further evidence is to be found in the amount of destruction that is caused to the fabric of premises, both outside and inside the houses, as seen in damaged internal fittings, plaster work, &c., and the external walls, roofs of outbuildings, &c. Whilst, undoubtedly, much of this destruction is the work of children, it is often done under the eyes, and apparently with the consent, of parents. Such evidences indicate the prevalence of irresponsibility and the absence amongst this section of the community of the most elementary ideas of citizenship.

This problem causes much concern to the Department as well as to owners of property. From the Department's point of view, the absence of civic conscience on the part of many citizens involves additional supervision and considerable expenditure of time and money, and from the owner's point of view it adds greatly to the already heavy bill of costs. Anything that can be done to rectify this state of matters is worthy of attention. The Department will continue to act, on the one hand, by the enforcement of responsibility, and, on the other hand, by means of education.

So far as the throwing out of garbage is concerned, the transgressors, when it is possible to trace them, are requested either to clear away the garbage or to pay for its removal. Similarly with those in default of cleanliness, the delinquents are made to do their duty. As, however, tenemental life affords occasion for much abuse of liberty, it is not always easy to ascertain who are the guilty parties.

With regard to the owner's position, many have a distinct and well-founded grievance in being called upon to be at the expense of repairing damage that was obviously caused by destructive tenants. It appears only right that the owners should have some recourse against the occupiers on such occasions, and this might take the form of a legal remedy, apart from the action that can be taken at common law, to compel such tenants to repay the cost of repairs that can be proved to be due to their act or default and not to ordinary wear and tear.

One notable feature of the work of the past year was the large number of cases reported to the Department of dampness, and in many cases flooding, within the dwellings caused by the defective condition of roofs and walls. This may have been caused by the exceptionally wet weather in certain periods of the year, but there can be no doubt that it was due also, in some measure, to the want of repairs on property during the war period.

Complaints are sometimes made by occupiers whose health has been actually affected injuriously from some unknown cause. These are diligently inquired into until the cause has been satisfactorily ascertained. In one such case that occurred during the past year, an occupier and her daughter were affected with severe headache and sickness, apparently caused by fumes, and had to be removed to another part of the house. The Inspector from this Department who made the investigations was also slightly overcome. Eventually it was found that the chimney of a coke-burning stove in a workshop adjoining was choked with soot, causing the fumes to pass through the wall into the house where the sickness occurred. On the chimney being cleaned there was no further cause for complaint.

SANITARY IMPROVEMENTS.

The somewhat rapid progress that was made in the sanitary improvement of the City, particularly since the formation of the Sanitary Department in 1898, received a sudden check on the outbreak of war in 1914. During the memorable years that followed, thought, energy and expenditure were diverted to the success of the country's cause, and the more peaceful task of improving the dwellings and health conditions of the citizens had to be very materially slowed down.

Any hope there was of an immediate return to the former rate of sanitary activity after the cessation of hostilities has been rudely shaken by the unfortunate economic conditions that have since prevailed. Prices have been exceptionally high and money has been very scarce, and these stern facts, together with that of high taxation, have made it very difficult, in many instances altogether impossible, to get the really necessary work done.

Even with these difficulties, however, it was possible to make considerable progress, as a reference to other parts of this Report will show. In some instances where a large amount of work was necessary in order to improve the sanitary condition of premises, arrangements were made to do it in sections, thereby permitting the expenditure to be spread over a longer period.

There is a vast amount of structural improvements required on many properties in order to bring them into conformity with ordinary sanitary requirements, and the overtaking of that work should not be unduly delayed. But, besides the necessity for overtaking the arrears of urgent sanitary improvements and alterations, there is also the much larger task of dealing drastically with the large areas of slum properties in various parts of the City. The conditions existing at many of those places are beyond description, and are a standing disgrace to the City. The transformation of those slum areas is a problem that has been left too long for future consideration. This is a matter which concerns the present generation—the future generation will assuredly have its share—and the sooner it is seriously and purposefully faced the better.

Amongst the improvements effected during the year, it is pleasing to note that no fewer than 272 "pan" and other antiquated types of water-closets were substituted by modern appliances, and, in addition, 703 defective water-closets were improved or repaired, and 413 choked water-closets were cleared.

Defective iron sinks were substituted in 182 instances by earthenware sinks, and the woodwork, &c., surrounding the sinks was repaired in 730 instances. Sinks, wash-tubs, &c., which were found choked on 172 occasions, were cleared. Defective rhones, rain water conductors, soil pipes, and sink waste pipes, to the number of 220, were repaired.

Houses and shops were found to be flooded in 150 cases on account of defects on flats above. There were 29 complaints of smells from shops, &c., underneath dwelling-houses, and in 60 instances of animals being kept in or in close proximity to dwellings.

Dampness in houses was remedied or abated on 102 occasions, but in four houses the dampness was such as to cause the houses to be vacated, and two other houses that had become uninhabitable were also vacated. Defects in roofs in 169 cases were repaired. Smoke was complained of in 128 houses, and this was found to be due to foul and obstructed vents. Choked drains were cleared on 565 occasions, and choked surface traps on 191 occasions.

A considerable amount of internal repairs were effected upon many of the dwellings; this included the repair of floors, hearths, &c., in 180 instances; repair or renewal of windows or sky-lights in 656 cases; the repair or renewal of grates, ranges, &c., in 85 houses; and 119 defective doors were put in order, besides many other items of repairs.

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

In terms of the above-mentioned Act, which in Scotland applies to houses of a rental up to £90 per annum, it is permissible for the owner to make certain increases of rent. The occupier, however, is given the opportunity of applying to the Sanitary Authority for a certificate on the grounds that the house is not in all respects reasonably fit for human habitation, or is not in a reasonable state of repair. If this certificate is granted, the occupier can then apply to the Sheriff Court for an Order suspending such increase until the Court is satisfied on the report of the Sanitary Authority or otherwise, that the necessary repairs (other than the repairs, if any, for which the tenant is liable) have been executed, and on the making of such order the increase shall cease to have effect until the Court is so satisfied.

Whereas, in the year 1920, 350 applications for certificates were made by occupiers, during the year 1921 only 113 applications were made. On an inspection of the houses it was found that, in the great majority of cases, the applications were made on very trivial grounds, and in only 15 instances were the conditions of such a nature as to warrant the granting of certificates. Of that number, 10 were on account of the houses not being in all respects reasonably fit for human habitation, and in 5 cases the houses were not in all respects in a reasonable state of repair.

All matters of disrepair, &c., brought to the notice of the Department on account of these applications were notified to the owners, and by that means it was possible to have a large amount of repair work done.

Since the commencement of the present year there has been a considerable falling off in the number of applications for certificates.

CLEANSING OF DIRTY HOUSES.

The walls and ceilings of 787 houses were found by the Inspectors to be in a dirty condition, and the owners were called upon to have them cleansed and painted. Other 121 houses requiring similar treatment were done by the tenants. This work is not always performed in a satisfactory manner, and as the powers of the Local Authority are somewhat limited, it is impossible to do other than express dissatisfaction. What is required, in many instances, is the stripping off of the existing dirty and worn wall-paper, and the repapering or, what is better, the repainting of the walls in an efficient manner. Under Section 40 of the Public Health (Scotland) Act, 1897, however, the

owner can only be called upon to *whitewash, cleanse, or purify* the house as the case may require. The wording of the Clause in the Local Act is also restricted to *whitewash.* In very few instances, however, is whitewashing now done, and the time has now arrived for amending the Acts, so as to empower the Local Authority to have the cleansing, painting, or repapering done as the case may require to their satisfaction.

The attention of the occupiers of 531 houses had to be directed to the dirty condition of the floors and fittings and of the beds and clothing. A considerable number of these were aged occupiers who, on occasion, were found to be quite unfit to look after either their personal or their household cleanliness, and the conditions were frequently of the foulest description. A number of these old people form the habit of accumulating old clothing and miscellaneous material, which is no longer fit for use. Their floors, walls and ceilings, and their bedding in time become very filthy, and their clothing and bodies also become dirty and verminous, yet they appear not to realise these conditions. They thus become a source of danger to their neighbours.

It is possible, on occasions, to get some friend who is willing to assist in the cleansing operations, and in other instances the aged person concerned agrees to go to some home or hospital ; but in a number of cases they resolutely oppose any suggestion made to do either of these things, and it is difficult, in such cases, to effect an improvement. In the interest of the community, these old folks should be properly cared for and attended to.

CLEANSING OF DOMESTIC SURROUNDINGS.

After the usual notices to the owners, 1,448 common stairs and passages were painted. The walls and ceilings had, in many instances, first to be repaired before the painting was done.

Owners of stairs are not called upon to paint same until the stairs are actually in a dirty condition, but while in the better parts of the City the time between each painting operation may extend to a considerable number of years, in the more populous parts of the town it often happens that painting requires to be done year after year. This frequency is caused not so much by ordinary wear and tear, but more often by the disfigurement and destruction that is caused by children and others in the stair. This could be greatly lessened if occupiers would strive to preserve the cleanliness of their surroundings as much as possible.

There can be no doubt, also, that much of the dust that is to be found on the walls of the staircases is caused by the hasty and careless manner in which the steps and passages are swept by the occupiers. But, as already indicated, the sweeping and washing of the stairs and passages is frequently neglected by some of the occupiers, and the Inspectors have to be called in to set the rotation of cleaning once again in proper order. Thus, on no less than 3,153 occasions did this neglect to observe the regulations occur, and in several instances the threat of a prosecution had to be resorted to.

Occupiers, too, often neglect to get rid of their household refuse regularly by putting it out to the scavenging carts in the morning, and this results in the refuse being deposited in any out-of-the-way corner. In the course of their visits, the Inspectors discovered no less than 2,081 such accumulations of rubbish, garbage, and filth in areas, vacant houses, cellars, lobbies, &c., and had to arrange for their removal.

As has been already pointed out, many back-courts and greens in various parts of the City are found in a dirty and untidy state, caused by the casting of garbage and filth, by the occupiers, over windows. It is difficult to make some tenants realise the harmful effects of this practice, both to themselves and their neighbours.

TICKETED HOUSES.

These are houses of one or two apartments having less capacity than 2,000 cubic feet, and which were all measured a number of years ago in accordance with statutory requirements. These houses had tickets placed upon the doors to indicate the available air space and the maximum number of persons that could occupy them. Most of the ticketed houses are situated in the central districts of the City, and are regularly visited by the Lady Sanitary Inspectors, who give attention to such matters as overcrowding, the general cleanliness of the houses and their contents, including the bedding and clothing, as well as the sanitary condition of the conveniences, stairs, &c. Inspections are also made by the Lady Inspectors of the other houses of larger capacity in the same and other stairs.

A great deal of good is done in the course of these visits, which are welcomed by the occupiers for the most part. The Lady Inspectors are enabled to get alongside the housekeepers, and to give them encouragement as well as advice in carrying through what is frequently a burdensome, discouraging, and difficult task. Many cases occur where the housewives, owing to illness or other circumstances, are totally unable to attend to their usual duties, and on that account the cleansing and other housework gets behind. In such cases it is often possible to arrange for some relative or friend to come in and ease the burden by cleaning up and taking charge of the housework.

Altogether 23,901 visits were made, 288 houses were found dirty, and the bedding, &c., of 159 houses were found in a dirty state.

OVERCROWDING.

Since fresh air is considered to be one of the most important requirements in the maintenance of a healthy community, it is laid down as one of the axiomatic principles of sanitary science that overcrowding should be discouraged and discontinued whenever found. This was the practice of the Department until, by reason of the continued shortage of dwelling-houses, it became next to impossible to deal with the many instances that came to notice. In several extreme cases throughout the year successful efforts were made to have the overcrowding discontinued, but in a large number of cases it was impossible for the occupiers to find larger houses, and so the continuance of the unsatisfactory conditions had to be permitted. A list of the small houses found overcrowded by the Department, and still in that condition, has been compiled, and this list includes 426 houses. But the harmful possibilities, both physical and moral, associated with this state of affairs exist in many other houses besides those coming more frequently under the supervision of the Department.

In the list of 426 houses referred to above, 232 were of one apartment, 181 of two apartments, and 13 of three apartments. The overcrowding in the one-apartment houses was in 127 cases by one person, in 73 cases by two persons, in 20 cases by three persons, in 11 cases by four persons, and in 3 cases by five or more persons in excess of the number allowed by statute. Of the two-apartment houses overcrowded, 77 were by one person, 46 by two persons, 38 by three persons, 14 by four persons, and 6 by five persons over the number allowed. The remaining houses consisting of three apartments were in 6 instances occupied by one person in excess, 5 by two persons, and 2 by three persons.

While in many cases the overcrowding was caused by members of the same family, it was more frequently caused by taking in lodgers, and in a number

of instances by two families living in the same house. The following are a few examples :—

1. A one-apartment house, suited for two persons, was found occupied by father, mother, and three children, and a lodger with two children, thus reducing the air space to 141 cubic feet per person. The lodgers have since found accommodation elsewhere, but until the tenant finds a larger house the overcrowding will continue.

2. A small house of three apartments, with accommodation for eight persons, was occupied by man and wife and four children, and another man and wife and four children, thereby reducing the air space to 265 cubic feet per person.

3. A small house of two apartments, suited for two persons, was occupied by father, mother, and four children, thus reducing the air space to 175 cubic feet per person.

4. A one-apartment house, suited for three occupants, was occupied by father, mother, and six children.

5. A house of two apartments, with accommodation for three occupants, was occupied by father, mother, and six children.

A problem which the Department is often faced with is the lack of proper sleeping accommodation in small houses, on account of which the sexes not only sleep in the same apartment but actually share the same bed, as for instance :—

1. Mrs ——, living in a small room, usually rather unsatisfactorily kept, had one bed shared by herself, son (age 23), and daughter (age 17). Occupant pled lack of means as being the cause.

2. Mrs ——, living in a small room, shared the one bed with son over 30 years of age.

3. Mr ——, occupying one fair-sized room, with only one bed, shared by himself, soldier son, and daughter (21 years). Acting on advice of Inspector, a second bed was obtained.

COMMON LODGING-HOUSES.

Including the common lodging-houses in Leith, 9 in number, there are 20 common lodging-houses in the City, with accommodation for 2,398 lodgers. Fifteen houses are used for the housing of male lodgers, 2 are set apart for married couples, and 3 are reserved for women lodgers. Except for 1 at Leith, owned by the Corporation, all the lodging-houses are privately owned. The charges range from 6d. per person per night to 1s. per person per night.

As the registration of common lodging-houses was regulated by a definition contained in the Public Health (Scotland) Act, 1897, and was limited to the amount of charge made per lodger, viz., a sum not exceeding 6d. per night, these places had to be registered temporarily as houses let-in-lodgings.

The Local Authority, however, made application to Parliament during the year for permission to have this definition amended, so that all the houses could still be included within the category of common lodging-houses. As a result, a clause was included in the Edinburgh Corporation Order Confirmation Act, 1921, increasing the sum by which it is determined whether the house is or is not a "common lodging-house" within the meaning of the Act, to 1s. per night per lodger.

Regular and frequent inspection was made of the premises, and of the bedding, fittings, &c., to see that the bye-laws were being observed, and on the whole they were found to be kept in very good condition.

Only in three of these lodging-houses is cooked food provided and sold by the management. In all other cases the lodgers have either to obtain their food outside or purchase it and cook it themselves on the hot plates provided within the kitchens of the lodging-houses for their use. Food thus partaken is not always the most suitable, and frequently, it is feared, money that should be spent in obtaining nourishing food is spent in worse directions. Arrangements for the provision of cooked food appear to be desirable in all modern common lodging-houses.

An addition was made to the Salvation Army Hostel at Tolbooth Wynd, Leith, to augment the accommodation by 24 beds, and various improvements were carried out at other houses.

FARMED-OUT HOUSES AND HOUSES LET-IN-LODGINGS.

At the end of the year there were 206 farmed-out houses on the register, and these provided accommodation for 779 persons. Frequent inspections were made of all the houses to see that they were being kept clean and in good order. On several occasions the attention of the keepers had to be directed to certain irregularities in cleansing and other matters. It is interesting to note that the charges made for lodgings at these places per night varied from 1s. 1d. to 2s., and from 3s. 6d. to 10s. 6d. per week. In considering these prices, it has to be remembered that the accommodation and furnishings are mostly of the poorest description.

An application made by the Corporation to the Scottish Board of Health for the powers contained in the Glasgow Corporation Order Confirmation Act, 1919, for dealing with this class of house, having been granted, bye-laws in terms of that Act were prepared and approved of by the Corporation. Meanwhile, they await the confirmation of the Board. Once they are finally sanctioned it will be possible to greatly improve the conditions obtaining at these places.

There are also 98 houses-let-in-lodgings on the register, and these provide accommodation for 967 persons. This number is in addition to those referred to under the heading of common lodging-houses, the registration of which, meanwhile, has to be effected under the category of houses let-in-lodgings.

SCHOOLS.

The sanitary condition of the schools continues to be maintained in excellent condition by the Edinburgh Education Authority and the other School Directors, and any matters requiring attention are immediately given effect to by them.

By arrangement with the Education Authority, an Inspector attached to the Sanitary Department devotes his whole time to visiting the homes of dirty and verminous children discovered attending the schools in the City that are under the control of the Education Authority.

During the year, 312 cases, involving 484 children, came under the supervision of this Inspector. Upon inspection, 46 houses were found having the floors and bedding in a dirty condition. The walls and ceilings of 15 houses were also in a dirty state; while in 6 houses overcrowding was discovered. The results effected included the bathing of 222 children and the disinfection at the City Disinfecting Station of 36 sets of bedding.

The following are typical of the cases that require to be dealt with:—

Case A.—Tenement house of 2 apartments, occupied by widower, who was unemployed, and his four sons, two of whom were of school age. The whole house was dirty; the bedding was very dirty and in an extremely verminous condition. All necessary disinfection was carried out, the children bathed and their clothing disinfected. The walls were stripped and size-painted and all bedclothes afterwards washed. The father is now working, and a distinct improvement has been steadily maintained.

Case B.—A very small area house of 1 apartment (cubic capacity, 977 feet, allowing 2 persons) occupied by tenant, his wife and 5 children, whose ages ranged from 13 to 1½ years. The house was dirty, the bedding was dirty and verminous, and the overcrowding was of such density that the cubic capacity, instead of being 400, was reduced to the extremely low figure of 139 cubic feet per person. The house, bedding, and all personal clothing were disinfected, and the whole family were bathed at the City Disinfecting Station. The overcrowding was abated by obtaining a large additional room, thereby enabling the family not only to live under healthier conditions, but also conditions much more conducive to a better moral atmosphere in the home.

Case C.—Top-flat tenement house of 2 apartments, occupied by tenant, his wife, two children, and mother-in-law, 68 years. The house and bedding were dirty, and the old woman was lying ill in bed. She was afterwards removed to the Poorhouse, where she remained for some months. All necessary disinfection was carried out, and the wife, relieved of continuous attendance on her mother, was able to give the necessary attention to her home and children.

HOUSING OF ANIMALS.

The sanitary supervision of the places where animals and poultry are kept has an important bearing upon the health of the community. Particularly is this the case during the summer and autumn. Visits are accordingly paid by the Inspectors to those places at frequent intervals to see that they are kept in a satisfactory manner. Throughout the whole year, and especially during the fly season, insistence is made upon the frequent removal of stable manure.

Many stables, pig-stys and poultry-runs are situated in close proximity to dwelling-houses, and complaints of smells are frequently made by citizens. It is not always easy to cause those in charge of such places, and who are constantly working in them, to realise, that, although the smells may not be doing themselves any evident harm, yet they are very disagreeable to the occupiers of adjacent houses who wish to maintain a fresh atmosphere therein.

In recent years many additional poultry-runs have been established within the City area, and frequently these have been placed in positions that are close to dwellings, and much annoyance is caused to the neighbourhood, not only by the smells, but also by the constant crowing and cackling.

As indicated in a previous Report, the only satisfactory way to control this growing business is to provide a code of bye-laws dealing with such matters as locality, relation to dwellings, construction, and proper maintenance and cleanliness.

PLACES OF PUBLIC ENTERTAINMENT.

As it is of the utmost importance that the Theatres, Picture Houses, and other places of public entertainment, where crowds of people are housed for lengthy periods, should be maintained in a thorough hygienic condition, those places are kept under regular supervision.

Many places have been constructed with due regard to sanitary principles, and the management, in most cases, make every effort to have such important matters as cleanliness, ventilation and heating, properly attended to. In a few instances, however, it has been found necessary to indicate directions in which improvements could be effected. Cleaning and painting were required at several establishments, and these were duly attended to.

INSPECTION OF SHOPS AND RESTAURANTS.

Close observation was made of all shops and warehouses in which foodstuffs were either sold or prepared, as well as the kitchens of hotels and restaurants, to see that these were maintained in a satisfactory hygienic condition. Many matters requiring improvement were brought to the notice of those responsible.

These included the cleansing and painting of walls and ceilings, the provision, repair, or cleaning of sanitary conveniences, the provision of receptacles for offal and refuse, the abatement of nuisance from smells, the removal of accumulations of refuse, the extermination of rats, and the carrying out of various structural improvements.

RAT DESTRUCTION.

Very great progress has been made in recent years in the work of rat destruction. The Rats and Mice (Destruction) Act, 1919, although defective in certain respects, has been a useful instrument to Local Authorities in bringing pressure to bear upon occupiers of premises to have satisfactory measures adopted to exterminate these destructive and disease-carrying pests.

In continuance of the policy carried out by the Department as outlined in last year's Report, visits were made by the Inspectors to the premises that were known to be infested, and advice was given to the occupiers as to the best means of extermination, and to the necessity for adopting rat-proofing measures. It was found that infestation occurred in 731 premises. This number included 195 dwelling-houses, 194 shops, 99 warehouses, 68 farms and water-courses, 41 piggeries, 90 stables and other outbuildings and 44 miscellaneous premises. Tradesmen were engaged by the occupiers or owners to assist in the work of extermination in 120 instances, and a large amount of structural repairs were carried out. Revisits were made to all the infested premises from time to time, and it was found that no less than 208 premises were completely cleared of rats. Extermination measures were being continued at the remainder.

It is somewhat difficult to give a correct estimate of the number of rats actually destroyed during the year, but reports which have reached the Department show that at least 12,000 rats were found dead or caught in traps.

In accordance with the request of the Scottish Board of Agriculture, an intensive campaign for the destruction of rats was carried out during the week 28th November to 3rd December, and this rat week proved to be very successful. The purpose of the campaign was to secure at the one time the co-operative effort of those whose premises were infested, and this was accomplished.

In the work of extermination various methods were adopted according to the nature and situation of the premises, including rat hunting expeditions with the use of ferrets, dogs, cats, as well as fumigation, and the use of various poisonous baits.

The publicity given to the rat problem during the campaign and at other times has been the means of educating the public to the importance and necessity for continued co-operation and persistent effort in the work of rat destruction, in having premises rat-proofed, and in keeping out of reach foodstuffs and refuse likely to attract rats.

PORT SANITARY INSPECTION.

The sanitary supervision of the shipping arriving at our Ports is of the utmost importance so far as the health of the community is concerned.

In accordance with the scheme of Port Sanitary Administration, approved by the Local Authority, and afterwards sanctioned by the Scottish Board of Health, two Sanitary Inspectors were set apart for the sanitary inspection of ships passing in and out of Leith Docks and Granton Harbour.

Their duties consist in the boarding of all ships coming into Port, and of making an examination of the quarters of the crews and passengers, including the bunks, bedding and clothing, sanitary accommodation, water supply, &c., and also investigating into the presence of rats on board vessels. In the course of these inspections 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, *e.g.*—in 71 cases the floors, decks, &c., were found in a dirty condition; in 60 cases the bedding and clothing were dirty and verminous; dirty lockers were found in 42 instances, and foul or choked water-closets, latrines, wash-basins, &c., in 172 instances, besides other defects.

In many cases the condition of the sleeping quarters, especially those of the sailors and firemen, leaves much to be desired. The presence of bugs and other vermin within the quarters is apparently taken by the men as a necessary evil, and little effort is made in many cases to cope with this most objectionable state of matters. Should any of the men come ashore carrying these vermin upon their clothing, they become a menace to all with whom they come into contact.

As regards disinfestation there are many so-called remedies in the market, but the limitation of their application makes them at best but temporary expedients. For a thoroughly bad case of verminous infestation, including the bedding and clothing, nothing can take the place of effective fumigation. The practice of carrying aboard second-hand bedding by members of the crew requires careful supervision, as the bedding is often hawked from ship to ship, and in many cases such bedding has been found in a very dirty condition.

There is still room for great improvement in the outfitting of that type of vessel known as the "weekly boat," and "coasters." The provision made for the crew of suitable washplaces is very inadequate considering the class of work carried on. There is also an absence of proper meat safes in those cases where the crews victual themselves, and it is quite common to find butcher meat, fish and other foodstuffs stored in spare sleeping bunks and other confined places, which, to most people, would make the food unsuitable for use.

Occasionally, when nuisances are intimated to the master, they are not remedied before the departure of the ship, and information has to be sent to the Sanitary Authority of the next Port of call, so that steps may be taken to enforce the requirements. It would tend to create greater interest in the maintenance of proper sanitary conditions on ships if the procedure for dealing with nuisances laid down under the Public Health (Scotland) Act, 1897, was made less cumbersome.

The destruction of rats aboard ships is of primary importance if the present intensive campaigns for rat extermination throughout the country are to achieve the best results. There can be no doubt that much still requires to be done to make it impossible for rats to pass ashore from ships. A great number of foreign-going ships carrying general cargoes bring home considerable numbers of rats, and as the ship cannot be disinfested until the cargo has been discharged, it is possible for numbers of rats to be conveyed ashore in the cargoes. It is also found that ships undergoing repairs in dry dock have plates removed without any effort having been made in the first place to destroy the rats on board, with the result that they have ready means of escape to the shore. Many masters also show a marked indifference to the

use of rat guards on hawsers, chains, &c., used for securing the vessels to the shore. These are often found to be on board, but are not made use of unless a request is made to do so.

Masters of ships state that these requirements are not enforced at all Ports. This points to the necessity for a uniform system of Port Sanitary Administration throughout the whole country. It is desirable also that a regular system of fumigation should be instituted, whereby ships, and especially all foreign going ships, would be fumigated at stated intervals, and a record kept of the place and date of the operations witnessed by the Port Sanitary Officers. The United States' Government as well as some European Governments have adopted stringent regulations along these lines. In order to minimise the danger of infection from abroad it will be necessary for this country without delay to establish some such system.

STAFF.

As will be seen from the record of work done, the Department has had a very busy year. In every section the members of the staff have given faithful and assiduous service, and I am indebted to them for their loyal support. It has been a great pleasure, also, to have the complete and hearty co-operation as Depute-Chief Inspector of Mr Thomas Bishop, whose extensive experience as Chief Inspector in Leith has made his services invaluable.

I am,

My Lord Provost and Gentlemen,

Your obedient Servant,

ALLAN W. RITCHIE, M.R.San.Inst.,

Chief Sanitary Inspector.

SANITARY IMPROVEMENTS IN 1921.

Nature of Nuisance.	Calton.	Canongate.	Newington.	Morningside.	Merchiston.	Gorgie.	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 Cramond.	Totals.
Accumulations of rubbish, garbage and filth removed from areas, roofs, cellars and vacant houses	50	191	20	14	12	81	9	20	94	82	76	285	105	134	483	131	104	113	20	25	20	2	10	2081
Stairs and passages in a dirty condition and cleansed by tenants	122	312	41	39	37	102	10	28	67	109	164	489	95	245	610	109	135	262	107	67	...	3	...	3153
Choked W.-C.'s cleared	7	75	7	...	...	5	3	2	5	8	16	124	16	34	61	12	14	12	3	8	1	...	...	413
W.-C.'s insufficiently lighted and ventilated—improvements effected	...	...	1	...	...	...	...	...	...	...	1	3	...	...	2	...	...	...	3	...	...	...	...	10
W.-C.'s removed to more sanitary situation	...	...	...	...	1	...	...	6	...	...	...	1	...	...	2	...	1	...	...	...	...	...	...	11
Defective W.-C.'s:—																								
New apparatus substituted	16	2	22	6	13	13	8	2	9	15	4	14	23	10	47	12	25	9	7	8	1	4	2	272
Improved or repaired	29	84	10	9	12	39	3	5	14	18	10	129	31	53	100	28	43	49	12	14	2	8	1	703
Partitions of W.-C.'s repaired	...	...	...	...	...	...	...	...	1	...	...	3	...	1	4	...	...	1	...	...	...	...	2	12
W.-C.'s introduced	...	...	...	...	...	...	2	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	4	7
Insanitary W.-C.'s removed	...	...	...	...	...	1	...	...	...	...	...	1	...	2	1	2	...	...	...	...	...	...	...	7
W.-C.'s and sinks in a filthy condition and cleansed	7	51	2	3	1	18	...	...	5	4	12	36	5	24	27	4	6	10	2	3	1	2	...	223
Sinks introduced	...	...	...	...	...	...	1	2	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	4
Insanitary sinks abolished	1	...	1	...	...	...	...	...	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	5
Defective sinks:—																								
Earthenware sinks substituted	3	2	1	2	2	23	3	1	3	13	3	12	37	8	36	2	4	11	6	6	...	4	...	182
Repaired (Woodwork, &c.)	86	20	9	18	23	91	6	13	39	15	6	29	43	22	51	63	62	62	30	16	14	8	4	730
Removed to more sanitary situations	...	...	...	1	...	...	...	1	...	1	1	...	...	...	3	...	...	1	1	...	...	...	...	9
Choked sinks, washtubs, &c., cleared	11	17	4	3	3	12	...	5	5	2	2	25	13	18	23	2	10	8	3	5	1	...	...	172
Wash-hand basin renewed or introduced	...	1	1	2	4	...	...	2	...	...	1	...	1	...	...	2	1	...	...	...	...	...	...	15
Washtub introduced or substituted	...	16	3	1	1	10	1	1	...	1	...	...	15	...	1	...	...	...	...	...	...	...	...	50
Defective rhones, rainwater conductors, soil pipes and sink waste-pipes repaired	9	5	4	6	12	13	3	8	4	5	9	35	9	20	18	12	13	16	8	6	...	5	...	220
Privies repaired and improvements effected	...	...	...	1	1	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	2	...	1	7
Houses and shops flooded from defects on flats above	3	5	2	3	4	13	1	4	4	...	7	24	5	14	28	2	7	19	1	4	...	...	...	150
Smells from shops, &c., underneath dwellings	2	3	...	...	...	1	...	1	4	...	1	...	1	6	...	1	2	5	1	1	...	...	...	29
Animals kept in, or in close proximity to, dwellings	...	1	4	1	1	6	...	...	8	2	1	3	1	12	1	5	7	3	2	...	...	...	2	60
Carry forward	346	785	132	109	127	428	50	101	264	275	318	1214	400	603	1498	387	434	581	206	163	42	36	26	8525

SANITARY IMPROVEMENTS IN 1921—continued.

Nature of Nuisance.	Calton.	Canongate.	Newington.	Morningside.	Merchiston.	Gorgie.	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 Cramond.	Totals.
Brought forward	346	785	132	109	127	428	50	101	264	275	318	1214	400	603	1498	387	434	584	206	163	42	36	26	8525
Houses distempered, papered or painted by Tenants	2	14	...	1	...	3	...	3	...	4	6	10	4	1	33	14	15	8	...	2	1	...	...	121
Owners	65	33	9	15	20	59	14	29	25	34	44	109	22	85	116	31	26	22	3	9	3	5	9	787
Floors and bedding of houses in a dirty condition and cleansed by tenants	11	52	12	3	3	6	4	8	2	6	12	117	6	41	89	31	29	72	8	12	6	...	1	531
Schools:—																								
Walls and ceilings painted or distempered.	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...	...	...	...	...	...	3
Water-closets substituted	24	...	...	17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	41
Water-closets and urinals repaired	...	...	...	2	...	...	...	...	...	...	...	...	2	...	...	3	...	...	...	...	...	...	...	7
Staircases painted	78	137	30	63	92	79	52	65	61	50	41	120	97	126	123	52	30	54	45	21	2	16	14	1448
Nuisances due to bad smells in dwelling-houses caused by escapes of gas, dead vermin, &c.	9	2	6	7	4	5	5	7	8	6	10	23	1	17	10	8	15	14	5	2	...	1	1	166
Damp houses remedied or abated	13	3	5	1	3	10	2	3	2	2	...	8	8	7	5	2	4	7	7	...	1	2	7	102
Damp and uninhabitable houses vacated	1	...	...	...	...	...	...	...	1	1	...	1	1	...	...	...	...	1	...	...	...	...	...	6
Houses overcrowded	13	36	16	3	...	3	2	11	12	12	8	99	19	60	96	30	1	4	...	...	1	...	...	426
Reported cases of overcrowding	1	...	...	...	1	2	...	1	...	2	2	6	1	2	3	1	2	2	2	...	...	...	...	28
Premises infested with rats	21	36	24	13	16	30	27	31	20	26	104	54	10	22	25	23	42	31	45	7	39	21	64	731
Premises infested with other vermin	6	3	2	...	...	4	2	2	1	1	3	4	2	7	10	9	4	1	4	3	...	...	...	68
Houses temporarily without water supply, due to burst pipes, &c.	14	10	8	...	...	5	...	11	8	7	2	51	19	3	53	...	34	13	2	...	...	...	8	248
Smoke in houses due to foul or obstructed vents	7	5	3	4	7	5	1	9	6	8	4	21	3	8	12	5	7	8	3	2	..	..	...	128
Accumulations of manure near dwellings	5	6	2	...	3	10	1	10	3	12	4	1	28	13	1	4	...	3	8	..	..	1	4	119
Disused cellars cleaned and closed	3	...	...	...	...	2	...	...	3	1	10	3	2	27	17	...	4	7	...	...	.	...	...	79
Ruinous cellars removed	...	...	...	...	...	...	...	...	...	...	4	...	...	3	...	...	...	...	...	...	..	...	...	7
Choked surface traps cleared	4	7	1	1	...	51	5	13	5	5	3	20	17	3	18	7	9	14	2	1	5	...	...	191
Choked drains cleared	21	50	2	3	6	48	3	5	9	13	10	66	43	24	81	30	31	57	24	21	19	3	5	565
Surfacing of courts and areas repaired or renewed	2	...	...	...	...	1	...	1	...	2	...	1	1	5	...	1	...	...	...	1	1	...	...	16
Brokers' shops and rag stores cleaned	...	...	...	...	...	...	...	...	...	...	...	3	...	1	1	...	...	...	...	...	...	...	...	5
Fried-fish shops cleaned	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	...	...	...	...	...	4
Shops cleaned by tenants or owners	1	...	...	...	...	...	...	...	...	...	1	3	1	...	8	3	1	...	1	...	1	...	...	20
Carry forward	648	1179	252	242	282	751	168	310	430	467	586	1935	687	1058	2199	645	688	900	365	244	112	85	139	14372

SANITARY IMPROVEMENTS IN 1921—continued.

Nature of Nuisance.	Calton.	Canongate.	Newington.	Morningside.	Merchiston.	Gorgie.	Haymarket.	St Bernard's.	Broughton.	St Stephen's.	St Andrew's.	St Giles.	Dairy.	George Square.	St Leonard's.	Portobello.	South Leith.	North Leith.	West Leith.	Central Leith.	Liberton.	Colinton.	Corstorphine and Cramond.	Totals.
Brought forward	648	1179	252	242	282	751	168	310	430	467	586	1935	687	1058	2199	645	688	900	365	244	112	85	139	14372
Floors, hearths, &c., repaired	16	2	5	3	1	12	3	6	9	7	4	18	8	11	11	13	5	21	7	4	6	1	7	180
Floors affected with dry rot	1	...	...	1	1	2	2	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	1	11
Coal-bunkers repaired or provided	4	...	...	...	2	...	...	1	3	2	1	3	1	5	17	...	...	6	3	1	...	...	...	49
Boilers repaired or renewed	4	2	1	1	1	...	...	1	2	1	...	3	...	1	2	2	3	1	1	...	...	...	...	26
Windows and skylights repaired or renewed	65	17	16	17	6	11	5	4	57	58	18	78	14	47	102	33	5	70	11	18	1	...	3	656
Grates or ranges repaired or substituted	10	...	4	2	...	6	3	...	10	7	5	2	4	2	10	2	3	9	1	1	2	...	2	85
Defective roofs repaired	10	2	4	8	3	4	1	1	2	4	9	26	5	15	13	5	16	18	8	7	1	3	4	169
Walls repaired and pointed	6	2	1	1	...	1	...	2	1	2	...	...	1	4	1	...	1	2	1	2	1	1	3	33
Door for room or press provided	...	...	...	...	...	...	...	...	1	...	...	...	...	...	2	...	...	1	1	...	...	...	...	5
Doors repaired	10	3	4	4	1	2	3	3	17	5	10	15	4	6	10	2	3	9	6	...	...	...	2	119
Locks and keys provided for doors of mutual water-closet apartments	...	3	1	...	...	...	...	1	1	...	...	...	...	9	3	...	2	2	...	1	...	6	...	29
Doors and windows of condemned and vacated houses secured and built up	1	...	...	...	...	...	...	2	2	1	6	4	...	2	7	...	4	3	...	...	...	...	...	32
Tenants shaking mats on stair landings, &c.	...	3	...	3	6	...	...	...	4	4	1	2	4	3	1	...	...	2	...	...	...	...	1	34
Tenants casting garbage over windows	18	4	3	13	8	3	...	6	6	4	8	21	9	12	10	2	4	2	2	...	...	...	...	135
Doors erected to prevent unauthorised persons gaining access and committing nuisance	...	...	...	...	...	...	...	...	...	...	...	2	...	2	1	...	1	...	...	...	...	...	...	6
Persons committing nuisance in common stairs	3	2	2	...	2	2	...	...	1	1	1	4	2	1	...	...	3	...	...	...	...	...	...	24
Dogs and cats committing nuisance in common stairs	5	2	...	7	10	5	4	4	4	3	5	5	7	8	8	1	2	6	4	3	...	...	...	93
Dirty poultry houses and runs	...	...	...	...	1	...	...	...	...	...	...	...	...	2	...	4	...	...	2	1	...	...	...	10
Cisterns :—																								
Found dirty	6	13	...	...	48	727	...	1	2	2	5	400	1	8	3	3	308	230	729	512	1	...	1	3000
Without covers	1	2	1	...	5	12	...	...	1	2	2	14	...	3	1	...	30	33	39	36	...	...	...	182
Repaired or renewed	2	5	4	...	1	33	...	1	1	...	3	6	10	13	11	1	7	13	5	2	...	...	...	118
Waste pipes disconnected from drains	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	5	4	1	...	...	...	12
Branches taken off main	...	...	1	...	...	...	...	8	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	11
Water pipes repaired	6	7	1	3	3	7	...	1	4	5	...	14	1	9	9	3	14	20	4	1	1	1	1	115
Walls of W.-C.'s used in common, limewashed	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	2	...	...	...	1	...	...	...	4
Plaster repaired	15	13	4	7	5	15	5	3	7	16	5	33	8	27	24	4	5	25	5	9	3	2	7	247
Miscellaneous nuisances	3	1	1	3	...	3	3	3	7	8	3	17	4	11	2	8	2	5	4	1	3	1	2	95
Totals	834	1262	305	315	387	1596	197	359	572	601	672	2602	770	1260	2447	731	1108	1383	1202	845	131	100	173	19852

PORT SANITARY INSPECTION.

Ships inspected	364
Re-visits made	329
Nuisances discovered	709
Nuisances abated	553
Communications written	29
Notices served	35
Verbal warnings	325
Ships fumigated for vermin, by owners	27
Rats exterminated	614
Ships provisioned with rat guards by request	97

NUISANCES DISCOVERED.

Dirty floors, decks, &c,	71
,, bedding, clothing, &c.	60
,, partitions and ceilings	5
,, lockers, &c.	42
Foul closets, latrines, &c.	102
,, wash basins	24
,, sinks	3
,, baths	2
,, scuppers	16
Choked or defective latrines	15
,, ,, wash basins	6
,, ,, sinks	4
Obnoxious odours	5
Accumulation of garbage, refuse, &c.	7
Dirty fresh water tanks	68
Foul and offensive bilges	4
Dampness in quarters	6
Ships without rat guards affixed to mooring ropes	202
Presence of rats and mice	20
,, cockroaches and beetles	14
,, bugs and fleas	30
,, flies	1
Miscellaneous	2

SUMMARY—YEAR 1921.

Number of complaints by citizens	3,975
,, ,, ,, other Departments	218
Number of nuisances discovered and reported by District Inspectors	16,315
Total number of nuisances dealt with by the Department	20,508
Of these have been abated	19,489
The remainder being in progress or under arrangement	1,019
Number of intimations of existence of nuisance served	1,712
,, notices to remove nuisances served at the instance of the Local Authority	241
,, notices delivered cautioning persons against casting garbage over windows	2,400
,, notices served on occupiers, failing to take due rotation of stair sweeping and washing	267
,, notices served for the cleaning of dirty areas, cellars, &c.	553
,, ,, ,, ,, whitewashing and cleansing of houses	752
,, ,, ,, ,, removal of accumulation of manure	46
,, ,, ,, ,, cleansing of floors, bedding, &c.	29

Veterinary Department,
Public Health Chambers,
Johnston Terrace,
Edinburgh, *May*, 1922.

To

The Lord Provost, Magistrates, and
Council of the City of Edinburgh.

My Lord and Gentlemen,

I beg to submit, herewith, my Report on the work of the Veterinary Department during the year 1921. The extension of the City boundaries in November 1920, to include Leith and the Suburban district of the County of Mid-Lothian, naturally caused a material increase of work, the full effect of which was only appreciated during the year under report, and it is illustrated in the appended tabulated statements dealing with the various sections of work. The inclusion of the Port of Leith entailed a very important new duty in the inspection of imported foodstuffs. A glance at the attached statement will illustrate the variety of materials which came under observation, and they have been grouped together to show the countries from which they are imported. In addition, the Department has, during the year, undertaken the Veterinary care and supervision of the Cleansing Department Horses.

INSPECTION OF MEAT AND OTHER FOODS.

The live stock markets have been maintained under close observation in order that control may be exercised over obviously diseased animals offered for sale, and which are intended for slaughter for human food. It is satisfactory to be able to state that the numbers of animals exposed in the fat stock markets within the City in a condition which justifies intervention is relatively small. The Public Health (Scotland) Act, 1897, confers power on the Veterinary Inspector to seize "any animal, alive or dead," which is diseased and is exposed for sale for human food, and such seizures have been made from time to time. It is found, however, that immediate removal and slaughter provide a prompt and more appropriate method of dealing with the majority of these animals than formal seizure, and no difficulty has been experienced in arranging for this to be carried out. During the year 15 animals have been dealt with in this way, and as all were condemned after slaughter it is obvious that the intervention was fully justified.

During the year, 157,129 animals were passed through the Gorgie Slaughterhouses. These large numbers make constant attendance at the Abattoir during working hours necessary, in order to ensure proper supervision and control of the meat passed out for human food, and constant attendance has been maintained. At Leith and Portobello Abattoirs, the corresponding figures were 9,361 and 1,394 respectively, and the work of the Department was arranged to ensure that the whole of the meat was subjected to inspection before being passed on to the market. As compared with the preceding year, the gross total of 167,884 animals, passed through the three slaughterhouses, represents an increase of 35,022, of which 9,361 is attributable to the inclusion of the Leith. Cattle and calves showed a decline of 1,323 and 1,821 respectively, sheep increased by 36,746, and pigs by 1,426. The relatively large increase in the numbers of sheep offered for slaughter is satisfactory since it is an evidence of progress in making good the depletion of the sheep stocks of the country which occurred during the war years.

Considerable leeway has, however, still to be made good. Similarly, it is satisfactory to note that, notwithstanding the inclusion of Leith, there was a large fall in the number of calves slaughtered, and consequent diminished wastage from this cause. The figures represent a decrease of approximately 30 per cent., as compared with the preceding year.

In the month of February, an important Report was issued by Dr Leighton, Medical Officer (Foods) of the Scottish Board of Health, on an "Enquiry into a Uniform System and Standard of Meat Inspection in Scotland," and this Report embodied the recommendations of three committees appointed by the Board to assist Dr Leighton in his enquiry. Your Chief Veterinary Inspector, at the request of the Board, served on these committees. The Report included detailed instructions of a system and procedure of meat inspection, together with a standard for the judgment of animals affected with disease, which it was recommended should be adopted in all slaughter-houses, and should be enforced by regulations framed by the Board of Health under the powers contained in the Public Health (Regulations as to Food) Act, 1907. Intimation has been made that it is the intention of the Board to issue regulations for this purpose, based on the recommendations referred to, and it may confidently be anticipated that the intention of the Board will be carried into effect at a relatively early date. It may, however, be stated that the system of inspection and the standards of judgment recommended are essentially those which have been in operation in the City Abattoirs for a number of years. The general adoption of the recommendations and their application by means of regulations will, undoubtedly, raise the standard of meat inspection throughout the country, and secure a much greater degree of uniformity than exists under present conditions. The necessity for action, from time to time, in respect of consignments of meat received from outside areas provides concrete evidence of the need which exists for advance in this direction.

During the year 315 carcases and 524 parts of carcases were condemned in the City Abattoirs as unfit for human food on account of disease or injury, representing a total weight of approximately 69¾ tons. Both in respect of the numbers and weight of condemnations the figures show a distinct fall as compared with 1920, although the number of animals submitted to inspection was greater by more than 35,000. One hundred and seventy carcases and 429 parts of carcases were condemned on account of tuberculosis, and this disease was responsible for 72·4 per cent. of the condemnations from all causes. The tables which are given to show the number of organs condemned, and the causes of condemnation, provide further evidence—if that be needed—of the loss occasioned by this disease, approximately 57 per cent. of the organs condemned being affected with tuberculosis.

The percentage incidence of tuberculosis in the different classes of animals is illustrative of the influence exercised by housing and intensive dairying on the spread of tuberculosis. Of the cows slaughtered in the Abattoirs, 57·5 per cent. were affected with tuberculosis in some degree as compared with 3·45 per cent. in other classes of cattle and 6·3 per cent. in swine. In a great many instances, however, the disease is in its early stages at the time of slaughter and is localised to one or it may be two of the internal organs, but this fact merely emphasises the need for constant and close systematic supervision in order to ensure that when disease exists it will be detected.

Records have been kept throughout the year of all cases of tuberculosis of the udder discovered in cows slaughtered in the Abattoir in order that definite information

might be available as to the incidence of this condition amongst cows in the City and surrounding districts. It was found that 0·68 per cent. or 1 in 147 of the cows slaughtered showed tuberculous lesions of the mammary gland which were definitely recognisable by naked eye examination. The constant changes in the cow population of the City byres make it impossible to compare accurately the slaughterhouse figures with the incidence of tuberculosis of the udder as disclosed by clinical examination of the cows in the dairy byres. If it be assumed, however, that the average cow population represents the number of individual cows which come under observation in the course of a year, then the incidence of tuberculosis of the udder in City cows as discovered by clinical examination approximates in a remarkable degree the slaughterhouse statistics, the figures being 0·66 per cent. or 1 in 152.

Approximately 3,371 tons of meat were imported into the City during the year. Of this total 582 tons were represented by home-killed carcases, and 2,789 tons were imported overseas. Constant observation was maintained in the dead meat markets, the wholesale meat shops, and railway stations, in order that these consignments should be passed under review. In this connection it is satisfactory to be able to state that the traders show every desire to co-operate with the Department and to assist in its work. The hot weather conditions during the summer months were unfavourable to the transport of fresh home-killed meat, but on the whole, consignments, both of fresh and frozen meat arrived in good condition, and the standard of quality was good. The majority of live stock owners are aware that heavy penalties may be imposed on the consignors of unsound meat to the towns for sale and take the precaution of having consignments inspected before they are despatched. It is only rarely, therefore, that it is necessary to institute proceedings for wilful traffic in unsound meat. During the year action was taken against a farmer in respect of the consignment of the carcases of 4 diseased sheep. He pleaded guilty to the charge and a fine of £25 was imposed.

The premises in which food is prepared, stored, or sold for human food have been regularly visited. As a result 86 tons of foodstuffs were seized and condemned as unfit for human food. Of this total 70·5 tons represented seizures of several large consignments of imported dried and salted fish which had become unsound in consequence of long storage. In my Report last year it was stated that the free market in foodstuffs had been a factor contributing to a decrease of 15 per cent. in the seizures of unsound food in the various premises in the City as compared with the preceding year, and that it might fairly confidently be anticipated that during the current year a much greater fall would occur. If the seizures of fish referred to be excluded—and they may fairly be excluded as quite exceptional in character—this in fact is found to be the case, the seizures totalling 15·5 tons in 1921 for the extended City as against 40 tons in 1920 for the City before extension, a decrease of 61·25 per cent. This must be regarded as a very satisfactory improvement.

The total weight of unsound foodstuffs dealt with by the Department in the Abattoirs and on premises in the City during the year amounted to 155¾ tons. To this must be added 61 tons of fruit, vegetables, meat, provisions, &c., found to be unsound after discharge from vessels arriving at the Port of Leith, making a gross total of 216¾ tons.

PORT FOOD INSPECTION.

Port food inspection represents a large and very important branch of work the advantage from which accrues not merely to the City but to the

towns and burghs in the east, west and south of Scotland, amongst which the food products arriving at the Port of Leith are distributed. These arrive in large consignments and, in the case of perishable materials, they require to be dealt with promptly, in particular during the summer months. The work is, therefore, arranged to prevent delay arising on account of inspection. Unsound foodstuffs to a total weight of 61 tons were dealt with and they comprised the carcases and offal of calves and pigs, fruit and vegetables, margarine, flour, &c. About 20 tons of these materials were re-exported by the consignees and the remainder was destroyed, or when practicable, diverted for pig feeding.

In the month of November, I was instructed to proceed to Denmark in company with Dr Leighton of the Scottish Board of Health, with the object of obtaining information as to the system and procedure of meat inspection in that country. This enquiry was related to the large imports into Leith of bacon and other pork products from Denmark. On my return, a full report on the subject was submitted to the Public Health Committee, to which brief reference may be made here.

Denmark is essentially an agricultural country and its prosperity is intimately associated with the success of that industry. The Danish Government has in consequence done much to foster its progress and has adopted measures intended to ensure the attainment and maintenance of a high standard of quality in all agricultural produce exported from the country. So far as meat products are concerned, a well-organised system of control and of expert Veterinary inspection is in operation, and a standard of judgment has been laid down which excludes from export to this country the carcase of an animal in which disease is found to exist. The system was seen in operation in various factories and slaughterhouses which were visited, and much information was obtained of great value and assistance in the work of inspecting and supervising the products on arrival at the port of debarkation in this country. Further, the experience gained generated a feeling of confidence in the Danish system of inspection and in the results obtained therefrom.

In view of the quantities of Danish butter imported, advantage was taken of the opportunity to visit several large creameries. The system of checking, testing and grading butter in force in Denmark has been many times commented upon in British publications, but little reference is made to a very important feature in the process of manufacture to which attention may be drawn. It may be well to explain in the first instance that the process of butter-making is dependent on the action of bacteria, and since certain types of bacteria which gain entrance to milk collected by the ordinary dairy procedure exercise an influence for good on the taste and aroma of the butter made from it, as well as on its keeping properties, and others may exercise a prejudicial effect, it is obvious that the quality of butter will vary according to the numbers of the different types of bacteria present in the particular milk from which it is made. Uniformity of quality and good keeping properties are well recognised features of Danish butter, and the most important factor which contributes to these characteristics is pasteurisation of the cream from which the butter is made. Something over 90 per cent. of Danish butter is made from cream which has been heated to 80 degrees Cent. or over This temperature destroys all the bacteria present in the cream including the tubercle bacillus if it should happen to be represented, and the bacteria essential for the butter-making process are supplied after pasteurisation by carefully selected good cultures known technically as "starters." In this way a definite control is exercised over the qualities of the butter produced, and to this more than to any other single

factor Danish butter owes its uniformity of quality and good keeping properties. In this connection it may be mentioned that the voluntary adoption of the process of pasteurising cream in the creameries had its complement in the passage of a law in 1898 under which it became compulsory to pasteurise at a temperature not less than 80 degrees Cent. all butter, milk and whey issued from creameries for animal feeding purposes—an important and valuable measure contributing to control of the spread of animal tuberculosis.

During the year several matters relating to inspection in the exporting countries were submitted to the Scottish Board of Health, and as the result of the action taken by the Board satisfactory adjustments were made.

INSPECTION OF COWSHEDS AND DAIRY COWS.

The extension of the City boundaries increased the number of licensed dairy byres within the City from 56 to 172, and the average cow population from 1,605 to 4,251. The work under this head was practically trebled. In consequence of this additional work within the City it was only possible to pay a relatively small number of visits to country byres producing milk for sale and consumption in the City. Forty-two cows were removed from dairy byres during the year on account of tuberculosis, and of these 29 were the subjects of tuberculosis of the udder, 4 were eliminating tubercle bacilli in the milk, and 9 were affected with advanced clinical tuberculosis. The differentiation between cows affected with tuberculosis of the udder and cows eliminating tubercle bacilli is made, because in the latter no symptoms were manifested by which their dangerous character could be recognised after the most careful clinical examination. In order to detect these cases, samples of mixed milk from herds are collected from time to time, as far as the facilities available and the demands of other work will permit, and these are subjected to the test of guinea-pig inoculation. By a process of elimination, the offending animal is definitely located and measures are taken to ensure immediate removal. It is of interest to state that in one instance the opportunity arose of maintaining observation on a particular cow of this type for a period of three months, during the whole of which time she continued to eliminate tubercle bacilli in the milk without manifesting clinical evidence of disease in the udder.

Of the 42 cows removed from dairy byres during the year on account of tuberculosis, 21 are known to have been slaughtered; but it has not been possible to obtain definite information as to the ultimate disposal of the remainder, and, unfortunately, existing powers are insufficient to ensure slaughter. It may further be noted that 7 of these cows were discovered in country byres from which milk is consigned to the City, a fact which emphasises the desirability of extending the work of inspection beyond the boundaries of the City; and this suggestion receives additional force when it is pointed out that approximately 52 per cent. only of the milk consumed in the City is produced within its boundaries. It has, however, already been pointed out that existing facilities only permit a very small fringe of this work to be touched.

Under the provisions of the Edinburgh Municipal and Police (Amendment) Act, 1891, 43 cows, suffering from various diseases of a non-contagious character but which injuriously affected the milk, were removed from dairy herds. Of these, 8 were slaughtered by order of the owners, and the remainder were sold for grazing and fattening.

In the early months of the year the whole of the dairy byres, brought within the City by the 1920 Extension Act, were carefully surveyed and inspected, prior to the issue of licences. The result of this inspection was to effect alterations and considerable improvements in 31 byres. In addition, the magistrates, on representations made to them, caused instructions to be issued to 39 licensees to effect improvements in their premises during the course of the year. For the most part these improvements have been effected, and in those cases in which no progress has been made, valid reasons have existed for the delay. The magistrates, after visiting an old dairy byre within the City, reached the decision that the premises were no longer suitable for dairy purposes, and ordered them to be closed as dairy premises, after giving the tenant reasonable opportunity to find alternate accommodation.

Six hundred and twenty-two samples of milk, secretions, exudates, &c., have been examined in the laboratory, but, as stated in previous Reports, the numbers of specimens examined give a very inadequate indication of the value and importance of the facilities afforded by the laboratory in the work of the Department.

DISEASES OF ANIMALS ACTS.

The importance of the work of inspecting the whole of the live stock passing through the market received emphasis last year, when a series of outbreaks of Foot and Mouth Disease in England were traced to animals which had been exposed in a public market. This emphasis has been repeated with striking force during the current year by the extent and gravity of the outbreak which has been experienced. It is beyond question that its widespread character was attributable to the successive infection of a number of live stock markets from which the disease was distributed. The efficient inspection of a live stock market entails a considerable expenditure of time if the whole of the animals in the market are to be brought under observation, and its value should be measured by the influence it exercises in preventing the exposure of diseased stock and by the availability of the means for the recognition of disease as well as for the prompt initiation of the measures necessary for controlling and checking its distribution. This has been consistently recognised in the City, and in carrying out the duties under the Diseases of Animals Acts and Orders, the importance of inspecting the stock passing through the City Market has been given the consideration and attention which it demands. A Veterinary Inspector is detailed for attendance during the whole of the market hours, and when large numbers of stock are exposed for sale, as for example—in the November Store Stock Sales, the presence of two Inspectors is necessary in order to ensure, as far as it is reasonably possible to do so, that the whole of the animals will come under observation.

No outbreaks of Foot and Mouth Disease occurred in the City during the year, but in consequence of certain outbreaks of Foot and Mouth Disease in England during the month of January, and which were traceable to Irish Cattle, a request was received from the Ministry of Agriculture to trace the whole of the animals landed from Ireland between certain dates and which had passed through the markets. So far as cattle remaining in the City were concerned, this resulted in the detention and isolation of 38 consignments of cattle, which were maintained under close observation for a period of three weeks. Information with regard to consignments of cattle distributed outwith the City boundaries was forwarded to the Local Authorities concerned for their action.

In the month of January, the Local Authority, acting in concert with the whole of the Scottish Local Authorities, found it desirable, owing to the occurrence of Foot and Mouth Disease in the North of England, to exercise the powers conferred by the Foot and Mouth Disease Order of 1895, and to issue protective Regulations prohibiting the movement into the City of ruminating animals and swine from England. These Regulations remained in force, with slight modifications, from 11th January to 1st June, and after that date till 8th July—when the Regulations were revoked—dairy cows were admitted from the County of Cumberland on declaration and licence. Over 300 cattle were admitted to the City under licence during this period.

Isolated cases of Anthrax continued to occur within the City, for the most part, in dairy byres. In every instance, measures were at once taken for the cremation of the infected carcase and for thorough disinfection of the premises, and, in some degree, credit for the absence of recurrence on the same premises is due to the prompt action taken. The in-contact animals were, however, maintained under close observation until the risks of infection had passed. In addition to the 8 cases of disease dealt with, 56 suspected cases were reported and proved negative on investigation.

The position in regard to Parasitic Mange shows very little change. There have been no outbreaks in large studs. Without exception, the disease has appeared amongst the horses of small owners, and it is noticeable that the majority of cases are associated with lack of care and attention to regularity and efficiency of grooming. Twenty-five cases of Mange were reported or under observation during the year, and, in addition, 20 suspected cases were investigated with negative results.

Swine Fever showed a much lower incidence than during the preceding year, and only 6 outbreaks were dealt with. Two of these occurred in the same premises within a very short space of time. On the first occasion, the owner slaughtered the whole of the stock, and was unfortunate when restocking to purchase pigs which had been exposed to infection and were in the incubative stage of the disease. On the second occasion, the whole of the animals were treated with anti-swine fever serum, and the premises were still under restriction at the end of the year, the stock having been kept under observation for more than nine months.

The City, though carrying a relatively large sheep population, continued to keep clear of sheep scab. The single case reported during the year occurred in a consignment of fat sheep intended for immediate slaughter, and which was received from the North of England. The continued freedom from this disease is in a large measure attributable to the preventive measures consistently followed. For this purpose the Local Authority, following the provisions of the Scotland and North of England Dipping Order, made Regulations on 6th September 1921, under the Sheep Scab Order of 1920, requiring that all sheep within the City be dipped during the period 15th July to 31st August, and again during the period 1st September to 30th November, and as a further measure of protection, requiring all sheep introduced into the City from the Northern Counties of Scotland to be dipped twice within fourteen days of arrival in the City. The value of dipping depends on the efficiency with which it is done, and for this reason supervision has been exercised regularly over the work. Over 10,000 sheep were dipped under supervision during the period from 27th June to 5th December 1921. In this work valuable assistance was rendered by the Police.

Three cases of suspected Rabies were reported during the year, all of which proved negative on investigation.

The Orders of the Ministry of Agriculture in respect of Glanders have proved effectual in reducing this disease to very small proportions. In the whole of Great Britain there were only 11 confirmed cases during the year under report. The City remained free from the disease, but mention may be made of one suspected case which was reported owing to the character of certain lesions discovered in the course of a post-mortem examination. These bore a very close resemblance to those of Glanders, and it was only possible after a series of careful and thorough tests to establish a negative diagnosis.

Important powers are contained in the Animals Transit and General Order of 1912 for the prevention of cruelty to animals during transport by rail and boat, and, during the year, constant supervision has been exercised over the condition of animals arriving by train, and at Leith by boat. A serious case of overcrowding, resulting in the death of two cattle, was dealt with under this Order, and, from time to time the movement by rail of unfit animals from the markets has been prohibited by notice to the owner. In these latter cases the animals have been appropriately dealt with by removal to the slaughterhouse.

The additional powers of control over the export of horses for food to the Continent, conferred by the Exportation and Transit of Horses, Asses and Mules Order of 1921, and the strict supervision over the trade which was instituted by the Ministry of Agriculture during the course of the year, together with the high standard of fitness demanded before permission to export is granted, have had the effect of removing any ground for reproach on the score of cruelty which may formerly have been attachable to this traffic.

The cattle markets and auction sale-yards have been maintained under close supervision throughout the year, in order to ensure thorough cleansing after the close of each market.

I am,

My Lord and Gentlemen,

Your obedient Servant,

A. GOFTON, F.R.C.V.S.,
Chief Veterinary Inspector.

MEAT INSPECTION.

Table showing number of animals slaughtered at Gorgie, Portobello, and Leith Abattoirs during 1921 as compared with 1920.

	1920.			1921.			
	Gorgie.	Portobello.	Total.	Gorgie.	Portobello.	Leith.	Total.
Cattle . . .	29,169	177	29,346	25,700	277	2,046	28,023
Calves . . .	6,244	...	6,244	4,384	1	38	4,423
Sheep . . .	89,569	397	89,966	119,560	680	6,466	126,706
Swine . . .	6,836	470	7,306	7,485	436	811	8,732
	131,818	1,044	132,862	157,129	1,394	9,361	167,884

Meat imported into and consumed in the City :—

	1920.	1921.
Beef (Frozen) . . .	equal to 6,500 carcases	equal to 8,500 carcases
„ (Home killed) . .	„ 1,200 „	„ 1,871 „
Veal (Home) . . .	„ 503 „	„ 500 „
„ (Dutch) . . .	„ 100 „	„ 504 „
Sheep and Lambs (Frozen) .	„ 28,000 „	„ 24,000 „
„ „ (Home killed) .	„ 14,974 „	„ 4,649 „
Pigs (Imported Fresh or Frozen) .	„ 1,700 „	„ 5,622 „
„ (Home killed) . .	„ 371 „	„ 1,000 „
Venison	„ 38 „	„ 52 „
Boneless Beef (Frozen) . .	5,000 packages or 132 tons.	6,000 packages or 150 tons.

(The above figures are approximate only.)

Table showing number of carcases in the different classes of animals condemned at Abattoirs during 1921, and showing weights of condemned carcases.

	Totally condemned.		Partially condemned.		Total weight in lb.
	No.	Weight in lb.	No.	Weight in lb.	
Cattle . . .	169	89,881	421	51,279	141,160
Calves . . .	9	471	...	...	471
Sheep . . .	78	3,383	40	376	3,759
Swine . . .	59	8,132	63	2,578	10,710
Total . .	315	101,867	524	54,233	156,100

Table showing causes of condemnation of carcases in the different classes of animals slaughtered in Abattoirs during 1921.

	Cattle.		Calves.		Sheep.		Swine.	
	Total.	Partial.	Total.	Partial.	Total.	Partial.	Total.	Partial.
Tuberculosis	139	370	1	...	...	...	39	59
Œdema and Emaciation	2	...	...	...	22	10	2	...
Traumatism	2	33	...	...	8	24	6	2
Septic conditions	2	7	...	...	3	3	...	2
Pericarditis and Endocarditis	2	1	...	...	1	...	...	...
Peritonitis	1	4	1	...	3	...	...	...
Pleurisy and Pneumonia	1	3	...	...	...	...	1	...
Fever	3	...	...	...	...	...	...	...
Mastitis	2	...	...	...	...	...	...	...
Moribund and Illbled	14	1	6	...	30	3	5	...
Jaundice	...	...	1	...	...	...	1	...
Suffocation	...	...	...	...	2	...	1	...
Neoplasms	...	...	...	...	2	...	...	...
Actinomycosis	...	2	...	...	...	...	...	...
Swine Fever	...	...	...	...	...	...	2	...
Swine Erysipelas	...	...	...	...	...	...	2	...
Decomposition	1	...	...	...	7	...	...	...
Total	169	421	9	...	78	40	59	63

Table showing comparison between Tuberculous and Non-Tuberculous diseases as causes of condemnation in carcases of animals slaughtered in Abattoirs during 1921.

		Cattle.				Swine.	Sheep.	Total.
		Cows.	Calves.	Other Cattle.	Total.			
Tuberculosis	Total	110	1	29	140	39	...	179
	Partial	241	...	129	370	59	...	429
Total and Partial		351	1	158	510	98	...	608
Non-Tuberculous Diseases	Total	24	8	6	38	20	78	136
	Partial	28	...	23	51	4	40	95
Total and Partial		52	8	29	89	24	118	231

Table showing numbers of organs condemned in the different classes of animals at Abattoirs during 1921, and causes of condemnation.

	Cattle.						Swine.	Sheep.	Total.
	Oxen.	Bulls.	Cows.	Heifers.	Calves.	Total.			
Lungs—									
Tuberculosis . .	454	30	1605	43	3	2135	144	...	2279
Abscesses . . .	33	2	13	...	...	48	3	17	68
Pneumonia . .	1	...	6	...	...	7	11	1	19
Pleurisy . . .	71	6	16	1	...	94	20	3	117
Parasitism . . .	44	4	56	1	...	105	8	159	272
Œdema . . .	...	...	3	...	...	3	4	32	39
Traumatism . .	...	...	...	...	...	...	...	34	34
Hearts—									
Pericarditis . .	11	2	7	...	...	20	10	13	43
,, Tuberculous	2	...	4	...	...	6	...	...	6
Abscesses . . .	1	...	...	...	...	1	...	2	3
Œdema . . .	...	...	2	...	...	2	3	29	34
Traumatism . .	...	...	...	...	...	...	...	34	34
Bowels—									
Tuberculosis . .	87	8	361	11	1	468	50	...	518
Abscesses . . .	...	...	...	2	...	2	...	...	2
Œdema . . .	...	...	2	...	...	2	2	30	34
Peritonitis . .	3	...	5	1	1	10	3	3	16
Stomachs—									
Tuberculosis . .	47	3	172	10	...	232	12	...	244
Abscesses . . .	25	2	8	1	...	36	...	1	37
Peritonitis . . .	6	...	4	...	1	11	1	6	18
Œdema . . .	13	...	2	...	...	15	2	30	47
Traumatism . .	...	...	...	...	...	...	...	34	34
Spleens—									
Tuberculosis . .	52	3	178	9	...	242	47	...	289
Abscesses . . .	1	...	...	...	...	1	...	...	1
Œdema . . .	...	...	2	...	...	2	2	30	34
Traumatism . .	...	...	...	...	...	...	...	34	34
Carry forward	851	60	2446	79	6	3442	322	492	4256

Table showing organs condemned during 1921—*continued.*

	Cattle.						Swine.	Sheep.	Total.
	Oxen.	Bulls.	Cows.	Heifers.	Calves.	Total.			
Brought forward	851	60	2446	79	6	3442	322	492	4256
Livers—									
Tuberculosis . .	168	6	297	18	1	490	130	...	620
Abscesses . . .	592	19	137	19	1	768	6	23	797
Dis. Necrosis . .	4	...	4	...	...	8	...	...	8
Cirrhosis . . .	110	1	36	1	...	148	47	6	201
Cav. Angioma . .	5	...	26	...	...	31	...	...	31
Echinococcus .	14	...	42	...	...	56	...	3	59
Distomatosis . .	1262	20	262	8	...	1552	...	98	1650
Œdema . . .	...	...	3	...	...	3	2	27	32
Neoplasms . . .	1	...	...	...	...	1	...	2	3
Peritonitis . . .	1	...	1	...	...	2	1	2	5
Degeneration . .	17	1	10	...	...	28	1	4	33
Traumatism . .	...	...	...	...	...	...	...	34	34
Kidneys—									
Tuberculosis . .	25	2	52	1	1	81	23	...	104
Abscesses . . .	16	1	7	...	...	24	...	...	24
Cysts . . .	2	...	1	...	...	3	1	...	4
Nephritis . . .	8	1	10	...	...	19	...	...	19
Degeneration . .	2	...	3	...	...	5	...	...	5
Œdema . . .	...	...	2	...	...	2	2	31	35
Udders—									
Tuberculosis . .	...	...	43	2	...	45	21	...	66
Mastitis . . .	...	...	350	...	...	350	2	...	352
Œdema . . .	...	...	1	...	...	1	...	...	1
Actinomycosis . .	...	...	1	...	...	1	1	...	2
Heads—									
Tuberculosis . .	569	54	416	39	1	1079	523	...	1602
Actinomycosis . .	59	5	...	1	...	65	...	...	65
Abscesses . . .	1	...	...	...	1	2	...	1	3
Œdema . . .	...	...	1	...	2	3	2	30	35
Traumatism . .	2	...	...	...	...	2	...	...	2
Feet—									
Actinomycosis . .	1	...	...	...	...	1	...	...	1
Abscesses . . .	8	1	2	...	...	11	...	...	11
Traumatism . .	2	...	...	...	...	2	...	...	2
Total . .	3720	171	4153	168	13	8225	1084	753	10,062

Table showing percentage incidence of Tuberculosis in animals slaughtered at Abattoirs during the years 1919, 1920, and 1921.

	1919.	1920.	1921.
	Per Cent.	Per Cent.	Per Cent.
Cows	35·99	34·64	57·52
Other Cattle	2·95	4·24	3·45
Cattle (all classes)	9.98	7·30	7·70
Calves	0·02	0·05	0·07
Swine	3·72	4·54	6·31

Table showing number of visits paid to shops, &c., during the year 1921.

Butchers' Shops	2,182
Provision Shops	4,438
Fishmongers' Shops	997
Fruiterers' Shops	3,202
Meat Sales and Wholesale Meat Shops	2,384
Live Stock Sales and Markets	259
Street Hawkers	195
Railway Stations	598
Hide and Skin Merchants	304
Ham Curers, Sausage Makers, &c.	36
Fish Markets	307
Total	14,902

Table showing numbers and weights of foodstuffs seized in premises in the City.

	No.	Weight in lb.
Beef	86	20,126
Mutton	37	2,138½
Pork	74	3,218
Veal	6	446
Poultry and Game	37	1,616
Edible Offal	40	3,647½
Fruit and Vegetables	52	3,174
Provisions	33	944
Fish	44	157,649
Total	409	192,959

Summary showing total foodstuffs condemned in the City during 1921 as compared with 1920.

	1920. Weight in lb.	1921. Weight in lb.
Meat	215,278¾	182,028½
Poultry and Game	4,482	1,616
Edible Offal	19,281¼	3,647½
Fruit and Vegetables	1,045	3,174
Provisions	20,197	944
Fish	...	157,649
Totals	260,284	349,059

Tons	cwts.	lb.	Tons	cwts.	lb.
116	3	108	155	16	67

PORT FOOD INSPECTION.

Imported Foodstuffs Inspected under the Foreign Meat Regulations.

Country of Origin.	Foodstuffs.	No. of Consignments	
Holland	Bacon	19	
	Calf offal	35	
	Calves	37	
	Pigs	114	
	Pigs' tongues	8	
	Sheep gut	2	
			215
Denmark	Bacon	93	
	Hams	3	
	Pigs	1	
	Pigs' feet	28	
	,, heads	44	
	,, stomachs	1	
	Sheep gut	1	
			171
U.S.A.	Bacon	8	
	Tongues, canned	2	
			10
Sweden	Bacon		8
Canada	Bacon	7	
	Tongues, lunch	5	
			12
			416

Imported Foodstuffs Inspected under the Unsound Food Regulations.

County of Origin.	Foodstuffs.	No. of Consignments.
Holland	Apples	76
	Beetroot	18
	Butter	71
	Cabbage	9
	Carrots	154
	Cauliflower	24
	,, in brine	2
	Cheese	158
	Cherries	11
	Chicory	5
	Chocolate	2
	Cocoa	12
	,, beans	1
	Cucumber	28
	Currants	8
	Eggs	65
	Farina	9
	Fat, rendered	4
	Gooseberries	14
	Grapes	43
	Lard	20
	Lemons	4
	Lettuce	22
	Margarine	151
	Melons	3
	Milk, condensed	135
	,, curd	1
	,, powder	37
	Onions	95
	,, in brine	2
	Oysters	17
	Peaches	2
	Pears	55
	Peas	4
	Plums	15
	Potatoes	20
	Radish	8
	Rennet	3
	Rice	9
	Strawberries	5
	Sugar	75
	Tea	1
	Tomatoes	74
	Yeast	53
		1,525

Imported Foodstuffs Inspected under the Unsound Food Regulations—(continued).

Country of Origin.	Foodstuffs.	No. of Consignments.	
Denmark	Butter	93	
	Cheese	86	
	Cranberries	2	
	Cream	7	
	Eggs	100	
	Fat, vegetable	1	
	Fish, canned	5	
	,, fresh	2	
	,, salted	11	
	Lard	6	
	Milk, condensed	46	
	Prunes	1	
	Rennet	2	
	Sugar	2	
			364
Belgium	Apples	18	
	Beetroot	3	
	Carrots	11	
	Chocolate	2	
	Cocoa	7	
	Eggs	15	
	Grapes	6	
	Maize Grits	6	
	Onions	12	
	Pears	13	
	Plums	4	
	Prunes	2	
	Sugar	39	
	Tomatoes	8	
			146
U.S.A	Baking Powder	1	
	Cheese	12	
	Flour	32	
	Grain	33	
	Lard	10	
	,, compound	3	
	Maize	1	
	,, Grits	2	
	Milk condensed	18	
	Oatmeal	1	
	Quaker Oats	1	
	Syrup	3	
	Tomato Ketchup	8	
	Treacle	1	
	Wheat	3	
			129

Imported Foodstuffs Inspected under the Unsound Food Regulations—(continued).

Country of Origin.	Foodstuffs.	No. of Consignments.	
Germany	Apples	13	
	Cocoanuts	1	
	Hazelnuts	1	
	Lemons	19	
	Milk, condensed	2	
	Oranges	10	
	Pears	20	
	Peas, split	1	
	Plums	13	
	Pomegranates	1	
	Sugar	15	
		—	96
Canada	Cheese	7	
	Flour	16	
	Grain	16	
	Maize, grits	1	
	Milk, condensed	14	
	Wheat	2	
		—	56
Iceland and Faroe	Fish, salted	42	
		—	42
France	Biscuits	1	
	Cherries, preserved	3	
	Chocolate	7	
	Cocoa	2	
	Eggs	4	
	Prunes	10	
	Sugar	4	
		—	31
Sweden	Eggs	10	
		—	10
South America	Grain	4	
	Maize	2	
	Wheat	2	
		—	8
Spain	Onions	3	
	Oranges	3	
		—	6
Australia	Grain	1	
		—	1
Burma	Rice	1	
		—	1
			2,415

Imported Foodstuffs condemned under the Foreign Meat Regulations.

	Wt. in lbs.
Calf offal	180
Calves	502
Pigs	458
Pigs' Heads	20
	1,160

Imported Foodstuffs condemned under the Unsound Food Regulations.

	Wt. in lbs.
Apples	2,100
Biscuits	1,568
Cabbages	3,740
Carrots	51,966
Fish, salted	11,424
Flour	2,240
Fruit Pulp	1,470
Lettuce	1,180
Margarine	44,160
Pears	15,926
Potatoes	330
Tomatoes	192
	136,296

DAIRY INSPECTION

Summary of work under Dairies, Cowsheds and Milkshops Orders and the Edinburgh Municipal and Police (Amendment) Act, 1891.

	1920.	1921.
No. of Licensed Dairy Byres	56	172
Average Cow Population	1,605	4,251
No. of Visits to City Byres	1,197	2,276
No. of Visits to Country Byres	449	88
No. of Country Cows Inspected	9,930	1,586
No. of newly calved Cows Inspected in Gorgie Markets	4,027	3,345

No. of Cows removed from Dairy Herds under Edinburgh Municipal and Police (Amendment) Act, 1891 :—

	1920.		1921.	
Tuberculosis of Udder	18		29	
Eliminating Tubercle Bacilli in Milk	...		4	
Advanced Clinical Tuberculosis	9		9	
Other causes	31		43	
	——	58	——	85

Bacterial and other examinations of :—

Milk	249		480	
Expectorate	10		34	
Blood	28		56	
Skin Scrapings for Mange Parasites	76		45	
Other Material	7		7	
	——	370	——	622

Notices served requiring :—

Lime-washing of Premises	122		308	
Removal of Manure	30		16	
Removal of Diseased Cows	28		45	
Carrying out Repairs	13		31	
	——	193	——	400

Animals tested with Tuberculin	339	200