Annual report on the health of the city for the year 1871 / W.T. Gairdner. and on the Operations of the Sanitary Department, for the year ending 30th April 1872 / by Kenneth M. Macleod.

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## ANNUAL REPORT

ON THE

# HEALTH OF THE CITY,

FOR THE YEAR 1871.

BX

W. T. GAIRDNER, M.D.,
MEDICAL OFFICER;

AND ON THE

#### OPERATIONS OF THE SANITARY DEPARTMENT,

For YEAR ending 30th APRIL, 1872.

BY

KENNETH M. MACLEOD,

SANITARY INSPECTOR.

PRESENTED TO THE HEALTH COMMITTEE, FOR THE INFORMATION
OF THE LORD PROVOST, MAGISTRATES, AND THE OTHER
MEMBERS OF THE BOARD OF FOLICE.

GLASGOW:

PRINTED BY ROBERT ANDERSON, 22 ANN STREET. 1872.

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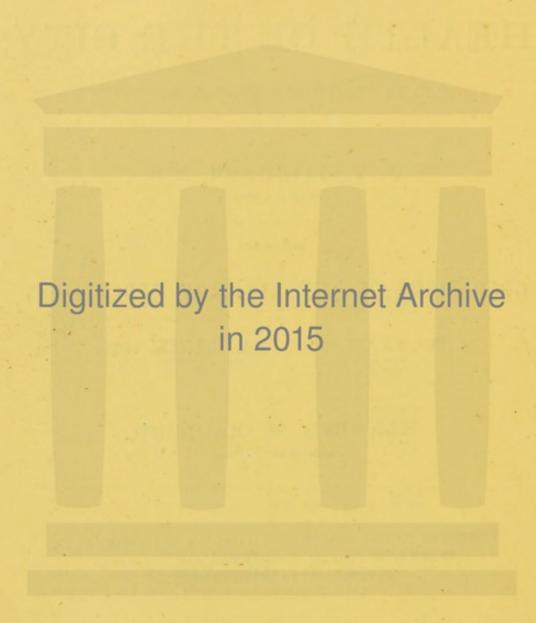
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#### REPORT

ON THE

## HEALTH OF THE CITY OF GLASGOW,

FOR THE YEAR 1871.

The year 1871 has already been the subject of investigations, both by the Registrar-General for Scotland, and by Mr. West Watson in his valuable official Report for Glasgow. It was a year of exceptionally high mortality, the death-rate for the whole population having amounted to 32.9 (say 33) in 1000 living, while the mean of the preceding ten years (1861-1870) was 30.9, or about 2 in each 1000 living less than in 1871. On comparing the individual years of the above period, it will appear that in 1864 and 1865 (when an epidemic of Typhus Fever attained its largest proportions) the death-rate approximated to, but fell fractionally short of, that of the past year; while in 1869, when I had occasion to report specially upon a very high rate of mortality occurring during the Spring months, chiefly from pulmonary diseases, the rate for the whole year exceeded the rate for 1871 by nearly 2 in 1000 living. In all the other years of the decade, and very notably in 1870 (in which the rate of total mortality was 30.9) in 1000 living), the evidence afforded by vital statistics shows a better state of the public health than during the past year. The causes and incidence of this increased death-rate it will be my duty to point out, in so far as they can be ascertained, in this Report, availing myself of the materials furnished by the Registrar-General in the first place; and, in the second, of the more minute local analysis of these materials prepared with great labour and care in the Sanitary Office, on the basis of the recent Census of the population for 1871.

In reporting upon the state of the public health in 1870, I had occasion to notice the occurrence of an epidemic of Relapsing

Fever, which contributed very appreciably to the mortality, but much more to the sickness and destitution of the year. That epidemic, which originated in London, and attacked Liverpool and some other English towns in great force before reaching Glasgow, may be said to have arrived at its culminating point in the month of December, 1870, when as many as 1558 cases were reported at the Sanitary Office, most of which were medically attended either in hospital or at their own homes; besides, no doubt, other cases, which from want of due notice, or from the great pressure upon the resources of the department and of the Parochial Boards, may have escaped observation and report. Early in 1871 the increased Hospital accommodation provided at Belvidere was in full working order, and from January onwards a decline was observed in the proportions of the epidemic; a decline so gradual, however, that the absolute total of Fever cases was greater in 1871 than in 1870, although in the former year the epidemic was culminating, and in the latter declining. This will be clearly seen from the following comparison of the two years, month by month, in respect of the totals reported, it being kept in view that, probably from want of a complete organization to meet the epidemic, the numbers in 1870 may probably be underrated more than those of 1871:—

Table showing the Numbers of Cases Reported and Treated as "Fever" (chiefly Relapsing Fever), in each Month of 1870 and 1871 respectively, as recorded in the Books of the Sanitary Department.

				1870.	1871.
January,				 729	1446
February,				 472	979
				 434	869
4 49				 264	619
				 282	535
T				 294	477
July,				 239	329
August,				 365	501
September,				 562	618
October,				 957	709
November,				 1408	527
December,				 1558	420
Total	of 1	2 mont	hs.	 7564	8029

It will be observed that, while the increase was rapid and decided from August to December, 1870, the decline of the epidemic from January, 1871, onwards was much more gradual, and not even during the Summer season did the numbers approach the minimum of the earlier year, while from August, 1871 onwards to October there was again a tendency to increase, until the numbers in the latter month were higher than they had been since the month of March. Indeed, it is only during the Summer of the present year (1872) that Fever can be said to have subsided to anything like its ordinary proportions; and although the type of Fever has not been such as to lead to a very large direct increase of the mortality, it cannot be doubted that the debilitating effect of so protracted an epidemic upon the poorer classes, and its secondary results in inducing destitution and precipitating the fatal results of other diseases, must have been much greater than can be made to appear in any statistical return.

To any one who personally witnessed the dreadful state of many of the households prostrated by Relapsing Fever during the past epidemic—the risk of direct starvation in the first instance; the total want, in many cases, of adequate covering and support for weeks together during convalescence; the helplessness arising from the successive or simultaneous illness of all the active members of the family; the frightful and, under the circumstances, irremediable overcrowding and misery; the equally irremediable neglect of infantile life during the illnesses of the parents and elder children while the epidemic was raging and spreading like wildfire through the vast piles of building in the Central district-it can be no subject for surprise to find that the death-rate of 1871, not from Fever directly, but from various incidental causes, and especially from pulmonary diseases attacking the infantile population, was an unusually high one. Owing to the smaller proportion in which Typhus Fever mingled with the later stages of the epidemic, the direct mortality from Fever was less during 1871 than during 1870; but, if I have rightly appreciated the after-results of the disease in increasing the liability to death from other and more ordinary causes, it may be said with confidence that the chief pressure of the epidemic, indirectly, upon the death-rate of the population at large must have taken place in the latter year. And, in particular, the very high rate of mortality at the infantile ages, which I shall

have to show was characteristic of 1871, may be fairly ascribed, in part, to the disturbing effect of this epidemic cause upon the domestic comfort of the poorer population.

To the influence of this epidemic cause of deteriorated vital resistance in the population at large in 1871, two others were added, peculiar to this last year, viz., Measles, which caused 889 deaths in 1871, as compared with only 129 in 1870; and Small-pox, which had only 18 victims in 1870, while 205 died of it in 1871. As regards the latter of these two epidemics, indeed, having in view its wide prevalence throughout the country at large, we might almost regard it as a subject of congratulation that the ravages of Small-pox were so circumscribed in respect of the numbers attacked, as well as of the mortality; and I am persuaded that the more the facts are minutely studied, the more will it appear that Glasgow has been very fortunate in escaping a much larger infliction of this terrible epidemic scourge. Indeed, considering the very large proportion of unvaccinated adult or adolescent Highlanders and Irish constantly resident among our population, who cannot be reached by any Vaccination Act, and may be regarded as a persistent, though ever-varying element of danger, the comparative freedom of our vast and mixed population from Small-pox during the late epidemic can only be ascribed to the care with which vaccination and revaccination in the infected localities were carried out throughout its prevalence among all who could be reached by the influence of the medical officers, and of the vaccinators specially appointed. As early as 1863, it was made a general instruction to the district medical officers that in all cases in which Small-pox was reported in a locality, vaccination should be not only freely offered, but systematically pressed upon the inhabitants of the neighbourhood. as well as of the immediately infected house; and this instruction, carried out in quiet times by the district medical staff without special assistance and without any unnecessary publicity, was expressly promulgated as a principle of action, and made the basis of special arrangements during the threatened epidemic of the past year. The absolute necessity of primary vaccination as a protection, and the great advantage of revaccination at and beyond the age of adolescence, especially in those in whom there might be reason to suspect the primary vaccination of being imperfect, was widely taught and brought home to poor and rich alike by the moral influence of the medical profession at large, and the energetic action of the Sanitary medical officers. At the time when it appeared to be most needed, new vaccinating stations were opened in several quarters in the city; and these, as well as the older facilities, were extensively advertised by handbills posted on the walls; advertisements, stating the grounds for apprehension and for action at large, were inserted in the newspapers, and a staff of vaccinators, ultimately reduced to one as the epidemic declined, was appointed to follow up all cases of Small-pox reported, and to carry supplies of lymph, with offers of prompt and gratuitous assistance, into the homes of the poor in the infected localities. From one of these special officers, Dr. Neil Carmichael, whose services are still retained by the department, I have obtained the following interesting and emphatic statement of his experience, dated 31st July, 1872:—

"As to my experience of the work, I may say that at first—five months ago-when I began duty I found great difficulty in overcoming the prejudices of the people against revaccination. Most had never heard of such a thing; many who had heard of it were ready to relate instances in which it had been the cause of death; almost all were under the impression that if vaccination were performed while the source of infection of Small-pox was near, the disease would be more readily taken, and would be certainly fatal; and a large proportion of the people in infected districts positively refused to submit, notwithstanding explanations and remonstrances. These refusals were due principally to the prejudices mentioned, but partly also to a fear lest the lymph used should be impure, and lest the state of the arm should keep them from work. The same prejudices do not interfere with the vaccination of infants, and interfere little with revaccination of children under 12 or 14. Of late these prejudices have been somewhat more easily overcome. This is partly due to the efforts of the Sanitary Inspectors in representing to the people the advantage of revaccination. That considerable benefit has resulted from revaccination there can be no doubt. Small-pox has seldom recurred in any house in the period during which I have vaccinated; and when it has reappeared in any building, or locality, persistent efforts at revaccination, with the other proper sanitary measures, have speedily cut short the spread of the disease."

In the midst of these precautions, it was very vexing to find cases of Small-pox brought into Hospital, in several instances from

places outside the bounds of the Glasgow municipal authority, sometimes several members of one family being affected in succession, in one instance as many as four successive deaths occurring in one family from confluent Small-pox, without the slightest evidence that the importance of vaccination as a protective means had ever been brought before the people by means similar to those above indicated. Correspondence, in one instance at least, showed that a neighbouring Local Authority had risen to the extreme conception of its duty when its medical officers were instructed to vaccinate those applying at a stated time and place; and in another instance the mere statement of the course pursued in Glasgow was resented as an intrusion by the official (non-medical) inspector, although it followed upon a declaration emitted by a dying patient in hospital, who was the second sent in unvaccinated from the same family, that she had never seen the vaccinator of the Local Authority, and had never heard of or been offered vaccination. It appears to me from these instances that the Board of Supervision would be justified in making more detailed inquiries as to how Local Authorities fulfil their statutory and, still more, their moral obligations with respect to this great protective agency. Probably it would be found that in a considerable number of parishes no inducements are offered to extend the benefits of vaccination beyond securing a supply of lymph, and appointing times and places where those who wish to be vaccinated may spontaneously apply. Our experience in Glasgow goes to show that this minimum of action is at all times barely sufficient, and that it very greatly falls short of what is urgently needed in an epidemic period.

The actual comparative prevalence of Small-pox as a cause of death in 1871 in the eight principal towns of Scotland may be here stated in the figures adopted by the Registrar-General, although I may state that our own figures, carefully revised in the Sanitary Office, give a fractionally greater proportion of Small-pox deaths to deaths from "All Causes," no doubt from the different areas included in the two returns, a certain number of cases being really chargeable to the City within the municipal boundary, though excluded from the Registrar's return:—

Percentage of Deaths from Small-pox to the Total Deaths in each of the Eight Principal Towns of Scotland, during the Year 1871 (in the order of epidemic prevalence).

			Small-pox Deaths were equal to—							
Dundee,	-			11.34	per cent.	of Deaths	from all	Causes.		
Leith,		-	-	7.63	,,	,,	,,			
Edinburgh	1,			3.12		- "	,,,			
Greenock,		-	35%	1.76		,,	- 199			
Aberdeen,		-	-	1.66	4.6	,,	23			
Perth,	-	-	-	1.46		,,	, ,,			
Glasgow,	-	*		1.12	>>	99	55			
Paisley,		-	-	0.21	"	"	22			
In Eigh	t T	owns,	*	2:83	-99	,,	,,			

It is perhaps worth while to notice that 205 deaths from Small-pox is the number which, after careful analysis of the registers, was found chargeable upon the City of Glasgow within the municipal boundary; the Registrar-General's return giving only 180 from the somewhat smaller area of the ten Registration Districts. The amount of the variation is not such as materially to disturb the relations of the preceding Table; the Registrar's 180 cases being taken from among a total of 15,785 deaths from "All Causes," being, as stated above, 1·15 per cent.; while the 205 deaths from Small-pox recorded in the Sanitary Office were from a total of 16,155 deaths, giving a percentage of 1·26, which does not affect the position of Glasgow, with its immense population and its open port, as the lowest but one in the preceding list.

The total number of cases of Small-pox reported at the Sanitary Office during the year 1871 was 1089; but it may fairly be assumed that the 205 deaths above-mentioned corresponded to a considerably larger number of cases, as it is nearly certain that a good many cases, being under the care of private practitioners, who made themselves responsible for the treatment and prevention of the disease, were unreported, and perhaps a few others may have escaped attention from the neglect or ignorance of persons in attendance. It is therefore certain that the mortality of Small-pox in Glasgow has been less than 1 in 5, probably, indeed, not more than one in 6 or 7 of the attacks; a fact which certainly tends to prove, among others, the considerable protection exerted by vaccination over a com-

munity even imperfectly vaccinated, the mortality of Small-pox in unprotected persons being probably at least 1 in 3, and in some cases higher than this. On the other hand, it would be uncandid not to admit that 62 deaths below five years of age from Smallpox in Glasgow, occurring among 205 deaths from this disease at all ages, is a proportion calculated to raise grave doubts as to the supposed completeness of the protection afforded to the population at those early ages, by the Compulsory Vaccination Act of 1863, in our large towns. The Registrar-General himself states that of 880 deaths from Small-pox which took place in 1871 in the eight towns, 202, or nearly 23 per cent., took place at ages which ought to have been covered by the Vaccination Act. But the inference which follows, as to the perhaps unavoidable imperfection of the machinery of that Act, is, I think, too feebly pressed, or rather, is not clearly stated at all. It appears from the Report of 1871 that a proportion of infants, varying from about 2.4 to 2.7 per cent., is in each year told off as not accounted for by the official vaccinators throughout Scotland at large, and in some parts of our large towns it is certain that the proportion of unvaccinated infants must be very much greater than this. These, with the still more numerous unvaccinated or imperfectly vaccinated adolescents and adults, no doubt form the pabulum on which every successive epidemic of Small-pox may be expected to take effect, and in proportion only as this margin of unprotected individuals can be reduced may we expect to see Small-pox diminish as a cause of mortality.

A still more serious cause than Small-pox of epidemically increased mortality in 1871 in Glasgow was Measles, which in the course of the early spring and summer increased to very unusual proportions, and proved fatal to a great number of children of tender age, thereby increasing the infantile mortality of the summer season very much out of proportion to that of all ages, but raising also the general death-rate of the City in June and July to a point very much above that proper to the season under ordinary circumstances. It has been already stated that Measles were the cause of 889\* deaths in 1871, as against

<sup>\*</sup>In this and other instances the returns given in the Tables differ considerably from those of the Registrar-General, but are the results of a much more careful collation of details in the Sanitary Office.

129 only in 1870; besides—in all probability largely, but to an incalculable extent-increasing indirectly the mortality from pulmonary diseases, both acute and chronic, at the early ages. The 889 deaths directly ascribed to Measles are classified according to age in Table II. of the Appendix, and yield the following results, which will be found in a more extended form in Table V .: Of the 889 deaths, 835 were under five years of age, 51 above five but below twenty years, and only 3 above the latter age. It is only at the earliest ages, accordingly, that Measles form a distinctly and considerably appreciable feature in the general mortality; although, as is well known to physicians, the ultimate results of an epidemic of Measles in causing secondary disease and death may not be fully worked out for years after the epidemic has ceased. Taking, however, only direct results, and these at the earliest ages, we find that Measles were in 1871 fatal to 12 children out of every 1000 living below the age of five years, and that their ravages in the various districts were represented by a Measles death-rate, varying from 2 only in 1000 in Maryhill suburban district and 4 in Blythswood, to 20 in 1000 in the Bridgegate and Wynds, 21 in St. Luke's, Calton, 22 in St. Andrew's Square, and 26 in the High Street closes on the west side. It would seem, therefore, judging from the experience of the past year, that Measles in the epidemic form have been apparently greatly aggravated by all those conditions which, as I shall afterwards show, were the great factors of mortality in other respects; overcrowding, poverty, and neglect being among the chief of these, and all the districts above specially named being notoriously open to these unfavourable criticisms.

Other causes of increased epidemic mortality in Glasgow during 1871 were, Hooping-cough, which both in 1871 and the previous year was unusually prevalent and fatal, giving rise to between 500 and 600 deaths in each year; Croup and Diphtheria, which advanced from a joint mortality of 121 in 1870, to 343 in 1871, while Scarlet Fever somewhat declined in the same period; but, above all, acute diseases of the lungs, which, although very fatal in 1870 (as I pointed out in my Report for that year), were nearly a third more fatal in 1871, and carried off nearly one-fourth (more exactly, 24.76 per cent) of the population who died during the year from all causes.

As I regard this mortality from pulmonary disease as being undoubtedly the most important and serious fact of the year, in its relations to the generally increased death-rate of Glasgow, I shall here ask particular attention to it with the view of extending and enforcing from new data the conclusions arrived at in last year's Report, which appeared at the time to come before some minds with the force of novelty. It may be remembered that I then urged, from the confessedly imperfect data then before me, the large and unequally distributed mortality from acute pulmonary affections as a ground for new researches and observations into the causation of these diseases in Glasgow and our other large towns; that I showed their peculiar bearing on the mortality of early life, and inferred from thence that although the exciting causes of these diseases might sometimes be found in the various industries, pursued, in some instances, in atmospheres loaded with dust or vapour, the real causes of much pulmonary mortality, and especially of that affecting the infantile age, must be looked for elsewhere; so that, whatever may be the effect of the workshop in determining pulmonary mortality, "an immensely preponderating proportion (of the deaths from acute disease of the lungs) takes place before the direct influence of occupation can be supposed to have any bearing on the individual life." The total mortality from this cause, it was further argued, has a much greater influence on the general death-rate than any individual epidemic disease, or even than all the epidemic fevers prevailing in ordinary seasons taken together, inasmuch as "the diseases of the respiratory organs, taken in the aggregate, caused considerably more than a third of the whole mortality; while, if we classify out the more acute forms of disease (Bronchitis, Pneumonia, and Pleurisy), we shall find them giving more than a fifth; and Tubercular Disease of the Lungs, or Consumption, nearly a seventh of the total mortality." Finally, I showed that the prevalence of these diseases as causes of mortality varied so much in the different towns of Scotland as to form a ground for supposing great differences in the social or vital state of the populations inhabiting these towns-differences, in fact, "far greater, as well as more permanent in character, than those due to the prevalence of epidemic disease." In other words, we seemed to have come to the conclusion that not only are pulmonary diseases the source of a very large and varying mortality, but that there are some reasons for regarding them as being, not less than the great epidemic fevers, local in their prevalence, and thus due to occasional as well as permanent causes, probably more or less preventible by proper sanitary regulations. I am very far from believing that these causes can be thoroughly, or even approximately, displayed in the present Report; but in applying the results of statistical analysis, aided by the recent Census of 1871, to the investigation of the local prevalence of disease and death in Glasgow, it is reasonable to hope that a way is being opened up for more fruitful researches and detailed observations in future. More especially is this the case with regard to the well-known and most deplorable sacrifice of infantile life which is continually taking place in this City, and which, I am glad to observe, has recently been discussed in the Town Council, on the basis of some very suggestive remarks by Councillor Scott, with the general scope of which every sanitary officer, and every well-informed citizen of Glasgow, must actively sympathize.

In entering on this branch of my subject, I will in the first place endeavour to describe briefly the new efforts that have been made, during the past year, to render the periodical statistical statements emanating from the Sanitary Department available for investigation into the local prevalence of causes of mortality. In constructing the Tables here referred to, I have been greatly aided by Dr. Dunlop, Assistant Medical Officer, who has devoted an immense amount of personal trouble and time to their preparation. It is right also to acknowledge here the services of Mr. George Mackay, who has for many years superintended the details of calculations made in the Sanitary Department.

In my Report of last year I had to regret the abortive termination of certain very considerable labours undertaken during the two previous years, with the view of providing a much more complete local subdivision of the population of the City for sanitary purposes than was ever before attempted, I believe, in a population of equal magnitude. The monthly sheets, or numerical summaries, then issued had reference to no fewer than fifty-four sanitary districts, as they were called, from their having been carefully selected and arranged so as to show the influence of different conditions of life, habitation, social position, &c., on the

death-rates and disease-rates of the various districts. Two things were wanting to give these arrangements real and positive value; first, the accumulation of details over a sufficiently extended period of time; second, an accurate numerical estimate of the population of each of the fifty-four districts above referred to, with all those details which could only be furnished by a general Census. Without such a census it was of course possible to furnish crude figures, so to speak; but quite impossible to deduce from these figures strictly scientific conclusions. Yet there were found persons of influence who, having first demanded, prematurely, the publication of these crude figures and then hastened to found upon them utterly absurd and erroneous conclusions, ascribed the faults of their own calculations to the innocent figures upon which they had operated so unwisely. And thus the labours of two years, when just ripening towards practical effect, were forced into a premature publicity only to be afterwards consigned to a premature oblivion.

During the past year a suggestion was made at the Committee of Health that a local subdivision of the City for sanitary purposes should be resumed, upon a somewhat less detailed plan, in connection with the Census of 1871, and it was left to Dr. Dunlop and myself to arrange the necessary subdivisions, experimentally, with reference to the facts of one month or more. The most obvious subdivision, and the one first adopted on account of its convenience (the details required being all accessible in the Registrar's books), was that already in use by the Registrar-General, which divides the whole City (with the exception of Springburn and a portion of Maryhill Parish within the boundary) into ten Registration Districts. Several monthly summaries were prepared on this plan, and submitted to the Committee. But it was soon discovered, as I had long ago remarked, that the ten Registration Districts formed a subdivision geographically compact enough, but for sanitary inquiries utterly useless, and even misleading, inasmuch as almost every one of these Registration Districts comprises a population not less varied in character than that of the City itself. The district called Central, for example, contains indeed a large proportion of what may be called the debased and degenerate population of the High Street; but it contains these, diluted, as it were, and lost for purposes of sanitary investigation, by being mixed up with the wealthy business quarter east of the Exchange, and the highly

respectable districts, themselves also differing entirely in character from each other, south and north of the Parliamentary Road. The name "Central District" conveys to the mind of the inhabitant of Glasgow the general idea of closely built-up space, overcrowding, epidemic disease, demoralization, dirt, and near neighbourhood in more senses than one to the Police Office; the actual Central District of the Registrar-General includes some of the most open spaces and airy heights within the City—the warehouses, offices, and shops in which its wealth is chiefly produced, and the residences of thousands of its most thriving artizans and well-to-do middle class.

It thus became apparent that another basis of arrangement must be sought, and, after much consideration, it was determined-1st, to retain whatever of advantage might be found to result from the primary divisions of the Registrar-General, by adopting these (at least nominally) into our arrangements; 2nd, to constitute within the Registration Districts a series of typical sub-districts, not aiming thereby at a complete geographical subdivision of the City, but only placing at the disposal of the sanitarian the statistics of such selected districts as appeared to present a certain marked character. as regards the population, from the sanitary point of view; 3rd, to make so complete a written analysis of the Census papers for official use, founded upon the minuter subdivisions of the Enumeration Districts, as should afford scope for inquiries at any future time into the population of a particular street, or subdivision of a street, or, in fact, any aggregate of population which could be made to coincide with a limited number of those Enumeration Districts. Acting on these general principles, twenty-two sub-districts were constituted as subordinate to the ten Registration Districts; the population of these sub-districts varying from 3399 (Brownfield) to 39,653 (Bellgrove and Dennistoun), while that of the ten Registration Districts varies from 25,000 to 60,000; the whole City, as included within the boundaries defined in the Act of Parliament, containing, according to the recent Census, 490,442 persons in 1871.

It will be found, I trust, that in almost every one of the subdistricts thus selected, a man of practical experience and general acquaintance with our City will recognize some characteristic features or peculiarities by which it can be mentally defined. Thus the High Street closes, east and west; the Bridgegate and Wynds; St. Andrew's Square, with its dense surrounding network of closes. will, together or separately, adequately respresent what is commonly known as the overcrowded centre of Glasgow; while Gorbals, St. Luke's Church (Calton), Port-Dundas, with its canal labourers, Brownfield, with its river-side lodging-houses, Cowcaddens, &c., all represent more or less distinctly defined groups, for the most part of labouring populations, which again may be compared with other groups containing the more select working-class or middle-class populations, as in the Charlotte Street, Hutcheson Square, Kingston, and Cranstonhill Districts. The strictly business quarter of the Exchange remains, under the new classification, a sub-district by itself, not strictly comparable with any other as to its resident population; while in such sub-districts as Bellgrove and Dennistoun, Greenhead, Barrowfield, St. Rollox, St. Enoch's, Laurieston, and Woodside, we have populations in some respects, perhaps, more difficult to characterize as of any uniform type, but which the citizen of Glasgow will have no difficulty in studying, as possessed of a certain amount of individuality (so to speak) when formed into statistical units for purposes of comparison. A very careful consideration, however, of the details of each of these districts is necessary for the full appreciation of its special character as regards population; and in the present Report it will only be possible to speak of them in very general terms, as illustrating more or less favourably placed populations in a sanitary point of view. The ultimate details of the Census (not yet published) will give abundant means for classifying the population of each district, not only according to sex and age, but also according to nationality, social condition, occupation, &c., &c.; and should the present form of statistical returns be adhered to, therefore, they may be expected to increase in their value, as to results, in proportion as these data are worked out in detail, and applied to a larger series of monthly and annual returns, illustrating the limits of variation of disease and mortality in each district.

Let us first endeavour to attain to some conception of the position, in a sanitary point of view, of each of these sub-districts, by ranging them in an order corresponding with the absolute death-rate of all ages taken together, during the year 1871. It may be admitted at once that this is only a rough test, so to speak, of the absolute or comparative value of human life in the different districts; that districts may be accidentally and unduly, as it

were, raised or lowered in the scale temporarily, owing to the prevalence of epidemics, or permanently, owing to the operation of such causes as a large relative proportion of infantile or of aged population; the proximity of certain kinds of work, the advantages of situation, &c., forming the ground of what Mr. Darwin would call a kind of "natural selection," by which the whole population of the City is variously and unequally distributed in the different districts. For the present it may be sufficient to remark, that any possible erroneous inferences in this direction are slight as compared with the broad truths to be set forth in this classification, and that several of these sources of fallacy will be to a certain extent corrected, or held in check, by what remains to be shown as regards the details of mortality at different ages, and especially of the deaths under five years of age. I must here remark, in passing, that the method adopted by Mr. Scott, in a very interesting paper communicated to the Philosophical Society of Glasgow last session, of assuming what he calls an "expectant death-rate" upon the basis of a calculated allowance for the disturbing influence of age, though undoubtedly a very ingenious proposal, has appeared to me too much of the nature of a theoretical refinement to be adopted in Tables that only profess to set forth actual facts, upon which, of course, every one may build his own superstructure of reasoning, and deduce from thence his own conclusions. In the discussion which followed on the reading of Mr. Scott's paper, I indicated my opinion that some of the results apparently obtained by him by this method are at least misleading in their form, if not actually erroneous in their terms as stated; and, in particular, that the estimate given of the sanitary status of districts, according as they exceed or fall short of the hypothetical death-rate assigned to them, either absolutely or in respect of certain kinds of disease, is full of fallacies sufficiently obvious to the practical sanitarian, working in detail in these districts, though not, perhaps, altogether obvious to a mere reader of Mr. Scott's paper. In the present Report, and in the Tables annexed, the result aimed at by Mr. Scott will be attained in another, and I think a far better, way, viz., by extending the principle of death-rates calculated upon actual facts to each of the ages referred to by him; whereby, without the introduction of any hypothetical or questionable element, the status of each district can be tested by the phenomena proper to each important period of human life.

#### GLASGOW, 1871.

Death-rates in 1871 per 1000 living of all Ages, and of Children under Five Years, in the whole City and in certain select Districts; showing also the proportion per cent. of Children under Five Years to the whole Population, and the number of Persons to One Acre, in each of the said Districts.

[N.B.—The order of the Districts here followed is that of the death-rate of all Ages, beginning with the highest, and ending with the lowest death-rates.]

	Death-rate per 1000 Living. (All Ages.)	Death-rate per 1000 Living. (Under 5 Years.)	Percentage of Children under 5 Years to Total Population.	Persons to One Acre.
High Street (West),	52	188	13.24	322
Bridgegate and Wynds,	48	189	12.24	595
High Street (East),	45	167	13.36	406
Gorbals,	42	155	13.80	494
Brownfield (Clyde),	42	128	13.50	566
Port-Dundas,	40	149	15.21	120
Mean of First Group (A),	45	163	13.56	417
St. Andrew's Square,	39	153	12.68	417
St. Luke's (Calton),		146	14.10	427
Cowcaddens	36	130	15.50	432
Cowcaddens,	36	138	14.73	222
St. Rollox,	34	113	15.64	333
Greenhead and London Road,	33	116	15.19	35
Mean of Second Group (B),	36	133	14.64	311
St. Enoch Square,	33	113	11.83	78
Bellgrove and Dennistoun,	32	102	14.97	35
Barrowfield,	32	117	13.90	255
Laurieston,	31	105	13.52	339
Springburn and Maryhill,	29	99	16.50	17
Woodside,	27	100	14.23	74
Mean of Third Group (C),	31	106	14.16	133
Charlotte Street,	26	94	11.70	35
Hutcheson Square,	26	90	15.20	95
Kingston,	25	87	13.63	94
Exchauge,	24	90	12.52	97
Blythswood,	22	84	10.43	127
Cranstonhill,	20	69	12:11	52
Mean of Fourth Group(D),	24	86	12.60	-83
Glasgow (whole City),	33	117	13.63	85

The annexed Table (the whole of the details of which are either taken, or have been directly calculated from those in Table I. in the Appendix) may be referred to as exhibiting with sufficient distinctness the sanitary status of the different sub-districts according to the plan proposed, excluding, however, all the special subdivisions of age except that of infancy, for the sake of simplicity; the fact being that in the estimate of a general death-rate no other period of life weighs nearly so heavily, or, in fact, at all appreciably in influencing the results obtained. In the first column in this Table will be found the comparative death-rate of the whole population of each sub-district, these being arranged in the exact order of their death-rates, beginning with the highest and ending with the lowest. In the second column a certain check is afforded by which any fallacies in the first column may in part be detected, and a new datum is provided by which the sanitary position of each subdistrict may be estimated, viz., the death-rate of the infantile age taken separately. In the third column a further insight is afforded into the probable influence of the infantile upon the general deathrate, by a statement of the actual proportion, according to the Census of 1871, of infants under five years to the general population; it being obvious enough that a high infantile mortality will have more disturbing influence on the general death-rate, when the proportion of infants is  $15\frac{1}{2}$  per cent., as in St. Rollox, than when it is only 101 per cent., as in Blythswood. Lastly, in the fourth column will be found a statement of the actual density of population in each of the sub-districts, i.e., the number of persons living upon each acre of surface, according to the Census of 1871; affording a ready means of testing the operation of the law so often insisted on in the reports of the Registrar-General, whereby the mortality of the country at large is shown to be, on the great scale, almost exactly proportionate to the density of population-greatest in the large towns, less in the smaller towns and villages, least of all in the remote country districts. This portion of the Table will show very clearly, on careful consideration of its details, that while the law alluded to undoubtedly holds true in Glasgow-and all the most overcrowded districts are also districts of high mortality-yet it is none the less true that density of population up to a certain point is consistent with relatively moderate death-rates, as in Blythswood, Exchange, Kingston, Hutcheson Square districts; while, on the other hand, districts much less densely peopled than these, as

Greenhead and London Road, Bellgrove and Dennistoun, Springburn and Maryhill, may have much higher death-rates. In the interpretation of these and other apparently anomalous facts, it is to be always kept in view that each of the sub-districts here constituted, though used for statistical purposes as a homogeneous aggregate of population, is in fact an aggregate not always homogeneous; and that it is possible for dangerous overcrowding to exist in detail, even when a particular district as a whole is not very densely peopled. In Springburn, for example, there are many more overcrowded localities than in Blythswood, although the population living on each acre in the former, according to the recent Census, is only 25, while it is 127 in the latter. This principle of qualification, or rather reasonable and intelligent interpretation of the results presented in these Tables, should never be lost sight of, otherwise it will appear as though every deduction from them were open to question on minutely considering the details of evidence.

By assuming the Registration District of Blythswood (containing, as is well known, a large part of the well-to-do Westend, together with a not insignificant proportion of needy and much less favourably placed population) as one of the sub-districts, and combining for the same object the two suburban districts of Springburn and Maryhill parish (the latter, of course, only so far as within the municipal boundary), the number of districts used in this Table for statistical comparison is raised from 22 to 24, which I have disposed in four groups of six districts each (A, B, C, and D,) according to the order of their death-rates, as follows:-The first group of six subdistricts, with death-rates that may be described as enormous, varying from 40 to 52, has a mean death-rate of 45 in 1000 living; the second group, with death-rates varying from 33 to 39, has a mean of 36; the third group, of 31; the fourth group, of 24; the absolutely lowest death-rates in this last group being those of Cranstonhill and Blythswood, which are 20 and 22 in 1000 living respectively. It follows that the death-rates of the whole population in the different sub-districts of the city chosen for investigation varies from 20 to 52; or, in other words, in the closes west from the High Street, more than two-and-a-half persons died in the year 1871 out of like numbers, for every one person that died among the inhabitants (mostly working-class, artizans, and tradesmen) of Cranstonhill.

The contrast is undoubtedly a striking one, and does not become less so as the inquiry advances to the infantile death-rates; for here again it appears that between the best and the worst districts in the Table there is a difference which may be thus expressed— That while in Cranstonhill District 69 children under five years died in 1871 out of 1000 ascertained by the Census of that year to be the number living within that age, the corresponding number in the Bridgegate and Wynd was 189, and in the High Street (west) 188 per 1000 living. In other words, for every one infant funeral in Cranstonhill District, there must have been out of a like number living in 1871 not far from three infant funerals in these notoriously unhealthy districts in the central part of the City. And it will not fail to be observed, that in the two districts which the double test of the general and the infantile mortality establishes as having by far the highest death-rates in the City, the density of population, as compared with Cranstonhill, is in the one case more than ten times, in the other more than six times, as great as in the district which has the absolutely lowest death-rates, both of the infantile and of the general population.

Thus far, therefore, the general laws which dominate the mortality of the selected districts of Glasgow appear to show very clearly the existence of certain unfavourable influences which act with nearly equal force upon the infantile and the more advanced ages, and which may be generally expressed as causing a much more than two-fold, nay, in the case of infants, nearly a three-fold mortality in some districts as compared with others. But this is not all; for it cannot be doubted, though by these Tables it cannot be numerically proved, that the contrast in reality is much greater than this. Were we to choose out the very best localities in Blythswood or Cranstonhill, and to compare them with the very worst in High Street or Bridgegate, there can be no doubt whatever that instead of a doubled or trebled, we should find a quadrupled or quintupled mortality in the latter as compared with the former. And there can be almost as little doubt that we should find these limited areas of frightfully great mortality occupied by a still more densely crowded population; it having been proved by careful inquiries that in some parts of the Central District 800 or 900 persons may be found living upon an acre of surface.

Reverting for a moment now to the four groups of districts above-mentioned, in which the very large populations involved

(from nearly 69,000 in group A, to 158,000 in group D) may be supposed to diminish the risk of fallacy from too small numbers, the mean numbers representing the infantile and the general deathrate are throughout found to be remarkably in accord with each other, and with the mean density of population in each group. The law of variation in general terms may be stated thus:—The infantile death-rate is usually rather more, or rather less, than threeand-a-half times, but in no instance so much as four times, the death-rate of all ages. In other words, when the death-rate of the whole population is 20 per 1000 living, an infantile death-rate of about 70 or upwards may be expected; when the general deathrate is 30, the infantile may be 100 or upwards; when the general death-rate is 40, the infantile will probably be about 140—150; and when, in rare cases, the general death-rate reaches, or exceeds, 50 in 1000 living, the infantile death-rate may probably vary from 170 to 190. Moreover, the highest of these death-rates, both infantile and general, accompany densities of population extending from 400 persons on the acre upwards; and the next highest 300 upwards; while the lower death-rates also correspond on the great scale to minor densities of population.

It is to be observed, further, that the proportion which the living infantile population bears to the whole population of a district or of a group of districts has no very obvious or definite influence upon the results of our inquiry into the mortality as thus determined. It is quite true that the variations of the infantile deathrate (owing to epidemics and other causes) are greater than those of the general death-rate, and at particular times may bring about a disparity between the two; but, as matter of fact, the proportions above stated hold good, with only moderate variations on either side throughout the Table, whether in districts in which children are relatively numerous, or in those in opposite circumstances. Thus, if we take the six districts in the above Table in which children most predominate, being in all of them more than 15 per cent. of the population, and compare these with the five districts in which the lowest proportion of children (10.43 to 12.52 per cent.) is associated with the death-rates, moderate or at least not exceptionally high-Blythswood, Charlotte Street, St. Enoch Square, Cranstonhill, Exchange—we find that in both series the infantile death-rate is just three-and-a-half times that of all ages and a little more, the difference between the two series in this respect being almost inappreciable.

#### GLASGOW, 1871.

Death-rates in 1871 per 1000 living of Children under Five Years, in the whole City and in certain select Districts; showing also the proportion per cent. of Children under Five Years to the whole population, the proportion per cent. of these Children in which the Cause of Death is uncertified, owing to deficiency of regular medical attendance, and the number of Persons to One Acre in each of the said Districts.

[N.B.—The order of the Districts here followed is that of the death-rate of Children under Five Years, beginning with the highest, and ending with the lowest, death-rates].

100		1-11			
		Infantile Death-rate (per1000 Liv- ing below 5 years).	Percentage of Children under 5 years to Whole Population.	Percentage of Children not Medically Attended.	Persons to One Acre.
14	Bridgegate and Wynds,	189	12:24	59	595
3	High Street (West)	188	13.24	32	322
10	High Street (Fast)	167	13:36	43	406
	High Street (West),	155	13.80	46	494
2-2-	St. Andrew's Square,	153	12.68	24	The second secon
10		149	15.21		417
2-	Port-Dundas,	149	15.21	27	120
	Mean of First Group (a),	167	13.42	39	392
_	St. Luke's (Calton),	146	14.10	18	427
18	Hydepark Street (Anderston),		14.73	19	222
	Coweeddens	130	15.50	33	432
10	Cowcaddens,	128	13.50	27	566
138	Barrowfield,	117			
D	Greenhead and London Road,	117	13.90	34	255
7	Greennead and London Road,	116	15.19	23	35
	Mean of Second Group (b),	129	14.49	26	323
12	St. Enoch Square,	113	11.83	30	78
12	St. Rollox,		15.64	6	333
20	Laurieston,		13.52	7	339
	Bellgrove and Dennistoun,	102	14.97	23	35
15	Woodside,	100	14.23	21	74
	Springburn and Maryhill,	99	16.50	5	17
0	opringbarn and maryim,		10 50	9	17
	Mean of Third Group (c),	105	14.45	15	146
-	Charlotte Street,	. 94	11.70	8	35
21	Exchange,		12.52	16	97
21	Hutcheson Square,	. 90	15.20	10	95
19	Kingston,		13.63	10	94
1	Blythswood,	. 84	10.43	11	127
0	Cranstonhill,	69	12:11	10	The state of the s
5			12.11	10	52
2111	Mean of Fourth Group (d)	, 86	12.60	11	83
	Glasgow (whole City),	117	13.63	24	. 85

I have now to direct attention to yet another Table, in which the infantile death-rate, apart from that of the population at large, is made the basis of a renewed classification and grouping of the sub-districts. In this case we find that the four groups of districts arrange themselves somewhat differently; we shall, therefore, designate them by a different form of letter, viz. (a, b, c, d); but (a) will correspond with (A) in comprising the six districts having the very highest death-rates, (b) with (B) in being the next highest, and so on. Now, on comparing carefully the names in the two lists (a) is found to differ from (A) only in a slightly different order of the districts and in admitting St. Andrew's Square instead of Brownfield; (d) is composed of absolutely the same names as (D) in a slightly different order; and intermediate groups are also only slightly rearranged in the one series as compared with the other. The four names at the top of the list, and the six at the bottom, are the same names, with only the least possible variation in the arrangement. Could there possibly be a clearer proof that the great sanitary conditions which dominate infantile mortality are nearly the same as those which rule the death-rate of the people at large?

In this list, as in the former, we find that the law of association, between density of population and high mortality, is, on the whole, quite apparent, and, in the case of the mean results, quite regular. It cannot be necessary, therefore, to enlarge any further upon it.

The third column, however, presents a rather curious set of figures, upon which a few words in explanation may be desirable. The Registrars are accustomed, in noting the causes of death, as returned, to indicate whether a medical certificate has been obtained stating the cause of death in each particular case. In obedience to an instruction of the Board of Police, these notes of the Registrars were obtained and classified as follows:-1, Cause of death certified by medical attendant; 2, Not certified, but medical attendance known or presumed to have been given; 3, No medical attendant; 4, Including a number of cases where a little medicine may have been got, but where the prescriber was not in attendance, and could not identify the case, so as to certify the cause of death. It seems reasonable to assume that in these two latter cases there was as good as no medical attendance, and therefore they have been treated as one and the same for the purpose now to be set forth, which is to show the

varying, and unhappily often enormous, proportions in which children under five years especially are allowed, in the different districts, to die without medical attendance. One fair inference from this is that the record of the cause of death in such cases must be viewed with great suspicion. It is so easy to return a child as dying of Measles or Hooping-cough, when it may in fact have been drugged to death with opium, or simply allowed to die of starvation and neglect. But setting aside for the present any question of criminal interference or negligence, it might be expected that if medical services are worth anything at all, the effect of the want of them should be shown in these returns. Moreover, the ignorance or thoughtlessness (to go no further into the question of worse motives, or wilful neglect) which allows a child to die without even sending to the parish for medical assistance, is sure to be associated with the want of maternal care, of proper food, of adequate clothing, of ventilation, of cleanliness, in other words, of almost everything that the young, tender life requires to keep it from flickering out during the first months, or even years, of infantile existence. Making every allowance, therefore, for errors in the returns, and also for cases in which a child may have been intelligently and carefully tended, though not under medical superintendence; is it not an alarming fact, and one indicating a deep and terrible flaw in our civilization, that in six of the districts of Glasgow having the highest infantile death-rates, and a population of about 70,000 persons, nearly 40 per cent. of the children overhead died without medical attendance in 1871, and in one of these districts 59 per cent. so died? further, that in six other districts with minor, but still high death-rates, 26 per cent. overhead, and as many as 33 and 34 per cent. in some instances, died without medical attendance, the deficiency in this case affecting a population of more than 140,000? further, that even in the best districts in Glasgow 10 or 11 per cent. of the children are often not attended medically, and only in a few districts is the proportion stated at so small a figure as 5 to 8 per cent.? These facts undoubtedly claim attention, not certainly as the exclusive causes of infantile mortality, but as closely connected with many other causes; and it is at least instructive to note that a high infantile death-rate on the one hand, and overcrowding of ground space on the other, seem in the table of mean results to be exactly correlated with the deficiency of medical attendance as set forth in the Registrar's returns.

#### GLASGOW, 1871.

Death-rates in 1871 per 1000 living at all Ages, from all causes, from Acute Diseases of the Lungs, &c. (Bronchitis, Pneumonia, Pleurisy), and from Consumption, in the whole City and in certain select Districts; showing also the proportion of Children under Five Years, and the number of Persons to One Acre, in each of the said Districts.

[N.B.—The order of the Districts here followed is that of the death-rate of all Ages, beginning with the highest, and ending with the lowest death-rates.]

	Death-rate	Death-rate	Death-rate	Percentage	
	per 1000	per 1000	per 1000	of Children	
	Living	Living,	Living,	under 5	Persons to
	(All Ages		The second second	years to	One Acre.
	and all Causes).	Diseases of Lungs, &c.	Consump-	Total	
	Causes).	Lungs, &c.	tion.	Population	
High Street (West),		13.7	9.0	13.24	322
Bridgegate and Wynds,	48	12.9	6.9	12.24	595
High Street (East),	45	13.6	5.2	13.36	406
Gorbals,	42	12.0	5.3	13:80	494
Brownfield (Clyde),	42	7.7	5.3	13.50	566
Port-Dundas,		12:6	3.6	15.21	120
Mean of First Group (A),	45	12.1	5.9	13.56	417
St. Andrew's Square,	39	11.7	4.3	12.68	417
St. Luke's (Calton),	39	11.1	4.6	14.10	427
Cowcaddens,		10.6	3.4	15.50	432
Hydepark Street,		8.7	5.3	14 73	222
St. Rollox,		7.5	4.7	15.64	333
Greenhead and London Road,		7.1	4.4	15.19	35
Greenicad and Bondon Road,		' -	**	10 10	- 00
Mean of Second Group (B),	36	9.4	4.5	14.64	311
St. Enoch Square,	33	6.3	5.0	11.83	78
Bellgrove and Dennistoun,	32	7.7	4.4	14.97	35
Barrowfield,	The second secon	7.6	4.9	13.90	255
Laurieston,	1 2 2	6.6	4.7	13:52	339
Springburn and Maryhill,		6.1	4.3	16.50	17
Washida		6.3	2.9	14.23	74
Woodside,	21	0.0	2 3	14 20	12
Mean of Third Group (C),	31	6.8	4.4	14.16	133
Charlotte Street,	26	5.5	4.5	11.70	35
Hutcheson Square,	0.0	6.1	5.0	15.20	95
Kingston,		6.2	3.2	13.63	94
	0.4	5.1	4.5	12.52	97
Exchange,		5.2	2.9	10.43	127
Blythswood,		4.2	2.7	12:11	52
Cranstonhill,	20	12	2.1	12 11	02
Mean of Fourth Group (D)	24	5.4	3.8	12.60	83
Glasgow (whole City),	33	8.2	4.5	13.63	85

I shall now introduce one more Table, founded on the figures given at length in Table I. (Appendix), and after these three specimens of results that may be attained and compared with future years, I shall leave the detailed figures to speak for themselves. The deaths from pulmonary diseases at all times occupy, as I have already remarked in this and other Reports, a prominent position as factors of Glasgow mortality; and in the year 1871 even the more acute of these affections destroyed very nearly a fourth of the population that died in the City at large. No doubt the epidemic of Measles that prevailed in summer was one cause of this greatly increased mortality from pulmonary affections; but I have already shown that this epidemic produced its most considerable direct effect upon the death-rate precisely in those localities which we have recognized in the preceding Tables as having the highest death-rates from all causes, both infantile and general. It will be interesting now to follow out the same inquiry as regards the special pulmonary death-rate; and the materials for doing so are here presented in a concise form, so far as they can be reduced to numerical expressions with any approach to even probable accuracy. The order of the districts adopted is again that of the general death-rate.

In order, however, to use properly a Table like this (and the same remark is to be made of all the Tables, in so far as they involve the statement of particular causes of death), it is necessary to avoid all unnecessary refinements, and even to guard the result by the statement of what is not apparently included in the inquiry, if it be liable, through errors of diagnosis or otherwise, to obvious fallacies from any particular cause. For this reason I have not only combined together the facts relating to the three most considerable acute diseases of respiration, the separate statement of which would involve a host of probable errors, but I have presented side by side with these a column relating to Consumption; knowing well, as every physician does, that cases are often termed "Consumption" or "Bronchitis" more according to the special aspects they have presented than according to their true pathological character. And with respect to the uncertified cases, it may be said that often the only thing that can be said to be known at all is that the disease appeared to affect the chest. The two columns referred to, however, taken together, afford as accurate a criterion

as can be had statistically of the extent to which the different districts suffered from acute and chronic disease of the organs of respiration.

From these data it may be gathered :-

- 1. That the acute pulmonary mortality of Glasgow in 1871 varied from about 20 to about 30 per cent. of the total deaths, and from 4 to nearly 14 in 1000 of the living population.
- 2. That the mortality from Consumption (a much less definite quantity, however, because more open to popular perversion) appears to vary from about 9 per cent. to 17 per cent. of the total deaths, and from less than 3 to about 9 in the 1000 living in the different districts.
- 3. That the mortality of both together varies from less than 35 to more than 40 per cent. of the total deaths, and from about 7 to more than 22 in 1000 living.
- 4. That the causes ruling these enormously large district variations seem to be in the main the same as rule the general sanitary condition of the districts, inasmuch as the same order is followed to a very great extent, and in the case of the *groups* of districts absolutely, as in the general death-rate.
- 5. That the greater or less proportion of children in the population, although of course it affects considerably the proclivity of a population to respiratory disease, does not appear, practically, to disturb the law of association just mentioned.
- 6. That great density of population, with all its attendant evils, produces even a more marked effect upon the pulmonary death-rate than upon the deaths from all causes; inasmuch as the districts of Glasgow in which the absolutely highest death-rates are associated with the greatest, or nearly the greatest, density of population, are found to have had a death-rate from Acute Diseases of the Lungs, and from Consumption, more than three times as great as those in which the sanitary conditions, as expressed in the general death-rate, are most favourable.

### SECOND ANNUAL REPORT

BY THE

#### SANITARY INSPECTOR OF THE CITY OF GLASGOW,

FOR YEAR ENDING 30TH APRIL, 1872.

To the HEALTH COMMITTEE,

BOARD OF POLICE, CITY OF GLASGOW.

MR. CHAIRMAN AND GENTLEMEN,

I have the honour to submit my Second Annual Report of the work carried out in the City by the Inspecting Section of the Sanitary Department.

The service is divided into eight branches, viz.:--

- I. Nuisance Inspection, which includes the sanitary improvement of defectively constructed dwellings and their surroundings, by which ventilation, light, drainage, paving, water supply, suitable conveniences, and the means of maintaining cleanliness are obtained.
- II. Lodging-House Inspection, which controls the number of Lodgers in Ticketed Houses, Common Lodging-Houses, and Houses let in Lodgings; enforces cleanliness, and detects overcrowding therein.
- III. Epidemic Inspection, which includes House-to-House Visitation, for the discovery of persons suffering

from Infectious Diseases, the arrangement for their Hospital and Home treatment, and the appliance of measures necessary to check and prevent the spread of such diseases.

- IV. Female Visitation, which includes House-to-House Visitation of the poorer classes, educating them in cleanliness, &c., making Sanitary Reports, and aiding the Epidemic Inspectors in cases of sickness.
- V. Inspections for detection of Unwholesome and Adulterated Food.
- VI. Workshops Inspection, which includes the detection of Employers who overwork females, young persons, and children, contrary to the provisions contained in the Workshops Regulation Act, 1867.

(This inspection, by a recent Act, is transferred to the Government Inspector of Factories.)

- VII. Bakehouses Inspection, which includes the enforcement of proper ventilation, cleanliness, and the detection of Employers overworking young persons, either by day or night, under powers conferred on the Local Authority by the Bakehouses Regulation Act, 1863.
- VIII. Indoor Service, which includes the receiving of Applications for Hospital Accommodation, Interments of Unclaimed and other Dead Bodies, under the Public Health Act, and also complaints of Nuisances; keeping Records, Medical Statistics, &c., all as shown in the annexed Tables.

I.

#### NUISANCE INSPECTION.

The Sanitary improvement of dwellings, by reconstructions and nuisance removals, has been, during the past year, attended with the most satisfactory results, not only in the comfort and health of the occupants, but in the absence of infectious diseases in localities formerly notoriously prolific of cases for the Fever Hospitals.

The willing acquiescence of owners and tenants in carrying out suggested Sanitary improvements on their properties and dwellings may be seen by a reference to the small number of prosecutions in the Table annexed.

By the new main sewers constructed in the Eastern District, underground drainage from dwellings and court paving have been obtained to a considerable extent.

In streets still undrained in many parts of the City, a daily flow of water, to flush the gutters and carry the stagnant sewage to the nearest sewer inlet, would, more especially in dry weather, freshen the atmosphere and be a great Sanitary improvement.

As manufacture refuse outflow to the main sewers and sewer ventilation have largely engaged public attention, and properly fall within the Nuisance Branch of the Service, I take the liberty of adding to the foregoing an epitome of my reports to you thereon:—

"REPORT ON THE DISCHARGES FROM PUBLIC WORKS.

"Sanitary Department,
"Glasgow, 9th December, 1871.

"There are 157 Public Works within and beyond the City boundaries discharging manufacture refuse, steam, and hot water into the City main sewers and the River Clyde, viz.:—In the Central District, 15; Northern, 32; Southern, 45; Eastern, 43; and Western, 22. Of these, 144 are discharging into the sewers, and 13 direct into the Clyde; 58 works discharge a mixture of

manufacture refuse and hot water; 73 manufacture refuse only; and 26 hot water and steam.

"Of 28 samples of the refuse outflow submitted to Dr. Gairdner, 9 were found offensive, 7 of a questionable character, and 12 innocuous.

"There are 30 Works complained of by the inhabitants emitting foul gases in the process of their manufacture, viz.:—Central District, 4; Northern, 17; Southern, 3; Eastern, 2; and Western, 4; and of these 16 may be described as offensive, and 14 as not only offensive, but as exciting a sickening feeling in their several neighbourhoods.

"From this it will be seen that the Northern District contains the largest number of Works contaminating the atmosphere, and the Eastern the smallest.

"The Molendinar Burn, running through the Eastern, Northern, and Central Districts, contains the outflow from several Works; that portion of it still open on both sides of Duke Street is a most offensive nuisance, but difficult to remove, in consequence of claims by millowners on its banks of prescriptive right to use its water for steam-condensing purposes. Proposals to cover it over have been for some time under consideration.

"Pinkston Burn flows through the Northern District, and empties itself into the Kelvin, receiving in its course the outflow from 10 Public Works, besides house sewage; 4 of these are situated beyond the City boundary, on the north side of the Port-Dundas Branch of the Forth and Clyde Canal.

"Messrs. Chas. Tennant & Co. have a private sewer, which carries the outflow from their Works direct to the Clyde.

"The Kinning Burn, in the Southern District, appears to be all covered, but it receives Public Works' outflow and house sewage in its course to the Clyde.

"In the Eastern District, Camlachie Burn flows open from the municipal boundary above Westmuir to Greenhead Street, except where bridged over by streets, and also receives in its course the outflow of Public Works and house sewage.

"The Kelvin, carrying the outflow of Pinkston Burn, with its mixture of sewage, still continues to emit offensive smells, contaminating the atmosphere of the beautiful Park and neighbourhood through which, like a running sore, it flows to the Clyde.

"In the Central, Northern, and Eastern Districts, these burn waters, with their mixture of sewage, being used in several Public Works for steam-condensing purposes, pollute the surrounding atmosphere with offensive odours.

"The most satisfactory remedies for this offensive practice, which is dangerous to health, seem to be the proposal to give millowners either a supply of pure water for condensing purposes, in compensation for yielding up their alleged right of using the foul water, and thereafter continue to use the Burns as common sewers, or restore the Burns to their natural purity by prohibition of all foul discharges thereinto, and the construction of parallel sewers for the reception of house sewage and manufacture outflow—proposals both worthy of favourable consideration.

"In several parts of the City there are Gut Works much complained of, the material and operations in, and outflow from which, are very offensive. The owner of one of these Works has been induced to remove from the Eastern District, and it is to be regretted that accommodation in the public Slaughter-houses, where they could carry on their work without offence to the community, cannot be granted."

"REPORT ON THE VENTILATION OF MAIN SEWERS BY CONNECTION WITH CHIMNEY-STALKS AND SHAFTS ATTACHED TO BUILDINGS.

" April, 1872.

"In compliance with Minute of 11th ult., instructing the Sanitary Inspector to ascertain the best points from which the main sewers could be ventilated by connection with available Factory chimney-stalks and furnaces, I beg to report that I have received (with two or three exceptions) the written consent of eighty-seven owners of Public Works, to form connections with the main sewers and their chimney-stalks, under the following provisions:—

"1st, That the connecting tubes be furnished with an appliance for easily shutting off the gases when the fires are out, or the flues under cleansing or repair; and,

"2nd, That disjunction be immediately made should the inser-

tion prove injurious to the draught.

"Where no available chimneys could be found, it was thought

that ventilating tubes attached to private buildings might be substituted, and of these there were selected twenty-four, making a grand total of 111 connections throughout the City.

"Thinking that, in addition to the foregoing, an account of the experience of other Local Authorities in the disposal of their sewage gas might be interesting and instructive, I took the liberty of putting myself in communication with the Local Authorities of Leamington, Stalybridge, Liverpool, Birkenhead, Rochdale, Southampton, Worthing, Atherton, Penzance, and London, and received the following information:—

Leamington.—Mr. Robert Davidson, Engineer's Department of Leamington, says—"The system of ventilation of sewers adopted in this town consists of a small grated chamber in the lid of each manhole, filled with charcoal, which is replaced every six months; all inlets into the sewers are well trapped, and no gas can escape except through these gratings. There are no complaints, and the system appears to work well."

STALYBRIDGE.—Mr. Gregory Gill, Borough Surveyor of Staly-bridge, says — "Street sewers are ventilated by charcoal traps in connection with the manholes, and by connecting the rain-water spouts. This we consider very essential, as they are only a few yards apart, and, connected with the top part of the sewers, they form numerous vents for the escape of gas as it is generated. Of course the joints of the spouts must be made air-tight. They carry off the foul air above the eaves of the houses. All the house drainage is trapped. The sinks (or slop-stones as they are called here) are trapped with a siphon, with a brass plug for cleansing the elbow when choked up. I have heard parties say that the rainwater spout system will allow the sewer gas to escape into the bedroom windows; but these people are only theorists, as I find nothing of the sort in practice."

LIVERPOOL.—Dr. Trench, the Medical Officer of Health, Liverpool, says—"The principle of sewer ventilation in Liverpool, adopted by the late Mr. Newlands, was to convey the gases by iron shafts or pipes above the tops of the houses. Each ventilating shaft or pipe is six inches in diameter, and has affixed

to it a fan or rotatory screw, which moves easily by the slightest force of the wind, and assists by such movement to extract the gas and to disperse it into the atmosphere. This apparatus is called by its maker an Archimedean Screw Ventilator. When the shafts were first used, charcoal filters, as recommended by Dr. Stenhouse, were fixed so that all the gas passed through them; but it has been found that the steam produced by the emptying of boilers into the sewers destroyed the power of the charcoal, and merely left a chemically inert material, which mechanically hindered the escape of the gas. The charcoal trays are not now used. Shortly before Mr. Newlands' death, an agitation as to the efficiency of these ventilators was raised by persons inside and outside the Council; and therefore the matter in dispute was referred to Drs. Parkes and Sanderson. I forward copy of their report, and you will find their opinion at page 27."

The opinion of Drs. Parkes and Sanderson, arrived at after making several experiments, may be summed up as follows:—The Archimedean Screw Ventilators really do the work which they profess to do by actually removing large quantities of air from the sewers; but from the small diameter of the shaft (8 in.), not sufficient to prevent its escape into the streets and the houses, and as a remedy for this defect they recommend that those in existence be allowed to remain unaltered, but that in addition there should be erected large vertical shafts, the structural area of which must be at least half as great as that of the main sewers, carried high above the houses, and that the sewers be frequently flushed and kept clean of filthy deposit.

BIRKENHEAD.—Mr. Thomas C. Thorburn, Town Surveyor of Birkenhead, says—"The main sewers in Birkenhead have been more or less ventilated during the past seven years, and within the past twelve months the system has been more thoroughly carried out. The ventilator consists of an upright shaft carried up from the crown of the sewer to the surface of the road or street, a special chamber or recess being provided in the shaft for the insertion of a charcoal basket, through which the sewer gases pass before they make their exit at the street grating."

dale, says—"We simply put a ventilator, in the form of a lamp eye or manhole, every 100 yards, and compel all rain pipes to be connected directly with the main sewer; whilst, on the other hand, we compel all drains to be trapped, as also all street grids, by the latter means removing the disengaged gases as far from the footpaths as possible. The charcoal disinfectant won't do, as the steam ascending from the sewers thoroughly saturates any charcoal in two or three hours, after which event, of course, it ceased to be disinfectant."

Southampton.—Mr. Lemon, Borough Surveyor of Southampton, says—"I send you my report on the ventilation of sewers; but the Local Board have as yet taken no steps to have either of the systems recommended carried out." His report, which is very interesting and instructive, considers in detail five modes, viz.:—

1st. By ventilating gratings in the centre of the roads.

2nd. By the use of charcoal trays.

3rd. By connecting the sewers with pipes carried to the tops of buildings.

4th. By connecting the sewers with chimney shafts.

5th. By the use of gas, in columns or otherwise.

With regard to the first mode he says—"It has been generally adopted in the metropolis and other large towns; but the Local Authorities are in most cases considering the advisability of resorting to a less objectionable and more effectual mode."

On the fifth mode he remarks—"Our townsman, Mr. Sharpe, the late Manager to the Gas-works, suggested an ingenious plan, which may be described as follows:—An iron shaft, about 14 feet in height and 8 inches external diameter, is to be erected over a main sewer, or contiguous thereto. At the bottom of the shaft, a mixture of coal gas and atmospheric air, with air from the sewers, is to be burned through wire gauze, which will prevent explosions in the sewer (on the principle of the Davy Lamp), and at the same time consume the poisonous gases. The heat produced at the bottom will cause a rapid current up the shaft. The opening at the top is protected by a cowl, as the wind might otherwise check the egress from the shaft. This method is self-acting, and will require very little attention to keep it in order."

## MR. LEMON'S CONCLUSIONS ARE-

Plan No. 1 should only be adopted in connection with the lowlevel sewers, and even then only at the lowest point, so that the openings or gratings would act as inlets for the admission of fresh air into the sewer, to supply the place of the foul air abstracted by other means at a high level.

Plan No. 2 should be followed in all parts of the town where the ventilation is not more effectually provided for by other means hereafter stated.

Plan No. 3 may be used in the upper parts of the town in connection with the high-level sewers, and will afford an excellent safeguard to the occupiers, if carried out in connection with the drains to every house, care being taken that the outlet pipe is above the level of, and not in immediate proximity with, any attic windows.

Plan No. 4 is one of the most effectual of the various modes proposed, because it is self-acting, and not likely to get out of order, giving efficient ventilation at a very small cost.

Plan No. 5 would be equally as effectual as No. 4, but the consumption of gas required to produce an upward draught would be a drawback to its adoption if an equally efficient mode can be carried out at a less cost.

Worthing.—Mr. J. Lund, Burgh Surveyor of Worthing, says that "the drainage of this town is ventilated with Brooks' Patent Ventilators. Mr. Rawlinson was the engineer, to whom I refer you for a full description of the same. I will, however, add, that I have more faith in high chimneys, where they can be had, than all the charcoal ventilators you can adopt: and where you cannot get high chimneys, carry cast-iron ventilating pipes from the head of your sewer above the roofs of the highest buildings in the neighbourhood, being particular to make all the joints air-tight. My experience is in favour of the plan above recommended."

ATHERTON.—Mr. Sharples, Borough Surveyor of Atherton, says—
"We ventilate our main street sewers with ventilating shafts and
charcoal chambers connected with manholes, and where it is convenient we ventilate the sewers with the down spouts attached to
buildings; and the system answers very well."

Penzance.—Mr. A. Morris, Borough Surveyor of Penzance, says—"Our mode of ventilating the sewers in this town is very simple indeed. At the higher parts, which is the end of the drains, we connect a 2½-inch iron pipe, and carry it up to the top of the chimney-stalk outside. As our town is a small one, and the higher parts are the outskirts, it is very effectual."

Southwark.—The Borough Surveyor of Southwark, London, from whom I expected to get valuable information, sent me a telegram stating that he would forward his plans for ventilation on receipt of my order for five guineas, or agreement to pay that amount, for which the remit gave no authority; I am therefore unable to enlighten you on that gentleman's costly plans.

Dr. Corfield in his recent publication quotes from a report that at Ely the connections with the pipe sewers are trapped at every inlet, including the rain spouts, and have only a single ventilating opening by a shaft at their highest point. "Sewer gas," he adds, "really does rise in this shaft, though there is no means of artificially making a draught up it."

In his evidence before the Health of Towns Commissioners, Dr. Neil Arnott says—"The drains must be shut up or trapped, and escape allowed for their impure air by lofty chimneys, in which it may be heated and partly burnt." And he considers that, when so treated, the gases would rise to a considerable height and diffuse themselves through the air, and not descend again within a moderate distance.

But this procedure cannot be recommended, on account of its danger. Mr. James Simpson says "that such pipes were made in the borough of Southwark, connecting the sewers with the furnaces of the scap works, the result being that an explosion took place which blew all the furnace down;" but Dr. Corfield adds, "Even where explosions have not taken place, another difficulty arises with this method, that in the case of furnace chimneys the draught is so great as to open all the traps connected with the house drains in the neighbourhood, and when out of work such inlets form outlets for gases generated in the sewers, and therefore at such times disperse the sewer gases into the air of the streets and dwellings of the inhabitants of the district; or, in other

words, such a system is violent, local, and intermittent in its application."

"On the whole, then," Dr. Corfield concludes, "the evidence would seem to show that the best plan is to have special pipes rising high above the roofs of the houses, each provided with an Archimedean screw at the top, and a charcoal filter at the base."

But Dr. Corfield seems to have overlooked the damaging effects of steam upon the filters; and as Glasgow sewers are subject to similar influences, in that respect, to those of Liverpool, the idea of charcoal trays may be set aside, leaving the selection of modes between the Liverpool shaft and the factory chimney-stalks. But while the evidence produced by the foregoing experience rather preponderates in favour of the chimney-stalks, there is sufficient evidence to show that shafts attached to buildings high above the roof do act successfully; and as the absence of available stalks in many parts of Glasgow renders the adoption of other modes imperative, no hesitation, it appears to the reporter, need be entertained in carrying out both of these last-named modes extensively throughout the city. Drains were found in a great many of the Public Works placed near the base of their chimney-stalks, which will enable the connections to be made at a comparative small cost.

With regard to the size of the connecting pipe, Mr. Lund, Borough Surveyor, Worthing, states in a second letter—"I fix 3-inch stalk pipes to the head of private drains; to sewers generally a 6-inch pipe is sufficient. The size should be regulated to the size of the sewer. Where it can be managed, a 9 or 12-inch pipe run into a factory chimney will answer for large sewers, and be no detriment to the chimney. Where you use stalk pipes for house drains, have the joints properly secured, and carry the pipe 18 inches above the eaves."

The ready willingness of owners to give the free use of their stalks, and to co-operate, gave proof of their faith in the efficacy of the scheme.

# REGULATIONS AS TO INTERMENTS.

The rules with regard to interments in the Cemeteries, Churchyards, and Crypts were found during the year to have been carefully observed. II.

### LODGING-HOUSE INSPECTION.

Houses ticketed, and Common Lodging-houses conducted under regulations provided by the Glasgow Police Act, and Houses let in Lodgings under regulations provided by the Public Health (Scotland) Act, and sanctioned by the Board of Supervision, present an appearance now much improved from what they did at the outset of the inspection in 1870, the rules as to cleanliness, ventilation, and whitewashing being in most cases carefully observed, and admitted by the class of persons subjected to them to be greatly conducive to their good health and comfort.

The night inspection for detecting overcrowding is now reduced to two nights' inspections in each district in the week, and thereby the evil seems to be kept in check. Should this continue, it is contemplated to further restrict the service to one night a week in each district, and arrange that inspection will be made in some part of the City every evening. Members of one family occupying ticketed houses are, when considered unable to pay rent for better dwellings, indulged to a limited extent as to cubic space over those keeping lodgers, who are, generally speaking, the greatest delinquents in overcrowding.

III.

# EPIDEMIC INSPECTION.

This branch of the Department was supplemented, during the past year, by a staff of house-to-house visitors, for the purpose of discovering unreported cases of infectious disease, and arranging their prompt removal to Hospital, which, with the disinfecting and other measures thereafter used to check its spread in localities where it might be otherwise unknown, has proved a valuable aid to the Service.

That Sanitary improvement, by reconstruction of dwellings, nuisance removal, house-to-house visitation, isolation of patients, and

disinfection, unitedly act as a prevention of Fevers and their spread, can now be clearly traced from the epidemic records at command. It may, however, be considered premature at this early period of the staff's existence, to affirm that these have wholly influenced the recognised causes from which infectious diseases spring, to the extent of reducing the cases to the small number now affected in the City; but it could not escape observation, and be greatly encouraging to all engaged in the work, that since the day on which these were assisted by additional Hospital accommodation the number of fever cases, with a few exceptional upward fluctuations, gradually decreased from 1014 to 148, the comparatively low number shown on the daily return of this date being nearly 100 cases fewer than returned in any week during the past nine years. It was equally gratifying to notice that similar prompt action and free vaccination in infected localities seemed to have effectually checked the threatened spread of Small-pox, when it raged with such virulence in other parts of the country.

The remedial effect of proper drainage, light, and free ventilation, in defectively constructed Fever localities, was strikingly seen in a court in King Street, City, containing a population of 324, which in 1870, the year preceding that in which these were obtained, when no real epidemic of Fever existed, yielded 89 cases of Fever, and in the year subsequent thereto only 5 cases; and in a property in Bell Street, with a population of 108, which yielded 27 cases the year before these improvements were made, only 18 were found in the year following, when an epidemic of Relapsing Fever was at its height, and some of these were due to importation. The same satisfactory result was observed in Main Street, Gorbals, where, in a locality containing a population of 215, in which 30 cases were found in 1870—the year prior to the enforcement of reconstruction—only 2 were affected in the year subsequent thereto; and in a locality in Crown Street, with a population of 65, 11 cases were found in the year preceding alterations, and only 4 the year thereafter. Similar evidences were found in all the other districts of the City; but without occupying space multiplying examples, the following may be selected, viz.:—Middleton Place in the North, Orr, Main, and East John Streets in the East, Carrick and Clyde Streets in the West, localities all bearing the infectious colour on the City Map.

The sweeping operations of the City Improvement Trust, falling as they chiefly do on densely populated, ill-constructed, and sickly localities, cannot be overlooked in any Sanitary Report that may be issued by this Department. Clearances of the most notorious Fever dens in the City have already been made, and others of equally dangerous character are in contemplation. From the list before me the following may be noticed as places in which the Epidemic Officer required to give almost hourly attention, but now partly or wholly swept away, viz.:-Nos. 80, 90, 100, 75, 93, High Street; 77, 97, 139 Saltmarket Street; 29, 35, 89, 99, and 103 Gallowgate; 77, 81 New Vennel, and 90 Havannah; and of those "spotted" for removal after Whitsunday, there are the blocks of closely built, overcrowded, and badly constructed buildings, nests of Fever, Nos. 147, 157 Bridgegate, to make space for a fishmarket, several blocks of densely peopled dwellings at foot of Havannah, near Molendinar Burn, including Hatters' Close at foot of New Vennel, on the west side of Main Street, Gorbals, which latter alone, during the past two years, yielded no fewer than 114 Fever patients, most of whom had to be treated and furnished with accommodation by arrangement of the Local Authority.

The removal of these plague spots, and the consequent distribution of the population they contained to more airy and healthy localities will, it can easily be seen, save the Local Authority and Parochial Boards an almost incalculable amount of permanent outlay, not to mention the saving that will be gained by the effectual check thereby put on the continuation and spread of those infectious diseases, which for so many years found resting-places there, causing suffering, death, and destitution among the unfortunate inhabitants.

The Reception-house at 39 Weaver Street, recently purchased and fitted up for the accommodation and maintenance of families removed from infected localities, while these are being cleaned and disinfected, will prove, it is confidently expected, a valuable adjunct to the other means now employed for grappling with these dangerous diseases.

This house contains one large dining-room, five bedrooms, in which 33 beds, with ample breathing space, are arranged, hot and cold water baths, and other suitable conveniences. Outside there are a clothes disinfecting chamber, and two suites of Mr. Stanford's

Patent Carbon Closets. The grounds are simply and neatly laid out. One of the female visitors has been appointed Matron, and arrangements are made for keeping a register of the inmates, and all the outlay connected with the establishment, in books separate from those of the Inspecting Department.

IV.

## FEMALE VISITATION.

The female visitors are still well received by the classes daily visited, and report favourably of sanitary improvements noticed on houses reinspected, and continue in many ways to aid the general service.

V.

## UNWHOLESOME FOOD INSPECTION.

The inspection for detection of adulterated and unwholesome food is confined chiefly to the latter, as the absence of a Public Analyst in the City renders the Local Authority powerless in prosecuting for the former offence; and it is questionable, even supposing an analyst were appointed, whether conviction would follow prosecution; the Act for Preventing the Adulteration of Articles of Food or Drink (1860) being so loosely framed that, up to this date, it has been found literally inoperative throughout the country. It must, for example, be proven to the satisfaction of the Court that the seller of the adulterated article or his servant knew that such article was to be analyzed, in order to secure it from being tampered with; and before a conviction can be obtained, it is necessary to prove not only that the vender knew the article of food or drink contained a foreign or deleterious mixture, but that the adulterant is actually injurious to health.

The penalties under the Glasgow Police Act are unfortunately confined to "any animal or part of an animal which died from

disease; any animal or part of an animal, or any fish, or any fruit, or vegetable, which is unsound, or unwholesome, or unfit for human food; any blown, stuffed, or pricked meat." And although in section 270 it states, "or any other article of food sold or exposed for sale, or kept in any place used for the sale of such articles, in respect of which there are reasonable grounds for supposing that a penalty has been incurred under any of the provisions hereinbefore contained," unluckily no provision "hereinbefore" grants penalties for adulterated butter, tea, sugar, &c., which in the meaning of the Act are "other articles of food," and for detection of these articles of large and daily consumpt it is powerless; as, most unaccountably, is also the Public Health (Scotland) Act.

The want of power in these Acts to suppress this growing evil is a misfortune to consumers of all classes, but more especially to the working-classes, and seems a fair groundw hereon to found a demand for early and effective enactments to abolish the practice.

A reduced death-rate, so anxiously looked for, from the salutary effects of structural improvements, can never be fully realized so long as this defect in the law exists; for, while clean and well-ventilated houses, the safe diffusion of sewer gases, and a supply of pure water, undoubtedly tend to check the spread of disease and lessen the number of deaths from infectious and preventible causes, the percentage from this cause alone, not to mention others placed beyond the reach of sanitary operations, is not only at present unreducible, but, from the variety of diseases it may induce, incalculable.

One sample of prepared coffee, brought to the Sanitary Chambers by a gentleman, was submitted to analysis by Professor Thorpe, and found to contain about five per cent. of mineral matter.

Two samples of coffee, bought from the same shop immediately thereafter, were also submitted to analysis by Professor Thorpe, who reports—"I have examined the samples marked No. 1 (mixture of

<sup>\*</sup> Since the above was put in type, an "Act to Amend the Law for the Prevention of Adulteration of Food and Drink, and of Drugs," with much greater powers than the former Act, has been passed, and promises greater protection to consumers.

chicory and coffee), and No. 2 (pure coffee). No. 1 only contains sand, but in such small amount that it may be probably ascribed to the imperfect washing of the chicory roots."

On complaints made regarding the adulteration of Milk and Butter, samples were bought in the different districts in the city and handed to Professor Thorpe for analysis, on which he reports as follows:—

"I beg to send you the results of my examination of the six samples of milk left with me on Tuesday morning. Three of the samples appear to be genuine, two have had a portion of the cream removed, or have been mixed with skimmed milk, and one sample has been mixed with from 15 to 20 per cent. of water. Annexed are the details:—

- "1st. Western District.—Dumbarton Road, genuine.
- "2nd. Western District.—Stobcross Street, genuine.
- "3rd. Southern District.—Main Street, Gorbals, creamed, or mixed with skimmed milk.
- "4th. Eastern District.—Main Street, Calton, mixed with from 15 to 20 per cent. of water.
- "5th. Northern District.—Stirling Road, creamed or mixed with skimmed milk.
  - "6th. Central District.—Duke Street, genuine."

Other two samples of milk and cream are reported on as follows:—

"The sample of milk from Southern District contained only 4 per cent. of cream. It appears to have been let down by the addition of 20 per cent. of water.

"The sample of cream from the same party was sour and clotted when I received it."

Two samples of butter were also examined by the same gentleman, with the following results:—

"Sample of butter purchased in shop West Milton Street, contained about 8 per cent. of water, and a large quantity of curdy matter.

"Sample of butter from Gallowgate also contained curd, but not so large in quantity as the preceding sample—water 7 per cent.

"The quantity of water contained in these butters is not excessive. I am disposed to consider the admixture with 'curd' as an adulteration. The addition is very commonly practised in Cork; it was particularly referred to by Sir John Gordon, Mayor of Cork, in his evidence before the Parliamentary Committee on Food Adulteration."

Nos. 3, 4, and 5 samples were entered for prosecution, but the law agents have, in present circumstances, recommended delay, at least until a Public Analyst is appointed.

Although the foregoing analysis shows no deleterious mixture, there is sufficient evidence that the pure article is tampered with by dealers, and that buyers pay for water and curd prices for which they ought to get pure milk and butter. No doubt analysis of other articles of food and drink would disclose mixtures of a more injurious nature, and a series of these should form the first work of the proposed Public Analyst.

With regard to the detection of unsound meat exposed for sale, the Inspector has secured several convictions, for which fines were imposed; and, in addition, made a number of seizures, which, on proof that there existed no fraudulent intention on the part of the possessor, and with his consent, were destroyed, without prosecution. A very inferior class of Irish smoked hams, which at the beginning of the inspection were largely sold in the City, can now, from frequent detection, find no wholesale purchasers, and are therefore not imported.

VI.

# WORKSHOPS INSPECTION.

Although this inspection has been handed over to the Inspector of Factories, complaints as to overworking females and young

persons are still made in considerable number at the Sanitary Office, in ignorance of the change.

The sanitary condition of all workshops still continues to engage our close attention.

#### VII.

### BAKEHOUSES INSPECTION.

The inspection of bakehouses is now carried out by the ordinary inspectors in each district, instead of by a special inspector over the City, as at first appointed, and the arrangement appears to work equally well in securing cleanliness and the observance of statutory hours of labour for young persons.

#### VIII.

## INDOOR SERVICE.

The number and variety of death and disease tables and returns made up during the past year necessitated considerable supplementary aid to this service from the other branches of the Department. In addition to making copies of the Registrar's books for the District Medical Officers, a sheet of Extracts of Deaths from all causes is made up weekly, for each district, for inspecting purposes.

# INSPECTING STAFF.

The present Staff consists of five District Inspectors, nine Nuisance Inspectors, six Lodging-house Inspectors, eight Epidemic Inspectors, one Inspector for detection of unwholesome food, one Indoor Inspector, three Clerks, two office boys, and four Female Visitors—thirty-nine in all, being eight fewer than it numbered on the date of my last Report, the vacancies having been made, for

the most part, by officers obtaining advancement outside the Department. I am glad to be able again to report favourably of the manner in which all the officers continue to discharge their important duties.

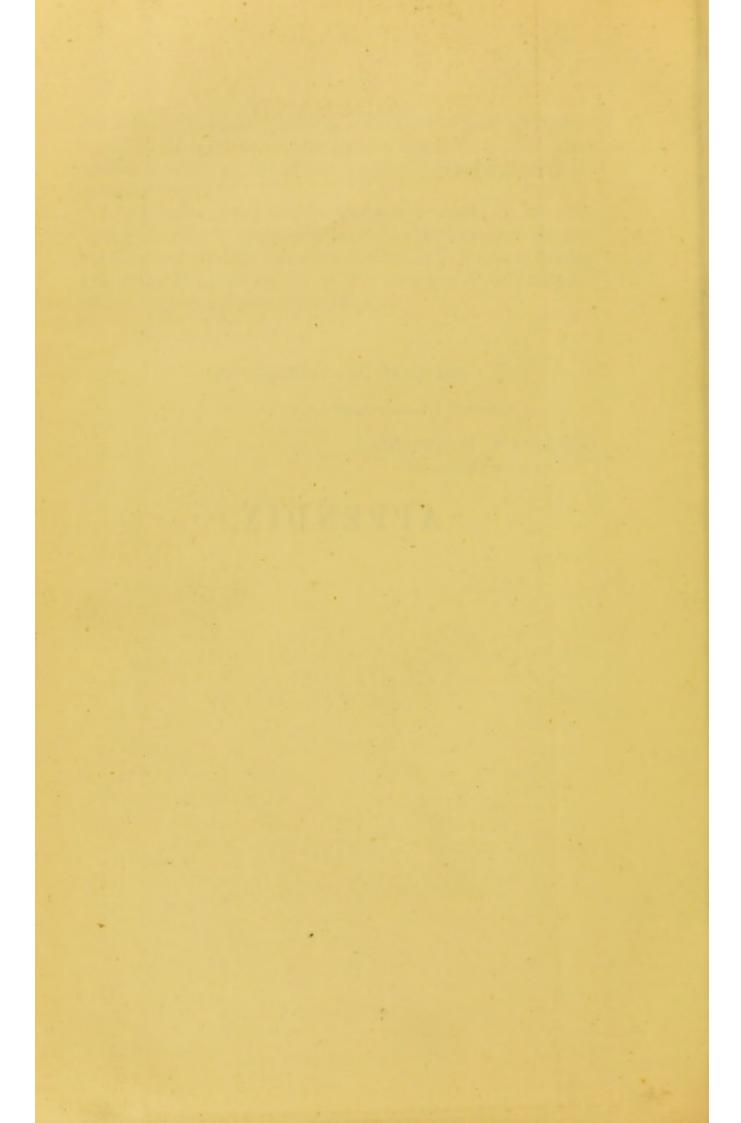
In conclusion, I beg to acknowledge with thanks the aid courteously accorded the Inspecting Service by the general public and the Chief and other Officers of the Medical, Law, Master of Works, and Police Departments, and to give assurance of my continued zeal in carrying out your instructions.

I have the honour to be,

MR. CHAIRMAN AND GENTLEMEN,

Your most obedient Servant,

KENNETH M. MACLEOD, Sanitary Inspector. APPENDIX.



# TABLE I.—RETURN OF DEATHS FROM ALL CAUSES AND CERTAIN DISEASES, WITH THE RATES PER CENT., AND PER THOUSAND, AT ALL AGES, AND AT FOUR PERIODS OF LIFE; WITH THE NUMBER MEDICALLY CERTIFIED OR OTHERWISE, IN THE REGISTRATION DISTRICTS, AND SUBDIVISIONS THEREOF, OF THE CITY OF GLASCOW, DURING THE YEAR 1871.

1				Porc	2ND	APRIL.	1571.	ATED,		ERTHS ISTERED		D	ZATHS A	T ALL	Mar.		- CARDO	TOTAL	RIODS, 1										ALL A	LGES.						Was		-		2000		
REGISTRATION DISTRICTS		100	\$		atten	100	office,	and a second		1	100	Seg		Coder 53	rath.	61	20 Yes	t under	20 10	or Year	t under	60 Yes	er and w	prants.						1			1 8			0.000	THER	Centur	HED OR	OTHER	WINE.	
SUBDIVISIONS.		Darring	Nu	boto mber, all gen.	ottage of Popula	mings of Persons and under 20 Year	retagn of Populates and Young	retagn of Popula	Numb	Rate per 3000 o	of Douths, att a	a per 1000 d Lo	otal Dyadle.	Percentage to	to per bitted	tel Beatha	rentage to	per 1000 of Penaltrian	of Deaths.	notables to	Este per 1000 of Living Population.	nd Deaths.	Proventage to Whole Deathe.	Este per 1900 of reing Population,	Freeze	Small per.	center Frenc.	Marian.	and Distribute	head Educates.	on Distant of Others	memption.	Season of Lanz	ther Country	2 Teach 2	Titles.	Not C	Certified.	No 3 Atte	fettest plant.	Tour	T.
CONTRACT OF					Pero	To a	Pare 200	200			2	4	-	100			24	- Rad	-	48	Link	4	2,5	Erick Lines					O	TGar	Nen	0	Acute I	0	Change	A Yes	Under	5 Year	Under 8	5 Years	Under 5	2 Tear
CENTRAL, Exchange,		1. 9				-		5 35	2,394	43	1,87	4 34	-	- 100				11	519	27	18	221	11	81	70	41 4	12 11	9 5	47	34	96	6 301	45	600	695	803	54	39	180	83	11	H
Port-Dundas, High Street and Closes (West), St. Rollox,		2 12 1 32 1 33	5 12	259	15:21	20:55	48 01 51 03	3 02 6 16 3 88			21 64	3 40	121	57 49	90 149 188 113	2 6	9	17	181	28	13 20 28 18	83 20 83 35	14 9 13 8	63 125 109 69	22 10 26 12	5 3	0 2 3 1 1 4 8 3	6 1	119	8 3 9			168	197	218 68 284 288	71	14 20 11	11 4 13	38 31 99	16 -17 43	6 2 1 2 2	
HIGH CHURCH,		50	56,	329	14:48	52:80	47:71	4 95	2,382	42	2,00	34	993	43	121	200	10	11	568	28	22	235	11	84	100	100		100	-			-					9	11	12	7	2	-
Bellgrove and Dennistoun, High Street and Closes (East),	6.	35 406	39, 16,	653		32:55 31:12		4 85 5 23			1,24	32 45	4 609 384	48 50	102	139	10	9	355	28	19 25	152 83	12 10	79 95	47 53	100 100	7 11- 4 7- 3 4			34	101	174		411		528	80	97 52 45	307	113	-	F
BRIDGETON,		62	59,5	993 1	14:53	33:27	47:29	4 51	2,599	43	1,945	32	1017	52	116	235	-10	12	486	0.			300			100	0 8		-			87	227	200	160	270	57	4.5	167	56	-	Æ
Greenhead and London Road, Barrowfield,	7. 8.	35 235	29,8	885 1	3-90	12:42	47-08	4-27		100	968 974		526 491	54	116	190	12	12 12	226	25 23 27	16 18	96 104	10 9 10	75 62	50 54	6 1 5 2	200				91	130	212	316	304	674 328	103	176 82	74	10000	212	3
CALTON,		186	38,0	12 1	3:54 2	10:50	29-57	5 98	1,473	35	1,442	37	733	50	142	150	10	12	399	-	-						10 50			20	66	148	229	318	205	346	119	94	40	20 25	127	1
Charlotte Street, St. Andrew's Square, St. Lake's Church,	20.	35 417 427	4,5	13 1	1 70 2 2 65 3 4 10 3	931 2	2 60	638			118	26	50 154	42 50 52	94 153 146	4 42 104	9	3 18 13	47	27 36 25 27	21 18 19 22	21 33 106	11 17 11 10	73	75 1 3 28 44	5 1	. 8	2 10	2 4	44	102 5 13	21	403 23 92	LI COLO	452 40 75		6 6	70 6	138	-		-
CLYDE,		200			2 24 3				505	-	300		-	-		The Control			200	27	22	106	10	66	-64		82	35	24	29	84	119	256	304	337	411	9.5	18 46	37 97	33		
Downheld,	12. 13. 14.	78 566	7,72	26 11	53 3 50 2 24 3	162 5	2:33	5-12	895	35	254 141		503 104 59	40 42	138 113 128	30 11	9 11 8	14 11 11	91 50	33 35 35		29 21 64	10		19 1	2 30	4	10	15	31	74	39	237	304 536	245	128	11 2	23	247	73		
LYTESWOOD,		127			43 29				881	26		22	296	49	189	65	9	15	221	-		-			7 1	117			10	19	13 49	18 99	26 182	38 183	135	287	6	11	16 199	- 4		
IILTON,		129	9300		100 80	- B		man (	2,044	44	1,432	31	778	39	113	148	10	10		31			100		41 1	17			19	14	54	98.	171	279	238	407	5	12	33	28		
Woodside, Cowcaddens,	15,	74 432	27,116 19,276	6 14 0 15	23 31 30 31	43 45 45 45	9 80	4 52 3 90	-	-	738 694	27 36	389	52 56	100	74 74	10 10	8 12	183			92			51 1: 26 : 25 1:	26 17		50 51	24 15	32	94	78	375	476 264	202	529 298	83 42	46	105	22	107	
NDERSTON,		75	52,447	131	66 29	95 51	-61	4:78	1,962	37	1,586	30	817			-	-									齫	-		15	16	41	66	204	212	221	298 231	41	21 25	63	39	64	1
Cranstonhill, Hydepark,	17.	52 222	20,983 31,464	12	11 29	93 50	02	5.00	222		430 1,156	20 26	176 641	41	133 69 138	178 49 129	11	8	135	31	12	70	16 1	56	9 1	16	1.5	11	36	45	119	224	362 88	522	642	209	37	14	138	46		F
RADESTON,		217	48,272	13 4	00 31	15 50	45	479	1,743	36	1,298	97	604	-	-	*	-									46		46	20	36	85	167	274	174 348	493	236 473	10 27	7	17	35		F
Kingstee,	19.	94 339	36,667 12,205	13%	30 0		42.4	4.00			919 379	25 31	430 174	46 47 46	92 87 105	169 115 54	13 11 14				13 1		13 7		8 11	24 12 12	20	39 14 16	23 14 9	48 27 21	105	174	306 225	467 342	341	652	8	8	55 43			
TCHESONTOWN,	1	125	55,622	14.8	0 31-1	1 49	62	4-45	9 361	42	120	-		Name of Street			PERSONAL PROPERTY.		manage of	History I.	-		-			12	14	16	9	21	24	58	81	125	158	187	4	4	12		- tre	E
Hutcheson Square, 2 Gorbals, 2	21.	9.5	38,811 16,811	15-9	91.1	7 60-	40	6.00			1,748 1,030 718	31 26 42	504 359	50 50	90 135	216 141 75	13	11			14	16	9 5	8 4	7 9	38	86 37	44 22 22	27 20 7	59 33	144	244	440 238	534 349	600	738	54	28	220	99	-	
STITUTIONS,			6,301	4.4	31:3	4 53	54 10	9:53			610	100	128	1000	400	45	Marian .	22	-	-	CENTE COM	96 1 17 2	100			7	49			33 26	46	89	202	194	167	289	27	17	165	53	-	H
RBOUR AND CANALS,			266	-	13-4	5 86	57				17	TODA -	2	12	-15	1				82 :					5	1	21	16	1	20	9	92	178		125	479	3	3	-	-		F
TOTALS,		95	477,710	13-63	3 31 2	2 501	08 5	5-03 1	8,734	37	15,779	33	7697	48	116	1728		100	000 F					-			-	-					1	15	200	11		-2	2	2		F
RINGBURN,		25	10,457						578	-	3337				-11		11	12 4	-		19 190	0 1:	2 7	77	202	338	865	522	328	410	1087	2146	3924	5181	5091	6577	757	518	1499	632	330	3
RYHILL,		7	2,275						78	55 34	299	28 34	170	57	98	28	9				15 5		9 8		3	5	23	9	10	9	22	47	61	103	103	97	GG	29	1	3		
TOTALS,		17	12,732					-	656	51	376		210					15	20 1	26 1	19	6 8	8 6	-	-	2	1	9	5		6	7	16	27	28	20	3	10	9	7		
HOLE CITY,	-	85	190,442		0 10 10			-	-		16,155			56	99	39	10	_	537 1		16 2			787		7	24	18	15	9	28	2200 -	77	180	131	117	69	39	10	-	350	-

and Fortheness, is unknown, or where persons have resided in the Poorboases for a number of years, their dualth are entered under the heading of "Institutions." Where the residence of persons who occasing, we have included.

The construction of the particular of t

. A SUPERIOR OF THE STREET 1

# TABLE II.

RETURNS OF CERTAIN SPECIFIED DISEASES AT FOUR PERIODS OF LIFE, IN THE REGISTRATION DISTRICTS AND SUBDIVISIONS THEREOF, DURING THE YEAR 1871.

TABLE II.—Return of Certain Specified Diseases at Four Periods of Life,

						Und	er 5	YEA	RS.					5	AND	-
REGISTRATION DISTRICTS  AND  SUBDIVISIONS.	DISTRICTS.	Fever.	Small-pox.	Scarlet Fever.	Measles.	Hooping-cough.	Croup and Diphtheria.	Diarrhoal Diseases,	Nervous (Children).	Consumption.	Lungs.	Other Diseases.	Fever.	Small-pox.	Scarlet Fever.	Measles
CENTRAL, Exchange, Port-Dundas, High Street & Closes—West, St. Rollox,	1 2 3 4	17 4 3 6 4	11 1 2 4 4	13 2 5	112 22 16 43 31	53 12 12 12 12 17	43 14 2 17 10	21 5 2 8 6	85 30 6 29 20	45 15 7 19 4	293 75 48 107 63	85 21 65	17 8 3 4 2	12 3 1 2 6	7 1 6	7 3 4
HIGH CHURCH, Bellgrove and Dennistoun, High Street & Closes—East,	 5 6	20 8 12	8 2 6	15	109 71 38	46 31 15	39 27 12	35 27 8	116 86 30	26 18 8	316 172 144	152	20 10 10	5 3 2	9 8 1	4 2 2
BRIDGETON,	7 8	35 19 16	6 2 4	8	132 64 68	55 27 28	30 22 8	24 12 12	137 77 60	19 10 9	268 133 135	152	21 10 11	1 1	11 3 8	15 10 5
CALTON, Charlotte Street, St. Andrew's Square, St. Luke's Church,	 9 10 11	19 2 8 9	10 1 6 3		109 8 23 78	45 2 10 33	29 2 4 23	31 3 8 20	92 5 11 76	17 3 3 11	222 12 51 159	12 27	12  4 8	3 2	6 3 3	5 .: 2 3
CLYDE, St. Enoch Square, Brownfield, Bridgegate and Wynds,	12 13 14	17 3 2 12		25 9 9 7	48 4 9 35	39 9 1 29	12 3 2 7	19 5 1 13	68 12 12 44	15 1 3 11	153 27 9 117	31 11	6 2  4	1	4 2 2 2	1  1
BLYTHSWOOD,		7	2	11	16	26	14	10	48	5	88	69	11	3	5	
MILTON,	15 16	5 3 2	5 1 4	27 14 13	56 28 28	97 49 48	34 21 13	31 15 16	78 42 36	22 11 11	249 112 137	93	17 11 6	2	15 12 3	2
ANDERSTON,		12 1 11	2	11	90 13 77	55 11 44	29 12 17	34 5 29	109 31 78	36 4 32	218 40 178	48	2	2 1 1	16 4 12	5 2 3
TRADESTON,	 19 20	11 7 4	3 2 1	13 5 8	43 29 14	25 13 12	17 9 8	37 23 14	94 75 19	20 15 5	188 136 52	116	13 5 8	4	9 6 3	1 1
HUTCHESONTOWN,	21 22	24 11 13	11 6 5	21 17 4	78 32 46	38 18 20	24 17 7	45 25 20	130 86 44	18 9 9	281 165 116		21 8 13	7 1 6	15 13 2	8 5 3
INSTITUTIONS,			1		20	15	1	4	8	1	50	28	1	3		1
HARBOUR, &c.,												2				
Totals,		167	59	219	813	494	272	291	965	224	2326	1867	154	43	107	49
SPRINGBURN,		3	3	5 2	21 1	9 7	10	8	22 6	11 2	35 9		ï			2
Totals,		3	3	7	22	16	13	8	28	13	44	53	1			2
CITY,		170	62	226	835	510	285	299	993	237	2370	1920	155	43	107	51

in the Registration Districts and Subdivisions thereof, during the Year 1871.

UNDER 20 YEARS.	20 AND UNDER 60 YEARS.	60 Years and upwards.
Hooping-cough. Croup and Diphtheria. Diarrhoca. Nervous (Children). Consumption. Lungs.	Small-pox. Scarlet Fever. Measles. Hooping-cough. Croup and Diphtheria. Diarrhoea. Nervous Diseases. Consumption. Lungs.	Fever. Small-pox. Scarlet Fever. Measles. Hooping-cough. Croup and Diphtheris. Diarrhoral Diseases. Consumption. Lungs.
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	10 1 11 50 149 3 2 20 58 1 1 4 14 5 6 16 56 1 1 2 10 21
3     6     2     17     58     26     55       1     3     2     15     40     16     30       2     3     2     18     10     25	55     9     2     1      1     8      168     131     193       28     7     1     1      1     5      111     81     120       27     2     1       3      57     50     73	5 9 60 161 1 5 37 109 4 4 23 52
1 14 2 20 86 28 40 1 9 1 14 37 12 22 5 1 6 49 16 18	40     4       1     7      171     89     474       18     3       1     2      82     38     82       22     1       5      89     51     92	8 5 2 56 129 3 3 1 29 60 5 2 1 27 69
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	34     2     1     4     101 108     149       1      1     16     7     18       11     1     1     1     13     21     29       22     1     1     2     72     80     102	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	55     41     1     1      1     9      88     63     103       13     13     1       3      24     11     26       5     13       2     9     10     11       37     15      1      1     4      55     42     66	8 2 8 31 65 1 1 9 18 1 6 15 7 2 7 16 32
1 5 6 22 8 19	16 3 1 3 67 35 111	7
4     5     5     28     20     40       1     3     11     15     4     17       3     2     4     13     16     23	24     11     1       1     1     92     72     159       10     1       1      51     37     83       14     10     1       1     41     35     76	5 1 2 34 103 2 1 18 71 3 1 1 16 32
2 6 3 10 61 19 39 3 3 13 5 16 2 3 3 7 48 14 23	24     1     2      4      123     84     166       5      1      1      38     28     62       19     1     1      3      85     56     104	8 1 4 4 41 129 1 1 3 2 15 48 7 1 1 2 26 81
5     6     2     11     49     20     49       1     5      6     36     13     38       4     1     2     5     13     7     11	36     6     2       7      97     57     153       32     4     1       3      59     44     106       4     2     1       4      38     13     47	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
6 3 4 14 73 27 38 4 3 3 12 53 14 25 2 1 2 20 13 13	23 2 1 4 93 42 104	18 2 3 40 119 5 17 73 13 1 3 23 46
1 1 15 11 12	10 1 1 7 72 65 114	3
1	1 13	
12 0 11	369 99 12 3 469 4 1310 891 1683 8	
	3 1 22 18 30 7	1
2 1 14 4 15	6 1 26 23 37	1
30 51 16 118   567   217   412   3	375 99 12 3 5 69 4 1336 914 1720 8	37 1 2 35 60 500 1259

TABLE III.—Table showing the number of Deaths from Fever and from Small-pox, these Deaths bear to the whole Deaths in the City,

			EVER.		Unde	EVER.	EARS.		EVER.			FEVER	
REGISTRATION DISTRICTS  AND  SUBDIVISIONS.	DISTRICTS.	Number.	Percentage to Whole Deaths.	Rate per 1000 of Population.	Number.	Percentage to Deaths under 5 years.	Rate per 1000 of Population.	Number.	Percentage to Deaths from 5 and under 20 years.	Rate per 1000 of Population,	Number.	Percentage to Deaths from 20 & under 60 years.	Rate per 1000 of Population.
CENTRAL, Exchange, Port-Dundas, High Street & Closes—West, St. Rollox,	2	70 22 10 26 12	4· 4· 5· 4· 3·	1·2 ·9 2· 2·4 1·	17 4 3 6 4	1.8 1.4 2.4 1.9 1.7	2·2 1·3 3·6 3·6 1·9	17 8 3 4 2	8· 13· 15· 6· 4·	1: 1: 1: 1:1 5	26 7 3 11 5	5· 4· 5· 6· 4·	·9 ·5 1·1 1·7 ·7
HIGH CHURCH, Bellgrove and Dennistoun, High Street & Closes—East,	 5 6	100 47 53	5· 4· 1·	1·9 1· 3·	20 8 12	2· 1·3 3·3	2·4 1·3 5·3	20 10 10	9· 7· 13·	1· ·7 1·9	55 28 27	9· 7· 12·	2· 1·5 3·2
BRIDGETON,	7 8	104 50 54	5· 5· 5·	2· 2· 2·	35 19 16	3·4 3·6 3·2	4· 4·1 3·8	21 10 11	9· 8· 9·	1· 1· 1·1	40 18 22	8. 8. 8.	1·4 1·2 1·5
CALTON, Charlotte Street, St. Andrew's Square, St. Luke's Church,	10	75 3 28 44	5· 2· 9· 4·	2· ·8 4· 1·4	19 2 8 9	2·5 4· 5· 1·6	3·6 3·7 7·9 2·4	12  4 8	7·  9· 7·	1·1 1·7 ·9	34 1 11 22	8· 2· 14· 7·	1.8 .4 2.7 1.6
CLYDE, St. Enoch Square, Brownfield, Bridgegate and Wynds,	12	86 19 7 60	8· 8· 5· 9·	3· 2·4 2· 4·	17 3 2 -12	3·3 2·9 3·4 3·5	5·4 3·2 4·3 6·8	6 2  4	5· 6·	·7 ·8 ···9	55 13 5 37	15· 14· 10· 16·	4·1 3·2 2·8 4·9
BLYTHSWOOD,	-	41	5.	1.	7	2.3	2.	11	13.	1:1	16	6.	-8
MILTON,	15 16		4· 4· 4·	1.	5 3 2	·6 ·7 ·5	·7 ·7	17 11 6	11· 14· 8·	1·1 1·2 ·9	24 10 14	6· 5· 8·	1·4 ·7 1·4
ANDERSTON,	17 18	59 9 50	3· 2· 4·	1· ·2 1·9	12 1 11	1·4 ·5 1·7	1.6 .3 2.3	15 2 13	8· 4· 10·	·9 ·3 1·3	24 5 19	5· 3· 7·	·8 ·4 1·1
TRADESTON,	19 20	64 48 16	5· 5· 4·	1.5 1.5 1.5	11 7 4	1·7 1·6 2·3	1.6 1.4 2.4	13 5 8	7· 4· 14·	·8 ·4 2·	36 32 4	10· 12· 3·	1·4 1·7 ·6
HUTCHESONTOWN, Hutcheson Square, Gorbals,	21 22	112 47 65	6· 5· 9·	2· 1·2 4·	24 11 13	2·7 2·1 3·6	2·9 1·8 5·6	21 8 13	9· 5· 17·	1·2 ·6 2·4	49 23 26	10· 7· 13·	1·4 1·1 3·
INSTITUTIONS,		14	2.	2.5				1	2.	.5	10	3.	2.9
HARBOUR AND CANALS,	1-	-					***	***				•••	
Totals,		-	4.87	_	167	2.1	2.5	154	8.	1.	369	8.	1.9
SPRINGBURN, MARYHILL,		7 4	2· 5·	2.7	3	1.7	1.7	1		1.3	3	15.	2.8
Totals,		11	3.	1.	3	1.4	1.3	1	2.	-2	6	6.	1.
CITY,		787	4.87	1.5	170	2.1	2.5	155	8.	1.	375	8.	1.9

in the Registration Districts and their Subdivisions, the proportion which and their rate per 1000 of Living Population.

ī		FEVE		Si	(ALL-P	ox.	SM	ALL-P	ox,		ALL-P			ALL-P		SM	ALL-P	ox.
	60 &	UPWA	ARDS,	A	LL AG	ES.	UND	ER 5 Y	EARS.	5 &	UNDE	R 20.	20 &	UNDE	R 60.	60 &	UPWA	RDS.
	Number.	Percentage to Deaths from 60 years and upwards.	Rate per 1000 of Population.	Number.	Percentage to Whole Deaths.	Rate per 1000 of Population,	Number.	Percentage to Deaths under 5 years.	Rate per 1000 of Population.	Number.	Percentage to Deaths from 5 and under 20 years.	Rate per 1000 of Population,	Number.	Percentage to Deaths from 20 & under 60 years.	Rate per 1000 of Population.	Number.	Percentage to Deaths from 60 years and upwards.	Rate per 1000 of Population.
	10 3 1 5	4·5 3·6 5· 6· 2·8	3·6 2·2 6·2 6· 2·	41 8 5 8 20	2·1 1·3 2·3 1·2 4·6	·7 ·3 ·9 ·6 1:5	11 1 2 4 4	1·1 ·3 1·6 1·2 1·7	1·4 ·3 2·4 2·4 1·9	12 3 1 2 6	6·2 5·1 5· 3·1 12·2	·7 ·4 ·5 ·5 1·5	18 4 2 2 10	3·4 2·4 3·8 1·1 8·3	6 .3 .7 .3 1.5			
	5 1 4	2·1 ·6 4·8	1·7 ·5 4·5	22 12 10	1· ·9 1·3	·3 ·3 ·5	8 2 6	·8 ·3 1·5	·9 ·3 2·6	5 3 2	2·4 2·3 2·6	·2 ·2 ·3	9 7 2	1·5 1·9 ·9	·3 .4 ·2			
	8 3 5	4· 3·1 4·8	2·7 2·3 3·	11 6 5	·5 ·6 ·5	.1 .2 ·1	6 2 4	·5 ·3 ·8	·6 ·4 ·9	1 1 	·4 ·8 	 1 	4 3 1	·8 1·3 ·3	·1 ·2 ·07			
-	10  5 5	6· 15· 4·7	4·4  12· 3·1	15 1 9 5	1· ·8 2·9 ·4	3 2 1:1 1	10 1 6 3	1:3 2: 3:9 5	1·9 1·9 5·9 ·8	3  2 1	2· 4·7 ·9	·2 ·8 ·1	2  1 1	5 1:3 3	·1  ·2 ·08			
-	8 1 	7· 3·4  10·9	6·1 2·4  9·5	42 14 13 15	3·8 5·5 9· 2·1	1·4 1·6 3·8 1·				1	3.3	·1 ·4 ···	41 13 13 15	11·3 14·2 26· 6·7	3. 3. 7.3 2.			
-	7	5.1	3.3	-8	1.	-2	2	-6	-5	3	3.7	-3	3	1.2	-1			
ŀ	5		_	19	1.3	-4	5	-6	1.4	2	1.3	-1	11	3.	-4		7	200
	2 3	3·4 2·1 5·	2·5 1·6 3·9	17 17	2.4	·07	1 4	1.2	1.3	2	2.7		10	5.6	·07	1  1	1.8	5 1.3
	8 1 .7	$\frac{4.2}{1.2}$ $\frac{5}{5}$	3·1 ·9 4·3	5 1 4	2·3 8·2 ·3	·09 ·04 ·1	2  2	·2 ···	·2 ··· ·4	2 1 1	1.2 2. 8	1 1 1	1  1	·2 ···	.06			
	4 4	2·4 3·2 	1.7 2.3 	13 10 3	1· 1· ·8	·2 ·2 ·2	3 2 1	2. 2. 2. 2. 2. 3.	·4 ·4 ·6	4 4	2·4 3·4 	·2 ·3 	6 4 2	1.6 1.6 1.8	·2 ·2 ·3			
	18 5 13	9·8 5·2 15·	7·1 3· 14·9	20 9 11	1·1 ·8 1·5	·3 ·2 ·6	11 6 5	1·2 1·1 1·3	1:3 1: 2:1	7 1 6	3·2 ·7 8·	·4 ·08 1·1	2 2	·4 ·7	0·7 ·1			
1	3	1.7	4.4	5	.8	-9	1	.8	3.6	3	6.6	.3	1	-3	-3			
				1	.5	1.7							1	7.1	2.			
-	86	4.5	3.5	202	1.26	•4	59	-7	.8	43	2.4	-2	99	2.2	-4	1	.05	-04
	1	3.5	3.1	3	1.3	.2	3	1.7	1.7									
1-		9.	0.4						***		***						***	
	1	3.	2.4	3	1.00	-2	3	1.4	1.4									
	87	4.4	3.5	205	1.26	4	62	.7	.9	43	2.4	.2	99	2.1	.4	. 1	.05	.04

TABLE IV.—Table showing the number of Deaths from Consumption and from the Proportion which these Deaths bear to the whole Deaths in

			1111				-	ISUI				) Gau	111 211
		A	LL AGI	18.	UND	er 5 Y	EARS.	5 A	ND UN YEAR	DER IS.	20 6	AND U	NDER RS.
REGISTRATION DISTRICTS  AND  SUBDIVISIONS.	DISTRICTS.	Number.	Percentage to Whole Deaths.	Rate per 1000 of Population Living,	Number.	Percentage to Deaths under 5 Years,	Rate per 1000 of Population under 5 Years.	Number,	Percentage to Deaths 5 and under 20 Years.	Rate per 1000 of Population Living.	Number.	Percentage to Deaths 20 and under 60 Years,	Rate per 1000 of Population Living.
CENTRAL, Exchange, Port-Dundas, High Street & Closes—West, St. Rollox,		301 111 19 110 61	16 19 9 17 14	5 5 3 9 4	45 15 7 19 4	4·7 5· 5· 6· 1·7	5·9 4·9 8·6 11·7 1·9	64 25 2 22 15	33 43 10 34 30	3·8 3·3 1·1 6· 3·9	181 69 9 63 40	41 17 34	6·4 5·5 3·5 10· 6·
HIGH CHURCH, Bellgrove and Dennistoun, High Street & Closes—East,	 5 6	261 174 87	13 14 11	5 5 5	26 18 8	2·6 2·9 2·	2·2 3· 3·5	58 40 18	28 30 24	3·1 6·7 3·4	168 111 57	29 31 26	6·2 6· 6·7
BRIDGETON, Greenhead & London Road, Barrowfield,	7 8	278 130 148		4 4 4	19 10 9	1·8 1·9 1·8	2·1 2·2 2·1	86 37 49	36 30 41	4·3 3·7 4·9	171 82 89	35 36 34	6·1 6·2
CALTON, Charlotte Street, St. Andrew's Square, St. Luke's Church,	9 10	174 21 34 119	12 17 11 11	4 5 4 4	17 3 3 11	2·3 6· 1·3 2·	3·3 4·1 2·9 3·	52 2 16 34	34 50 38 32	4·4 1·5 6·6 4·2	101 16 13 72	25 37 17 25	5·3 6·7 3·1 5·8
CLYDE, St. Enoch Square, Brownfield, Bridgegate and Wynds,	12 13	156 39 18 99	14 15 12 14	6 5 5 7	15 1 3 11	2·9 ·9 5· 3·2	4·8 1· 6·5 6·3	45 13 6 26	42 43 54 40	5·8 5·4 6· 6·	88 24 9 55	24 26 18 24	6·7 5·9 6· 7·3
BLYTHSWOOD,		98	13	3	5	1.6	1.4	22	27	2.2	67	28	3.7
MILTON,	15 16	144 78 66	10 10 9	3 3 3	22 11 11	2·8 2·8 2·8	3·2 2·8 3·6	28 15 13	19 20 18	1·9 1·7 2·1	92 51 41	25 27 23	4· 3·7 4·3
ANDERSTON, Cranstonhill, Hydepark,	17 18	224 57 167	14 13 14	4 3 5	36 4 32	4·4 2·2 4·9	5· 1·5 6·9	61 13 48	34 26 37	3·8 2· 5·	123 38 85	30 28 31	4·5 3·4 5·3
TRADESTON,	19 20	174 116 58	13 12 15	3 4	20 15 5	3·3 3·4 2·8	3· 3·	49 36 13	29 31 24	3·2 3·2 3·3	97 59 38	27 23 35	3·5 3·2 6·2
HUTCHESONTOWN,	21 22	244 155 89	13 15 12	4 4 5	18 9 9	2· 1·7 2·5	2·4 1·5 3·6	73 53 20	33 37 26	4·2 4·3 3·8	150 93 57	32 34 28	5·4 4·8 6·7
INSTITUTIONS,		92	15	12	1	.7	3.6	15	33	7.5	72	26	21.
m-1-1										9.77			5.4
SPRINGBURN,	-	47	13.61	4	224	6.	6.4	553 13	32	3.6	1310	30	4.5
MARYHILL,		7	9	3	2	5.	5.1	1	9	1.3	4	20	3.8
Totals,		54		4	13	6.	6.1	14	36	3.2	26	26	4.4
CITY,	[]	2200	13.61	4	237	2.9	3.4	567	32	3.6	1336	29	5.4

Acute Diseases of Lungs in the Registration Districts and their Subdivisions, the City, and their Rate per 1000 of Living Population.

	oroj,	COLLICE		2000			UT	E D	SEA	SE	S OF	LU	JNG	S.			
60 Y U1	EARS A	AND 8.	AL	L AGES	,	UNDE	R 5 YE	ARS.	5 AN 20	D UNI YEAR	OHR S.	20 A 60	ND UN YEAR	DER IS.	60 Y UF	EARS .	AND S.
Number.	Percentage to Deaths 60 Years and Upwards,	Rate per 1000 of Population Living.	Number.	Percentage to Whole Deaths.	Rate per 1000 of Population Living.	Number.	Percentage to Deaths under 5 Years.	Rate per 1000 of Population Living.	Number.	Percentage to Deaths 5 and under 20 Years.	Rate per 1000 of Population Living.	Number.	Percentage to Deaths 20 and under 60 Years.	Rate per 1000 of Population Living	Number,	Percentage to Deaths 60 Years and Upwards.	Rate per 1000 of Population Living.
11 2 1 6 2	4·9 2·4 5· 7· 5·	4· 1·5 6·2 7·9 3·9	457 124 67 168 98	24 21 31 26 23	8 5 12 13 7	293 75 48 107 63	31 27 39 34 27	38 23 59 65 31	19 2 5 8 4	9· 3·4 25 12 8	1·1 ·2 2·8 2·2 1·	95 27 10 37 21	18 16 17 20 17	3·4 2·1 3·9 5·9 3·1	50 20 4 16 10	22 24 20 19 28	17 16 25 21 19
9 5 4	3·8 3·2 4·8	3·2 2·5 4·5	533 306 227	26 24 30	9 8 13	316 172 144	31 28 37	38 28 64	26 16 10	12 12 13	1·4 1·2 1·7	131 81 50	23 22 23	4·8 4·3 5·9	60 37 23	24 25 27	21 19 26
2 1 1	1.	·6 ·7 ·6	441 212 229	22 22 22 22	7 7 7	268 133 135	26 25 28	30 29 32	28 12 16	11 10 13	1·4 1·2 1·6	89 38 51	18 16 19	3·1 2·6 3·5	56 29 27	28 30 26	19 22 16
4  2 2	2:5 6: 1:9	1·7  5·1 1·2	403 25 92 286	28 21 30 28	10 5 12 11	222 12 51 159	30 24 33 30	43 22 50 43	24  9 15	16  21 14	2· 3·7 1·8	108 7 21 80	27 16 27 28	5·7 2·5 5·1 6·4	49 6 11 32	30 28 33 30	21 20 28 20
8 1  7	7· 3·4  11·	6·1 2·4  9·5	257 49 26 182		10 6 8 12	153 27 9 117	26	49 29 19 67	10 2 1 7	9 6 9 10	1.2 .8 1. 1.6	63 11 10 42	17 12 20 19	4·7 2·7 5·6 5·6	31 9 6 16	27 31 28 25	23 22 36 21
4	3.	1.9	171	23	7	88	30	25	8	10	.8	35	14	1.8	40	30	19
2 1 1	1:3 1: 2:	1· ·8 1·3	375 171 204	23	5 8 10	249 112 137	29	36 29 45	20 4 16	13 5 21	1:3 :4 2:6	72 37 35	19 20 19	3·1 2·7 3·6	34 18 16	23 19 30	17 14 21
4 2 2	2·1 2·8 1·7	1.5 1.8 1.3	362 88 274	20	7 4 9	218 40 178	22	30 15 38	19 5 14	10 10 11	1·2 ·7 1·4	84 28 56	20 20 20	3·1 2·5 3·5	41 15 26	22 21 22	16 14 18
8 6 2	4·7 4·8 4·9	3·4 3·4 3·3	306 225 81	24	6 6 6	188 136 52	31	28 28 31	20 13 7	12 11 12	1·3 1·1 1·8	57 44 13	15 17 12	2·3 2·4 2·1	41 32 9	24 25 21	17 18 15
3 3	1.6 3.5	1:1	440 238 202	23	8 6 12	281 165 116	31	34 27 50	27 14 13	12 9 17	1.5 1.1 2.4	92 42 50	19 15 25	3·3 2·1 5·9	40 17 23	22 17 26	15 10 26
3	1.7	4.4	178	29	28	50	39	179	11	26	5.6	65	24	19.	52	31	77
			1	6	2				1	100	1.2				***		***
58	3.	2.4	3924	-	8	2326		35	213	12	1.4	891	20	3.7	494	25	20
1	3.5	3.1	61		6 7	35		20 24	2 2	7 18	2·6	18 5	24 25	3·7 4·7	6	21	19
1	3.	2.4	77	20	6	44	21	20	4	12	.9	23	24	3.7	6	17	14
59	3.	2.4	4001	24.76	8	2370	29	35	217	12	1.4	914	20	3.7	500	25	20

TABLE V.—Table showing the number of Deaths from Scarlet Fever, Measles, and which these Deaths bear to the whole Deaths in the

					S	CAR	LE.			R.	Doct	110 11	
		A	ALL AC	ES.	UND	ER 5 Y	EARS.	5 /	ND UN 0 YEAR	DER RS.	20 /	AND US	NDER 18.
REGISTRATION DISTRICTS  AND  SUBDIVISIONS.	DISTRICTS.	Number.	Percentage to Whole Deaths.	Rate per 1000 of Population Living.	Number.	Percentage to Deaths under 5 Years.	Rate per 1000 of Population Living.	Number.	Percentage to Deaths from 5 to 20 Years.	Rate per 1000 of Population Living.	Number.	Percentage to Deaths from 20 to 60 Years.	Rate per 1000 of Population Living.
CENTRAL, Exchange, Port-Dundas, High Street & Closes—West, St. Rollox,	1	52 20 3 11 18	2·8 3·4 1·4 1·7 4·1	·9 ·8 ·5 ·8 1·3	35 13 2 5 15	3·5 4·7 1·6 1·5 6·4	4·6 4·2 2·4 3· 7·6	17 7 1 6 3	9· 12· 5· 9· 6·	1· ·9 ·5 1·6 ·5			
HIGH CHURCH,	5 6	27 24 3	1·3 1·9 ·3	·4 ·6 ·1	16 15 1	1.6 2.4 .2	1.9 2.5 ·4	9 8 1	4·3 6· 1·3	·4 ·6 ·1	2 1 1	·3 ·2 ·4	·07 ·05 ·1
BRIDGETON,	7 8	31 11 20	1.5 1.1 2.	·5 ·3 ·6	20 8 12	1·9 1·5 2·4	2·2 1·7 2·8	11 3 8	4·6 2·4 6·6	·5 ·3 ·9			
CALTON, Charlotte Street, St. Andrew's Square, St. Luke's Church,	10	13  6 7	·9 ··6	·3 ··· ·7 ·2	7  3 4	·9 2: ·7	1:3  2:9 1:1	6 3 3	4·  7· 2·8	·5 ··· 1·2 ·3			
CLYDE, St. Enoch Square, Brownfield, Bridgegate and Wynds,	12 13	30 12 11 7	2·7 4·7 7· 1·	1·1 1·5 3·2 ·4	25 9 9 7	4·9 8·6 15· 2·	8· 8·1 19· 4·	4 2 2 	3·7 6· 18· 	·5 ·8 2· 	1	·2 1·1 	·07 ·2 ···
BLYTHSWOOD,		17	2.2	.5	11	3.7	3.1	5	6.	•5	1	•4	.05
MILTON, Woodside, Cowcaddens,	15 16	43 26 17	3· 3·5 2·4	·9 ·9	27 14 13	3·4 3·6 3·3	3·9 3·6 4·3	15 12 3	10· 16· 4·	1· 1·4 ·4	1 	·2 .:.5	·04 
ANDERSTON,	17 18	62 16 46	3·8 3·7 3·9	1·1 ·7 1·4	44 11 33	5·3 6·2 5·1	6·1 4·3 7·1	16 4 12	9· 8· 9·	1· ·6 1·2	2 1 1	·4 ·7. ·3	·07 ·09 ·06
TRADESTON, Kingston, Laurieston,	 19 20	24 12 12	1·8 1·3 3·1	·4 ·3 ·9	13 5 8	2·1 1·1 4·5	1·9 1· 4·8	9 6 3	5· 5· 5·	·5 ·5 ·7	2 1 1	·5 ·4 ·9	.08 .05
HUTCHESONTOWN,	21	38 31 7	2·1 3· ·9	·6 ·8 ·4	21 17 4	2·3 3·2 1·1	2·5 2·7 1·7	15 13 2	7· 9· 2·6	.8 1.	2 1 1	·4 ·3 ·5	·07 ·05 ·1
INSTITUTIONS,		1	-1	.1		***					1	.3	.3
HARBOUR AND CANALS,					***		***	•••			***		
Totals,		338	2.13	.7	219	2.8	3.2	107	6.	-7	12	-2	.05
SPRINGBURN,MARYHILL,		5 2	1.6 2.6	·4 ·8	5 2	3· 5·	2·9 5·1						
Totals,		7	1.8	.5	7	3.3	3.3					***	
CITY,		345	2.13	.7	226	2.8	3.2	107	6.	.6	12	2	.04

Hooping-Cough in the Registration Districts and their Subdivisions, the proportion City, and their Rate per 1000 of Living Population.

010	у, ап	a th	eir .						16 -	Lopu	latio	1	_	HOO	PI	NG-	COL	JGI	Ι.	
-			11		ME.		AND U		1 20	AND U	NDER	-	LL A		.1		TEARS.		AND U	NDER
A	LL A	ES.	UND	ER 5 Y	TEARS.	2	O YEA	RS.		O YEA		_ A	LL A	GES.	UND	BE O	L BARS	-	20 YEA	RS.
Number.	Percentage to Whole Deaths.	Rate per 1000 of Population Living.	Number.	Percentage to Deaths under 5 Years.	Rate per 1000 of Population Living.	Number.	Percentage to Deaths from 5 to 20 Years.	Rate per 1000 of Population Living.	Number.	Percentage to Deaths from 20 to 60 Years.	Rate per 1000 of Population Living.	Number.	Percentage to Whole Deaths.	Rate per 1000 of Population Living.	Number.	Percentage to Deaths under 5 Years.	Rate per 1000 of Population Living.	Number.	Percentage to Deaths under 20 Years.	Rate per 1000 of Population Living.
119 22 16 46 35	6: 3: 7: 7: 8:	2·1 ·9 3·1 3·7 2·6	112 22 16 43 31	12 7 13 13 13	14 6 19 26 15	7  3 4	4·  4· 8·	·4  .8 1				55 12 12 14 17	3· 2· 6· 2· 4·	1· ·5 2·4 1·2 1·5	53 12 12 12 12 17	5· 4·3 9· 3·8 7·3	7: 3: 14: 7: 8:	2  2 	1· 3·	:1  .5 
114 74 40	5· 5· 5·	2· 1·8 2·4	109 71 38	11 11 10	13 11 17	4 2 2	2· 1·5 2·	·2 ·1 ·3	1 1	·2 ·3 	·02 ·05	49 32 17	2· 3· 2·	.6 .7 1.	46 31 15	4·6 5· 3·7	5· 5· 6·	3 1 2	1·4 ·7 2·6	.09 .09
147 74 73	7· 7· 7·	2·4 2·5 2·4	132 64 68	13 12 13	15 14 16	15 10 5	6· 8· 4·	·7 1· ·5				56 28 28	3· 3·	1.	55 27 28	5·4 5·1 5·6	6· 5· 6·	1 1 	·4 ·8 	1 1
115 8 25 82	7· 6· 8· 7·	3· 1·7 3·1 3·1	109 8 23 78	15 16 15 13	23 15 22 21	5  2 3	3·  4· 2·8	·4 ··8 ·3	1  1	·2  <sub>3</sub>	·05 	47 2 10 35	3· 2· 3· 3·	1.5 .5 1.3 1.4	45 2 10 33	6· 4· 6· 6·	10· 3· 9·	2 2	1·3  1·8	·1   ·2
50 4 9 37	4· 1·5 6· 5·	1·9 ·5 2·6 2·5	48 4 9 35	9 4 15 10	15 4 19 20	1  ï	·9  1·5	·1 	1  1	·3  .5	·07 	40 10 1 29	4· 4· ·9 4·	1.8 1.5 .3 2.	39 9 1 29	7· 8· 1·7 8·	12· 9· 2· 16·	1 1	3·3 	·1 ·4 ···
16	2.1	•4	16	5	4							27	4.	.8	26	9.	7.	1	1.2	.1
58 28 30	4· 3·7 4·3	1·2 1· 1·5	56 28 28	7 7 7	8 7 9	2 2	1:3	-1				101 50 51	7· 7· 8·	2·2 2· 2·	97 49 48	11: 12: 12:	14· 12· 16·	4 1 3	2·7 1·3 4·	·2 ·1 ·4
95 15 80		1·6 ·7 2·5	90 13 77	11 7 12	12 5 14	5 2 3	2·8 4· 2·3	3 3				57 11 46	4· 3· 4·	1· ·6 1·4	55 11 44	6. 6.	7· 4· 9·	2 2	1.1	·1 
44 30 14	3.2	·9 ·8 1·1	43 29 14	7 6 8	6 5 8	1 1 	 .9 	.06 .09				30 14 16	1.	.6 .4 1.	25 13 12	4·1 3· 7·	3· 2· 7·	5 1 4	3· ·8 7·	.09 1·
86 37 49	3.5	1.5 .9 2.9	78 32 46	10 6 13	9 5 15	8 5 3	3·7 3·5 4·	·4 ·4 ·5				44 22 22	3· 2· 3·	.7 .5 1.	38 18 20	4·3 3·4 5·	4· 3· 8·	6 4 2	2·7 2·8 2·6	.3 .3 .3
21	3.4	3.3	20	15	7	1	2.	.5				16	3:	2.5	15	11.	5.	1	2.2	.5
865	5.4	1.8	813	10	12	49	2.8	.3	3	.07	.01	522	3.34	1.	494	6.	7.	28	1.6	-2
23	7.7	2.1	21 1	12 2	12 2	2	7			*		9	3.	1.	9 7	5· 17·	5· 18·	2	18.	2
24		1.8	22	10	10	2	5.	-3				18	5.	1.2	16	8.	7.	2	5.	.4
889	5.50	1.8	835	10	12	51	2.8	.3	3	.07	.01	540	3 34	1.1	510	6.	7.	30	1.6	.2

# TABLE VI.—In this Table the Zymotic Group of

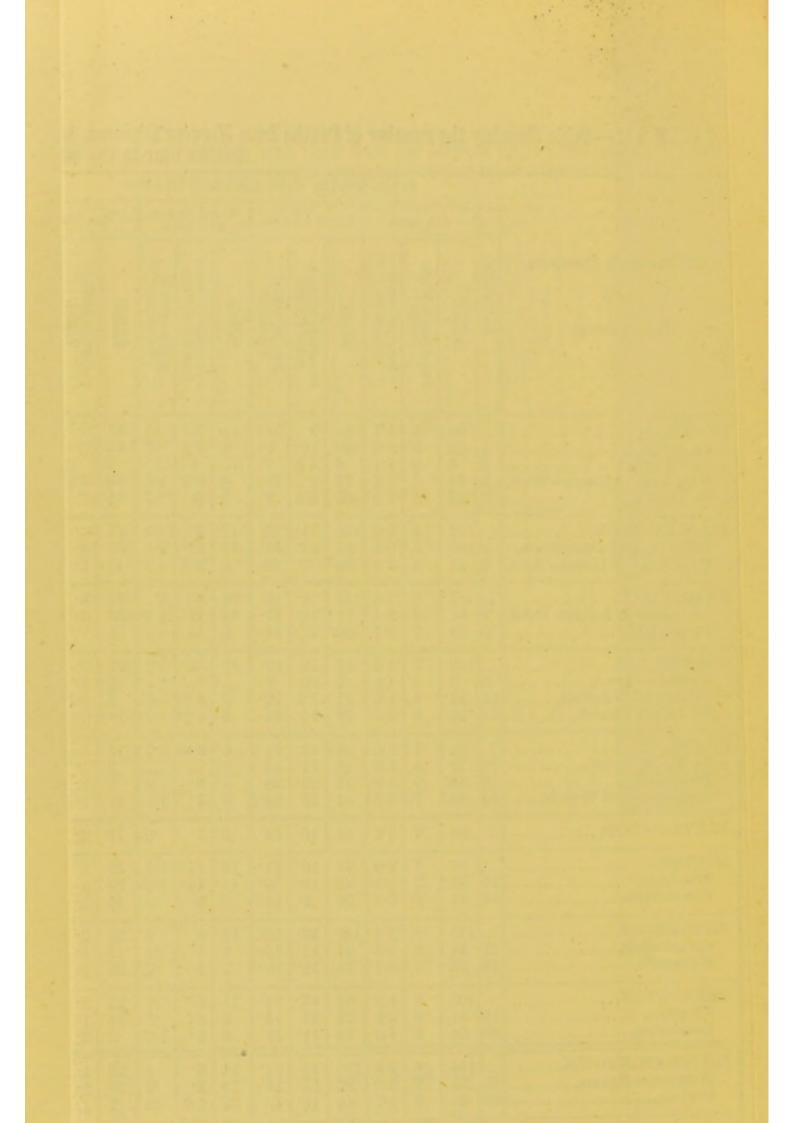
							ZY	MO'	ric	GR	OUE	٠.	
		AL	L AGI	s.	Unde	R 5 Y1	EARS.	5 AN 20	D UNI YEAR	S.	20 A3 60	YEAR	DER S.
REGISTRATION DISTRICTS  AND  SUBDIVISIONS.	DISTRICTS.	Number.	Percentage to Whole Deaths.	Rate per 1000 of Population.	Number,	Percentage to Deaths under 5 Years.	Rate per 1000 of Population.	Number.	Percentage to Deaths 5 and under 20 Years.	Rate per 1000 of Population.	Number.	Percentage to Deaths 20 and under 60 Years.	Rate per 1000 of Population.
CENTRAL, Exchange, Port-Dundas, High Street & Closes—West, St. Rollox,	1 2 3 4	348 86 41 107 114	18 14 19 16 26	6 4 8 9 9	275 67 36 89 83	29 24 29 28 36	36 22 44 54 40	42 12 2 14 14	22 20 10 22 28	3· 2· 1· 4· 4·	30 7 3 4 16	5·7 4·2 5·7 2·2 13·	1· ·6 1· ·6 2·
HIGH CHURCH, Bellgrove and Dennistoun, High Street & Closes—East,	 5 6	303 207 96	15 16 12	5 5 5	253 173 80	25 28 20	31 29 35	29 19 10	14 14 13	2· 2· 2·	21 15 6	3·6 4·2 2·7	·8 ·8 ·7
BRIDGETON,	7 8	328 169 159	16 17 16	5 6 5	267 135 132	26 25 26	29 29 31	44 25 19	18 20 16	2· 3· 2·	12 6 6	2·4 2·6 2·3	·4 ·4 ·4
CALTON,	9	264 19 70 175	18 16 22 17	7 4 9 7	231 16 54 161	31 32 35 30	45 30 54 44	17  7 10	11  16 9	1· 3· 1·	7 1 2 4	1.7 2.3 2.6 1.4	·4 ·5 ·5 ·3
CLYDE, St. Enoch Square, Brownfield, Bridgegate and Wynds,	12	208 52 39 117	20	8 7 11 8	143 30 22 91	28 28 37 26	45 33 48 52	10 5 2 3	9 16 18 4	1· 2· 2· ·6	53 17 15 21	14· 18· 30· 9·	4· 4· 9· 3·
BLYTHSWOOD,		101	13	3	79	26	23	14	17	1.	7	3.	.4
MILTON,	 15 16	292 146 146	19	6 5 7	250 128 122	32	36 33 41	28 16 12	18 21 16	2· 2· 2·	13 2 11	3·6 1·1 6·	·6 ·2 1·
ANDERSTON,Cranstonhill,Hydepark,	17	300 68 232	15	6 3 8	254 52 202	29	35 21 43	34 10 24	19 20 18	2· 2· 3·	7 2 5	1·7 1·4 1·8	·2 ·2 ·3
TRADESTON,	19	182 107 75	11	4 3 6	138 81 57	22 18 32	21 16 34	27 17 10	15 14 18	2· 2· 3·	15 8 7	4·1 3·2 6·4	·6 ·4 1·
HUTCHESONTOWN,	21	274 152 122	14	5 4 7	217 115 102	21	26 19 44	43 29 14	19 20 18	2· 2· 3·	12 7 5	2·5 2·6 2·5	·5 ·4 ·6
INSTITUTIONS,		64	10	11	41	32	148	5	11	3.	9	3.3	3.
HARBOUR AND CANALS,		1	6	2							1	7.1	2.
Totals,		2665	17	6	2148	27	33	293	17	2.	187	4.2	.8
SPRINGBURN,MARYHILL,		59 17	19 22	5 7	56 13		32 33	2 3	7 27	4.	 1	5	i"
Totals,		76	20	7	69	32	33	5	12	1.	1	1.	-2
CITY,		2741	17	6	2217	28	33	298	17	2.	188	4.1	.8

60 Years and Under 5 Years. 5 and under 20 And under 60 Years.	60 1	Value of
	0	YEARS AND PWARDS.
Number.  Percentage to Deaths 60 Years and Upwards. Rate per 1000 of Population.  Number.  Number.  Number.  Number.  Rate per 1000 of Population.  Number.  Rate per 1000 of Population.  Number.  Number.  Number.  Number.  Number.  Number.  Number.  Rate per 1000 of Population.  Number.  Rate per 1000 of Population.	Number.	Percentage to Deaths 60 Years and Upwards. Rate per 1000 of Population.
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	149 58 14 56 21	67 54 69 44 70 87 67 74 60 41
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	161 109 52	68 57 71 56 62 59
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	129 60 69	64 44 . 62 47 66 40
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	88 15 13 60	55 38 71 52 39 33 56 37
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	65 18 15 32	57 42 62 44 71 91 50 42
1 '7 '5 279 37 8 69 23 20 19 23 1.9 111 47 6.	80	60 38
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	103 71 32	71 52 77 57 60 42
5     2·6     2·3     522     32     9     188     23     26     39     22     2·4     166     41     6·       4     5·7     4·     174     40     8     48     27     19     16     32     2·5     62     45     5·       1     ·8     ·7     348     30     10     140     21     30     23     18     2·4     104     38     6·	48	69 51 68 44 68 56
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	82	66 48 65 47 71 50
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	73	65 47 76 44 53 52
9 5.3 12. 253 41 40 28 22 100 12 26 6. 114 42 33.	99 4	59 146
15 88 2·6 2·100 13 92 26·		
1 2.5 2. 100 04	1234 (	64 51
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	19 6	68 59 00 63
1 3 2 4 130 34 10 53 25 25 15 38 3 4 37 39 6		73 60
38   1 9   1 6   5311   32 87   10   1920   24   28   412   23   2 6   1720   37   7 1	1259	

## TABLE VII.

TABLE SHOWING THE NUMBER OF DEATHS FROM NERVOUS DISEASES, CROUP AND DIPHTHERIA, AND DIARRHŒAL DISEASES, IN THE REGISTRATION DISTRICTS AND THEIR SUBDIVISIONS, THE PROPORTION WHICH THESE DEATHS BEAR TO THE WHOLE DEATHS IN THE CITY, AND THEIR RATE PER 1000 OF LIVING POPULATION.

	_	_	_																										_		_									
F-I 2-I 98	z.	2-1	69	Į.	6.	91	P. P	9-8	66	8-	2	7.7	SIF	80-	Ţ.	2	20-	Į.	9	3	8.1	1 2	2 2		3.2	282	4.	21-2	843	8.	-4	123	.91	.21	866	8.3	069	112	τ	
P-Z 9-Z I		37		***			2-8	8-8	8	L-	8	.7 6				***	Į.	-1		2		7 I		.9	-9	13	1.1	-7	12		***		13-	13.	87	7-7	8	87		Totals,
 I-E 9-E I							9-1	4-1	8			8 6	23 113				6		I	3	.I .:	6 I		.4.	2.	3 10	2.2 I.	.9		***			12. IS.	12.	9 22	9.3 1.3		9 22		HILL,
P-1 L-1 FE	7-	g. I	69	I.	6.	91	₹.₹	1-8	16	32 8.	69	2.2	410	80.	Į.	7	70-	60	7	3	9.	3 0	20		3.2	272	g.	21.2	828	8.	- 2	123	.91	.21		2.3				Totals,
			***							-				***	***								"	**			***		***											OR AND CANALS,
		9.7	4				.71	100000	1000	1-1	86	-	2		***	***				-					8-	I	I.	·I	1	1.	₹.₽	7	-82	.9	8	9.1		6	-	,snoitu
9.   -1   1		F. [	- 1	Z. Z.	E-I I-Z 6-I	1 8	9.8 7.7 1.9	2.9 4.4 9.9	50 52 42		3 1	ε 9 ε ε ε 6	9							7.	1.	8 5		5.6	6-I 2-8 4-3	4 11 73	F. C. C.	·I ·3 ·I		8. 6.	9.3	7 7 10 14	16. 14. 12.	-51 -91 -71	98 081	2.3 9.3	9 6 8	91 86 11	17	reson Ednare,
8 I						5 3	7-8 4-7 9-9	F-8 8-8	14 22 28	1.	6 9	1 2 2 4 8 3	7								. 8.		1	3-1	2.₹ 8.₹	8 6 41	8. F. C.	3.	6 FI 83	Z-I g. L-	·6 ·9	9 11	11. 12. 14.	-II -LI -ZI	61 94 76	6-I 3-3 3-3	8	173	07	fuots
3 4. 2.	60-	I-I :		***	***	8	7.9 6.1 4.1	4.2 5.5 4.1	65 g FE	₹.	6	0 6 6 6 6		6. F.	 ∳-I g.	I I			***			9 8		1	9.7	41 31 63	9. L. L.	·1 ·5 ·5	03 91 98	L. 1. 9.	.cL.	2 8 01	16- 12- 15-	12-	84 18 60	4.3 9.1	4 8	98 98 16	81	
	20- 9	g. 1					8-9 8-8 9-7	4.1 9.8 4.	9I 12 18	8. 9.	I.	7 9 7 7 7 7	Ĭ							8 8	-1	8 4		.9	3.3 2. 4.3	13 18	8. 6. 6-	.20	176	8- I 8-	9. 14. 10.	2 11 91	-31 -01 -11	-6 -01 -01	98 45 45	1.7 6-1 8-7	1	17 89 76	91	The same of the sa
. L I	Į. 3	3.1					2.2	8-8	01	ş.	8	T F	I							9.		2		· P	4.7	H	ç.	.2		9.	-4		13-	-91		9-1		₹9		SWOOD,
	1.1	8-8	3	т. Т.	 .g 6.	 I I	7.4 2.1 2.9	8.8 4.8 4.8	81 1 9 61	8.	1.	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					I: 80-	g.  g.	Ĭ	7.		3 3		4. 9. 9.	3.	72 E ZI	4-9-	I. I. I.		1-1 6: 	-4 -6 -9-9	g I 9	52. 58. 13.	13. 50. 11.	71 31 31 89	5.8 9.8 9.1 6.2	6	61 81 71 74	13	och Square, field, gate and Wynds,
.9 .9 3	6	2-1 1-3 1-7	Z I I		6	I	9.9 9.9 9.9	2.5 2.5 4.5	03 8 8 18	8.	9. F.	5 6 I F	I	9.	6	I				1				9.	8.¥ 9.7 .¥	87 7 87 88	6648	201.2	73 7 7	6. 8	4.4	8 3	·15 ·01 ·6 ·41	1.7 10. 10.	94 11 g	7.8 9.1 1.1	8	13 13 2	III	N
2 2.5 1.7	1.	6.	2 2 2	I.	8- 8- 8-	I	8.3 9.3 4.3	7.7 7.7 8.7		9.	-	2 0	7 I				70-	g. 3.	I I	- G 6 4			3 8	I I	9-1 1- <del>1</del> 6-3	8 23 30	*· I	3. 3.	13	9. 1. I	.g .II .8	9 FI 07	-#I -4I -2I	15. 14. 13.	09	1.2	£ 6	99 16 49	8 4	head & London Road, wfield,
	6.	1.1	8	I. I.	 g. I -6	3	9.8 4.2 4.5	5.4 9.4 3.2	8 22 8 32	9. 8. 4.	F. 4.	I I 5 5 5 5 5	3				 90. 10.	g. 3-	I I	2 2 2	8-3	3 8	: 9	. 1	3.1 4.4 8.8	21 22 38	6- 9- 8-	2.2.2	12 31 40	6- 1-1 6-	9.7 -11 -8	3 21 21	.91 .91 .14.	·4 ·#I		6-1	8	78 10 88	9 19	Street & Closes—East,
		9. 6-1 4-1	9 I 1 8 II		 g.	I	6-3 6-4 4-3 9-1 4-3	9.7 9.7 9.1 8.1 8.3	9 8 7 9 13	4.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0	F. 8.	8 F I 6 I 8 I 8					₹0·	g. 3-	I	3	g	I I		10		01 21 3 14 84	8- 9-1 #- 4- 6-	.5 6. 5 7. 5 7. 5	7 91	2. 9. I 2. 9.	9.8	8 9 7 II	·6 ·4 ·6 ·6	9-8 -6 -6-7 -01 -6	66 9 08	8-1 8-2 1-1 8-1 4-1	9 8 9	96 96	3	AL, nge, bundas, illox,
M India		Percentage to Deaths 20 and under 60 Years.		Rate per 1000 of Population.	Percentage to Deaths 5 and under 20 Years.	Number.	Rate per 1000 of Population.	Percentage to Deaths under 5 Years.	Number.	Population.	Deaths.	Percentage to Whole	Victorial	Rate per 1000 of Population.	Percentage to Deaths 60 Years and upwards.	Number.	Population.	20 and under 60 Years.	Number.	Population.	5 and under 20 Years. Rate per 1000 of	Percentage to Deaths	Number.	Bate per 1000 of	Percentage to Deaths under 5 Years.	Number.	Rate per 1000 of Population.	Percentage to Whole Deaths.	Number.	Rate per 1000 of Population.	Percentage to Deaths from 5 to 20 Years.	Number.	Rate per 1000 of Population.	Percentage to Deaths under 5 Years.	Number.	Population.	Deaths.	ğ	DISTRICTS.	AND AND DISTRICTS AND SERVISIONS.
60 YEARS AND	HEGS	ANY OR	02 1	HEG	TEAN TEAN	CY 9	11	12 Z 2 I		1	Vors	TTV			HVAL		иа	aku a	09 XX 02	-	WHYN.	SO Z	2	HVH.	Z 2 HH	USD	'81	iov 3	TV	'S Hills	HVEA GE	05 (V e	'SHY	IZ 21	URDEL	-	Acre	TTY		
	- '	ZES	SEA	DI	TV:	HŒ	ян	AIG									11.0		-	- 11	DIE	-	- U	an	он	0				1		20000	ISE							
OCOTIO TIOTTIM	TTOTO	o the whole Deaths in the City, and their Rate per 1000 of Living Population.											I JES					-	_																					



# TABLE VIII.

TABLE SHOWING THE COMPOSITION OF EVERY 1000 DEATHS IN THE CITY OF GLASGOW, AND IN THE SUBDIVISIONS THEREOF, FOR THE YEAR 1871.

TABLE VIII.—Table showing the composition of every 1000 Deaths in

1111 1111 11110 1110		no compos.	TOTOIL OF GAL	bry 1000 .	Deaths in
REGISTRATION DISTRICTS  AND  SUBDIVISIONS.	DISTRICTS,	Fever.	Small-pox.	Scarlet Fever.	Measles.
CITY,		48.71	12.69	21:36	55.03
CENTRAL, Exchange, Port-Dundas, High Street and Closes—West, St. Rollox,	1 2 3	37·35 37·73 46·95 40·44 27·59	21·87 13·72 23·47 12·44 45·97	27·74 34·30 14·09 17·11 41·38	63·50 37·73 75·12 71·54 80·46
HIGH CHURCH,  Bellgrove and Dennistoun,  High Street and Closes—East,	5	49·97 37·72 70·19	10·99 9·63 13·25	13·49 19·26 3·97	56·97 59·39 52·98
BRIDGETON,	7	53:56 51:65 55:45	5·67 6·19 5·13	15·98 11·37 20·54	75·69 16·44 74·95
CALTON, Charlotte Street, St. Andrew's Square, St. Luke's Church,	9	52.00 25.42 91.80 43.18	10:40 8:47 29:51 4:91	9·09 19·66 6·87	79·74 67·79 81·96 80·47
CLYDE, St. Enoch Square, Brownfield, Bridgegate and Wynds,	12	79·26 74·80 49·65 86·96	38·71 55·12 92·19 21·74	27.65 47.24 78.02 10.14	46.08 15.75 63.83 53.62
BLYTHSWOOD,		55.12	10.75	22.85	21:51
MILTON,	15	35.62 35.23 36.03	13·27 2·71 24·49	30·03 35·23 24·49	40·50 37·94 43·23
ANDERSTON, Cranstonhill, Hydepark,		37·20 20·93 43·25	3·18 2·33 3·47	39·09 37·21 39·79	59·89 34·88 69·21
TRADESTON,  Kingston,  Laurieston,	19 20	49·31 52·18 42·22	10.02 10.84 7.92	18·49 13·05 31·68	33·89 32·64 36·94
HUTCHESONTOWN,	21	64·07 45·63 90·53	11:44 8:74 15:32	21·73 30·09 9·75	49·19 35·92 68·25
INSTITUTIONS,	_	22.95	8.20	1.64	34.42
HARBOUR AND CANALS,			58.82	•••	***
SPRINGBURN,		23.41	10.03	16.73	76.92
MARYHILL,		51.94		25.97	12.99

the City of Glasgow, and in the Subdivisions thereof, for the Year 1871.

the City	of Grasgow	v, and m	the Subdiv	ISTOILS CITC.	1001, 101 01	2002 20	-
Hooping-cough.	Croup and Diphtheria.	Nervous Diseases (Children).	Diarrhoal Diseases,	Consumption.	Acute Diseases of Lungs.	Other Causes.	Totals.
33.43	21.23	69.08	25.94	136.12	247.66	328.75	1000.00
29·35 20·59 56·34 21·77 39·08	25·08 27·45 9·39 29·55 22·99	51·23 54·89 28·17 54·43 52·87	18·14 13·72 14·09 13·99 32·21	160 ·62 190 ·40 89 ·20 171 ·07 140 ·23	243·87 212·70 314·55 261·28 225·29	321·25 356·77 328·63 306·38 291·93	1000·00 1000·00 1000·00 1000·00
24:48 25:68 22:52	22·99 24·88 19·87	66·47 81·06 42·38	22·49 27·29 14·57	130·44 139·64 115·23	266:38 245:59 300:65	335·33 329·86 344·39	1000·00 1000·00 1000·00
28·79 28·94 28·74 32·59	23·18 33·16 13·34 20·80	80.85 94.02 67.76 70.73	19·57 18·59 20·54 30·50	143·15 134·29 151·95	227·09 220·02 235·11 279·47	326·47 325·43 326·49	1000·00 1000·00 1000·00
16·94 32·79 34·35	16.94 13.12 23.55	42:37 42:62 82:43	33·89 36·07 28·46	177.96 111.48 116.78	211.86 301.64 280.66	398·36 239·35 298·34	1000·00 1000·00
36·86 39·35 7·09 42·03	13·82 11·80 14·18 14·49	68·20 47·24 92·19 71·01	28·57 35·43 21·27 27·54	143·79 153·58 127·66 143·48	236·87 192·92 184·41 263·77	280·19 326·77 269·51 265·22	1000·00 1000·00 1000·00
36:29	25.54	72.58	18.80	131.72	229.84	375.00	1000.00
70·53 67·75 73·49	27·24 32·52 21·62	65.64 71.82 59.08	22·35 21·68 23·06	100·55 105·69 95·10	261 ·87 231 ·71 293 ·95	332·40 357·72 305·46	1000·00 1000·00 1000·00
35·94 25·59 39·79	22.69 37.20 17.30	75·04 79·07 73·53	28:37 20:93 31:14	141 ·24 132 ·56 144 ·47	228·24 204·65 237·02	329·12 404·65 301·03	1000·00 1000·00 1000·00
23·11 15·23 42·22	17.72 15.23 23.75	80·89 88·24 63·26	36·98 29·38 55·44	134·05 126·22 153·04	235.75 244.83 213.72	359·78 372·16 329·81	1000·00 1000·00 1000·00
25·17 21·36 30·64	15·45 19·44 9·75	82·38 95·14 64·07	33.78 32.04 36.21	139:58 150:48 123:95	251·72 231·07 281·34	305·49 330·09 270·19	1000·00 1000·00 1000·00
26.23	1.64	16:39	32.78	149.18	291·81 58·82	414.76	1000:00
30.10	33.45	73.58	30.10	157:19	204.02	882·36 344·47	1000.00
116.88	64.94	77:92		90.92	207.79	350.65	1000.00

TABLE IX.

Table showing the Number of Deaths, from certain Diseases, and the Rates to Total Deaths and Living Population, for the Years 1870-71.

		1871.			1870.	
Diseases.	All Ages. Total Number.	Percentage to Whole Deaths.	Rate per 1000 of Living Population.	All Ages. Total Number.	Percentage to Whole Deaths.	Rate per 1000 of Living Population.
Fever,	787	4.87	1.5	956	6.52	1.9
Small-pox,	205	1.26	·4	18	·12	.03
Scarlet Fever,	345	2.14	.7	473	3.22	.9
Measles,	889	5.51	1.8	129	.88	.2
Hooping-cough, -	540	3.35	1.1	561	3.83	1.2
Croup and Diphtheria,	343	2.13	.7	121	*88	-2
Nervous Diseases— Children, -	1115	6.91	2.3	1288	8.79	2.7
Diarrhœa,	419	2.59	.8	_	-	_
Consumption,	2200	13.61	4.	2128	14.46	4.4
Acute Dis.—Lungs, -	4001	24.76	8.	3122	21.36	6.5
All Others,	5311	32.87	10.	5850	39.94	12.2
		-				
Totals,	16,155	100.00	33.	14,646	100.00	30.

SHOWING THE NUMBERS TREATED IN HOSPITAL AND AT HOME, FOR THE CITY OF GLASCOW,

6208	1622	8019	450	511	818	LUE	122	315	200	061	619	819	163	422	100	26	800	333	81	192	423	DI	900	232	GPI	988	619	121	590	698	915	2009	616	900	819	9991	929
1512 1151 1632 1632 3383	828	2346 1976 863 821 821 821 821	45 20 100 143	01 30 31 32 32 30 20	35 50 40 10 40	12 14 14 140 180	01 85 85 25 28	41 45 40 100 131	181 00 181 188 188	23 29 13 23 23	35 42 42 43 123 510	65 100 100 131	18 42 42 15 22	21 101 22 115	177 28 28 126 126	\$1 11 21 61	50 50 99 99 102	## 629 ## 600	01 6 6 11 6	55 32 32 20 20	17 98 89 89 89	6 16 51 55	12 22 20 20 20 00	42 18 28 89 80	10 55 56 56 58	63 92 99 69	69 28 201 611	32 32 32 32	19 39 34 76	124 124 124 125	22 45 31 31 53	26 32 33 153	20 100 113 100	25 60 19 19	55 181 133 133	06 011 105 895	65 14 65 84
Tena	Henn.	Hopital	Total	Hotse.	Horgital.	Total	Heme	Respiral	Tuest	Bens.	Hegital	Total	E9 House	92 Bospital	161	Se Meant.	191 Hospital	Tetat	98 Home.	Co Horpital	Total	19 Home.	120 Intigooli	Sto Total	19 Boue.	191 Hospital	200 Testal.	Home.	180	380	So House.	150 Hospital	Off Total	None.	Haspital.	Total.	Hame.
_	919	reg	-	crecion	1		CHRISTA	ĸ		JEROSTO (		- 4	HINTLES	8		Vesess			2007			Jest			Mar			YHILL			Maneu.		12	rivaring.			TRANSFE

RETURN OF SMALL-POX CASES IN THE CITY OF GLASCOW,

SHOWING THE NUMBERS TREATED IN HOSPITAL AND AT HOME, FOR YEAR ENDING 31st DECEMBER, 1871.

68	_	101	622	18	41	200	22	PI	68	53	4	91	16	3	15	Lts	13	14	2.5	05	20	LL	17	22	IFI	14	2.0	111	23	16	061	98	101	183	22	110	14	Same
13 66 20 96	17	90I 08I 25 18	21 20 20 122	69 5 4	25 5	1 28	30	I SI	25	71	8	PI I	9 8 5 5	ī		1 81 1	01	8 1 5	9 10 10 10 10	01 3 9	1 10 10 10	11 19 9 6	6 51 5	C 8 65 W 8	20 20 32 32	SE SE SE	11 18 2	13 68 13 41	9 17 17 18	19 9 65	15 19 11 21 20	20 20 20 21	61 61 113 23	25 43 57 57	15 15 15 1	10 35 30 30	1 85 85 87	
	Torat.	Hame.	Hospital	Total	Home.	Hagmal.	Total.	Нопе	Hospital	Total	Home.	Hospital	Total	Home.	Hospital	Total.	Hone.	Horpital	Total	Home.	Hospital	Total	Home.	Hopital.	Total	Home.	Hospital	Total	Поп.	Hörgital	Total	Home.	Horpital.	Total.	Benc	Heepftal.	Total	
_	_	ALAI	oz.	- 0	ESERTIST	α		EREWSAN	N		3(3,00)134	)	3	CEERSIA	rs.		THE PARTY			TATOR			Sesa.			MAK			THEY			TRUMPIC.		-	ARVARES	1,1		-1

AISILYLION', DERING LHE AEVE ISL LIE EXISL' VED MHICH HYD BEEN REINERLED LO ", HORSE LO HORSE LIE ROMBER OF HOOVILLES IN AHICH LHE DISEVEE MYS NZOMZ NAMBER OF SAVIT-FOX CYSES WED AVCCINVLIONS EERFOSTED! YESO

866,61	069	2142	6801	Whole City.
SECTION OF STREET	Automod	Aveelavilose	SHALL-FOX CASEs.	

TABLE XI.—Localities specially infected by FEVER in the Five Police Divisions of the City.

# 1st, or CENTRAL DISTRICT.

Localities.	No.	Inhabited Houses	Estimated Population.	Fever Cases Reported.	Percentage of Fever attacks to Estimated Population,
Argyle Street, Balmanno Street, Bell Street, Do. Do. Do. Do. Bridgegate, Do. Do. Do. Do. Do. Do. Do. Broad Close, Broomielaw, Do. College Street, Dovehill, Great, Do. Do. Do. Do. Consecubbs, Gallowgate, Do. Do. Græme Street, Do. Guildry Court, Havannah Street, Do.	6 13 48 56 29 36 80 95 118½ 147 157 14 16 120 20 22 40 20 143 112 29 49 103 112 3 30 76 77 89 90 55 65 75 80 85 90 93 100 101 118 125 136 148 160	119 56 27 40 18 52 26 76 28 40 45 34 6 51 21 34 6 22 27 4 53 11 45 12 23 10 34 17 15 8 32 16 28 24 44 38 7 45 93 68 33 95 66 72 28	476 252 130 194 87 234 123 342 126 200 202 153 27 242 105 160 27 99 108 19 212 52 213 48 104 45 153 76 67 36 148 76 112 99 192 192 173 174 175 176 177 176 177 177 178 178 178 178 178 178	75 43 18 12 10 12 15 45 20 39 26 16 10 11 14 13 10 10 14 15 50 10 18 12 13 16 15 15 12 12 10 18 11 11 11 12 13 14 15 16 17 18 19 10 11 11 11 11 11 11 11 11 11	15 5 14 6 11 5 12 13 16 14 12 10 39 4 13 80 23 20 8 25 30 46 10 20 24 33 8 16 11 10 5 8 10 10 10 10 10 10 10 10 10 10
Do	189 226	17 17	76 76	11 18	15 23

# CENTRAL DISTRICT-Continued.

Localities.	No.	Inhabited Houses.	Estimated Population.	Fever Cases Reported.	Percentage of Fever attacks to Estimated Population.
King Street,	27	26	123	95	00
Do	30	15	75	35 10	28 13
Do	47	112	504	89	17
Laigh Kirk Close,	20	13 .	58	12	20
London Street,	881	17	76	11	15
Maxwell Street,	44	33	147	13	8
M'Pherson Street,	8	47	211	11	5
Pettigrew Street,	4	16	72	11	15
Prince's Street,	12	33	147	29	20
Do	29	35	148	11	8
Do	30	37	166	10	6
T	57	19	85	15	17
St. Andrew's Square,	71 49	32 21	136	16	11
Saltmarket,	6	12	99 60	20 14	20
Do	46	11	55	24	23 44
Do	77	10	45	15	33
Do	87	25	112	26	23
Do	97	40	160	14	9
Do	122	40	160	24	15
Do	131	21	84	17	20
Do	139	58	246	34	14
Do	144	20	90	23	26
Saracen Lane,	3	22	93	16	17
Shuttle Street,	22	23	98	13	13
Do	37	34	144	11	8
Tarbert Street,		52	208	15	6
Trongate Street,	132 41	15 19	75 85	14	19
Do	57	26	117	17	12 14
Do	77	21	94	31	33
Do	97	36	162	11	8
Do	143	19	95	19	20
Vennel, Old,	8	18	81	11	13
Do	52	24	96	14	14
Do	78	38	152	31	20
Wynd, New,	40	28	126	29	23
Do	56	19	90	14	15
Do	78	12	57	18	31
Wynd, Old,	34	17	80	11	13
Do	36	13	61	23	37
Do	49	15	70	19	27
Do	55	13 27	61	20	33
Do	60 70	11	52	10 15	8 30
100.	10	11	02	10	30
	-				

Localities in which	5 or more	Cases occurred,	221 = 2728	Cases.
Do.	4 Cases	do.	36 = 144	,,
Do.	3 do.	do.	58 = 174	,,
Do.	2 do.	do.	88 = 176	,,
Do.	1 do.	do.	165 = 165	,,
		-		
			568-2287	

No. 2.—EASTERN DISTRICT.

Localities	Abercromby Street, 34 33 148 8 5 Armour Street, 3 10 40 6 15 Avenue Street, 159 8 36 7 19 Back Causeway, 10 12 54 6 11 Barrack Street, 76 48 204 5 2 Bartholomew Street, 181 16 72 5 6 Bell Street, Calton, 23 10 45 7 15 Broad Street, Camlachie, 14 10 45 7 15 Broad Street, 38 32 136 9 6 Brook Street, 38 32 136 9 6 Do. 80 23 97 11 11 Bowling Green Terrace, 2 16 76 7 9 Canning Street, 4 6 25 112 6 5 Do. 160 48 204 23 11 Charles Street, 4 6 26 6 23 Do. 10 12 54 7 13 Do. 13 11 49 6 12 Chaythorn Street, 30 13 58 5 8 Crossgibson Street, 4 1 4 18 5 5 22 Do. 12 12 12 54 18 33 Crossgibson Street, 4 1 4 18 5 5 22 Do. 12 12 12 54 18 33 Crossgibson Street, 46 28 119 40 33 Cumberland Street, 46 28 126 10 8 Do. 56 21 94 12 12 Calton Entry, 1 5 25 5 20 Crasser Street, 9 15 71 6 8 Crasser Street, 9 15 71 6 8 Creen Street, 11 9 42 6 14 Crasser Street, 9 15 71 6 8 Crasser Street, 11 9 42 6 14 Crasser Street, 9 15 71 6 8 Crasser Street, 11 9 42 6 14 Cratama Square, 22 30 135 5 5 Crasser Street, 11 9 42 6 14 Cratama Square, 22 30 135 5 5 Crasser Street, 21 2 5 5 5 Crasser Street, 21 2 5 5 5 Crasser Street, 21 2 5 5 5 Crasser Street, 22 5 5 25 Crasser Street, 23 5 5 5 Crasser Street, 24 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7			-			
Armour Street,	Armour Street,	Localities.	10000	Inhabited Houses.	Estimated Population.	Fever Cases Reported.	Percentage of Fever attacks to Estimated Population.
		Armour Street, Avenue Street, Back Causeway, Barrack Street, Bartholomew Street, Bell Street, Calton, Broad Street, Camlachie, Do. do. Brook Street, Do. Bowling Green Terrace, Canning Street, Do. Do. Charles Street, Coalhill Street, Crossgibson Street, Do. Do. Cumberland Street, Fraser Street, George Street, Green Street, Green Street, Great Eastern Road, Do. do. Hatters' Row, James Street, Calton, Do. do. John Street, Bridgeton, Do. do. John Street, Bridgeton, Do. do. John Street, Calton, Do. do. John Street, Calton, Do. do. John Street, Bridgeton, Do. do. John Street, Calton, Do. D	$\begin{array}{c} 3 \\ 159 \\ 10 \\ 76 \\ 181 \\ 23 \\ 14 \\ 24 \\ 38 \\ 80 \\ 2 \\ 6 \\ 160 \\ 4 \\ 10 \\ 13 \\ 30 \\ 41 \\ 12 \\ 20 \\ 46 \\ 56 \\ 11 \\ 21 \\ 9 \\ 15 \\ 3 \\ 116 \\ 11 \\ 22 \\ 56 \\ 106 \\ 139 \\ 14 \\ 35 \\ 41 \\ 21 \\ 62 \\ 29 \\ 93 \\ 140 \\ 16 \\ 23 \\ 57 \\ 72 \\ \end{array}$	10 8 12 48 16 10 10 30 32 23 16 25 48 6 12 11 13 35 4 12 28 21 5 11 20 27 9 30 35 36 13 10 10 27 9 30 35 36 36 36 36 36 36 36 36 36 36 36 36 36	148 40 36 54 204 72 45 45 127 136 97 76 112 204 26 54 49 58 152 18 54 119 126 94 25 89 71 52 90 121 42 135 158 162 58 45 158 158 158 158 158 158 158 15	8 6 7 6 5 5 7 7 12 9 11 7 6 23 6 7 6 5 5 5 8 6 5 5 8 9 5 7 7 5 7 7 5 7 7 5 7 7 5 7 7 5 7 7 5 7 7 5 7 7 5 7 7 5 7 7 5 7 7 5 7 7 7 5 7 7 7 5 7 7 7 5 7 7 7 5 7 7 7 5 7	5 15 19 11 2 6 15 15 9 6 11 9 5 11 23 13 12 8 3 22 33 38 12 20 17 8 13 5 6 14 4 8 3 10 11 9 9 23 4 2 25 18 6 3 4 5
	29 18 81 6 7	Dates of Care Control of Care Care Care Care Care Care Care Care	29	18	81	6	7

No. 2.—EASTERN DISTRICT—Continued.

Localities.	No.	Inhabited Houses.	Estimated Population.	Fever Cases Reported	Percentage of Fever attacks to Estimated Population.
Little Street, London Road, Do. Main Street, Bridgeton, Do. Main Street, Calton, Marlborough Street, Do. Millroad Street, East, New Street, East, New Street, Society Street, Savoy Street, Sister Street, Society Street, Society Street, Society Street, Struthers Street, Summer Street, Sydney Street, Sydney Street, Tobago Street, Thomson's Lane, Mile-end, Union Lane, East, Do. Whitevale Street, William Street, Mile-end, Do. D	28 32 24 7 20 11 40 48 18 13 22 45 3 5 10 21 43 83 11 13	· 22 26 21 28 21 26 29 65 16 44 15 11 7 18 47 37 38 69 20 13 23 5 16 20 14 22 18 14 9 9 15 10 10 10 10 10 10 10 10 10 10	99 117 89 133 99 123 137 276 72 187 47 49 33 81 188 148 152 276 90 58 103 23 72 90 63 99 81 63 40 40 57 85 58 20 22 19 172	8 5 6 5 23 6 5 8 7 5 5 6 12 11 5 12 34 56 9 6 5 7 6 9 5 11 6 5 6 6 7 5 5 8 6 6 8 5	8 4 7 3 23 4 3 2 9 2 10 12 36 13 2 8 21 20 10 10 4 30 8 11 7 8 15 17 8 5 13 30 28 42 2

Localities in wh	nich 5 or more Cas	es occurred,		39 Cases.
Do.	4 Cases	do.	28 = 1	
Do.	3 do.	do.	58 = 1	
Do.	2 do.	do.	105 = 2	
Do.	1 do.	do.	300 = 3	00 ,,
			585 = 16	35 ,,

No. 3.-NORTHERN DISTRICT.

Localities.	No.	Inhabited Houses,	Estimated Population.	Fever Cases Reported.	Percentage of Fever Attacks to Estimated Population.
Ann Street, Do. Broomhill Street, Do. Do. Brown Street, Do. Buchanan Street, Castle Street, Charlotte Street, Church Place, Cowcaddens Street, Fleming Street, Do. Garngad Hill, Do. Garngad Road, Do. Do. Do. Do. Scott Street, Do. Middleton Place, Meuse Lane, M'Aslan Street, North Woodside Road, Posil Road, Posil Road, Posil Road, Posil Road, Renfrew Lane, Rutherford Lane, Sawmillfield Street, Street, String Street,	50 5 7 13	14 19 21 23 22 23 16 29 25 9 19 20 18 24 11 31 52 12 23 25 9 10 23 27 14 5 19 12 23 25 9 16 23 25 9 16 26 17 18 27 18 28 19 29 19 20 20 20 20 20 20 20 20 20 20 20 20 20	66 90 99 103 99 103 72 130 116 42 73 189 85 90 81 118 52 131 71 108 42 47 103 157 52 191 90 57 109 45 76 153 153 154 155 165 176 176 176 176 176 176 176 176	8 9 13 7 7 12 9 6 5 5 11 11 5 16 10 9 5 7 7 24 5 5 6 19 5 5 7 6 8 12 19 5 9 6 5 14 5 9 11 5 11 10 8 13 19 5 7 6	$\begin{array}{c} 12 \\ 10 \\ 13 \\ 6 \\ 7 \\ 11 \\ 12 \\ 4 \\ 4 \\ 12 \\ 15 \\ 6 \\ 6 \\ 17 \\ 12 \\ 8 \\ 9 \\ 5 \\ 9 \\ 26 \\ 4 \\ 12 \\ 10 \\ 5 \\ 4 \\ 12 \\ 10 \\ 5 \\ 4 \\ 11 \\ 9 \\ 13 \\ 20 \\ 4 \\ 20 \\ 6 \\ 3 \\ 93 \\ 1 \\ 25 \\ 19 \\ 6 \\ 9 \\ 15 \\ 3 \\ 142 \\ 4 \\ 3 \\ 7 \\ \end{array}$
Turner Street,	5 78	16 14	80 63	11 8	13 12

Localities in whi	ch 5 or more	Cases occurred	, 56	=	494	Cases.
Do.	4 Cases	do.		=	96	"
Do.	3 do.	do.	21	=	63	,,
Do.	2 do.	do.	50	=	100	,,
Do.	1 do.	do.	205	=	205	"
Houseless and Ir	stitution,		356	=	958 163	"
				1	1121	,,

No. 4.—SOUTHERN DISTRICT.

the same of the sa					
Localities.	No.	Inhabited Houses.	Estimated Population.	Fever Cases Reported.	Percentage of Fever Attacks to Estimated Population.
Adelphi Street,	24	32	144	10	6
Apsley Place,	32	13	65	5	7
Bedford Lane,	5	31	131	18	14
Do	28	16	72	5	6
Bolton Street,	13	29	130	5	3
Do	19	30 22	135	8	5
Do	35 36	22	99 130	6 5	6 3
Camden Street,	54	11	55	6	10
Centre Street,	36	34	144	12	8
Do	53	26	117	7	5
Clyde Terrace,	10	20	95	5	5
Coburg Street, South,	21	7	35	5	14
Crown Street, Cumberland Lane,	71	33	148	14	9
Do	32 47	21 16	96 72	17 10	17
Dale Street,	44	29	130	6	13
Eglinton Lane,	4	11	55	6	17
Errol Street,	18	25	112	10	
Do	28	22	99	7	8 7 7
France Street,	2	13	64	5	7
Greenside Lane,		20	90	8	8
Do. Hospital Street,	43	16	72	8	11
King Street,	34 32	20 27	90	18	20
Kirk Street,	9	6	27	17 13	10 48
Do	25	22	99	11	11
Do	45	6	27	7	29
Main Street,	49	31	131	7	5
Do	62	35	148	9	6
Do	65	38	161	12	8 15
Do	73	20	90	14	
Do	102	24 38	108 161	6	5
Do	109	7	31	16 8	9 25
Do	118	11	49	24	50
Do	123	14	63	10	16
Do	129	48	204	10	4
Do	144	46	195	7	3
Mathieson Street,	151 236	38	161	25	15
Melville Street,	7	32 40	160 170	6	3
Moncrieff Street,	7	40	18	11 6	7
Do	10	9	40	16	33 40
Muirhead Street,	33	11	49	8	16
M'Neil Street,	45	18	85	8	9
Newfield Lane,	2	17	76	14	18
Nicholson Street,	10	51	216	19	8
Portugal Street,	51 42	12 17	60	6	10
3	12	17	76	9	12

No. 4.—SOUTHERN DISTRICT—Continued.

		Inhabited Houses.	Estimated Population	Fever Cases Reported.	Percentage of Fever Attacks to Estimated Population.
Portugal Street,	43	7	31	6	19
Rose Street,	40	36	162	16	9
Do	60	33	148	6	5
Do	94	22	104	6	
Rutherglen Loan,	1	. 3	13	12	92
Do	72	13	58	7	12
Salisbury Street,	12	12	60	6	10
Spring Lane,		22	104	8	7
Stirling Street,	2	20	100	12	12
St. Ninian Street,	40	33	148	19	12
Thistle Street,	27	17	76	5	7
Do	49	21	74	17	23
Do	75	13	58	8	13
Do	203	13	58	7	12
Wallace Street,	11	31	147	5	3
Wellington Street,	14	9	45	5	11
Do	110	32	160	5	3
Do	257	24	120	6	5

Localities in Do. Do. Do. Do. Do.	which 5 or more 4 Cases 3 do. 2 do. 1 do.	Cases	do.	27 39 58	= = =	108	"
20.				425		1245	

No. 5.-WESTERN DISTRICT.

Localities.	No.	Inhabited Houses.	Estimated Population.	Fever Cases Reported.	Percentage of Fever attacks to Estimated Population.
Bishop Street,	34	54	229	7	3
Bothwell Street,		24	108	16	10
Do	57	18	85	10	- 11
Brown Street,	26	25	118	5	4
Campbell Street, West,		20	100	5	5
Carrick Street,	56	23	209	22	14
Do	69	24	108	6	5
Catherine Lane,	3	9	40	7	16
Clyde Street,	33	25	112	13	11
Do	36	11	49	6	12
	63	21	94	5	5
	75	41	174	15	8
TV	80	21	94	19	20
College Street, West,	84	9	40	12	30
Hill Street	32	23	103	6	5
Hill Street,	31 216	17	85	5	5
Macalpine Street,		13	61	9	14
Do	3 9	6	30	9	30
Do	15	45 18	202	17	8
Do	53	24	81 108	7	8
Perth Street,	10	5	22	7 6	6
Piccadilly Street,	39	10	45	5	27
Do	51	29	94	5	11
Do	55	15	67	5	5
Do	77	10	45	9	7 20
Richard Street,	84	9	42	7	15
St. Vincent Street,	479	12	72	- 9	12
Stobcross Street,	250	1	4	6	150
Do	251	10	47	8	17
Warroch Street,	55	15	67	9	13
	00	10	01	0	10

Do.	5 or more Cas 4 Cases 3 do. 2 do. 1 do.	es occurred, do. do. do. do.	14 21 32	= = =	384 56 63 64 124	"
			228	=	641	

TABLE XII.—Localities in which Five or more Cases of SMALL-POX have occurred during the Year 1871.

No. 1	CENTR	AL	DIS	TR	CT.		
6 Drygate Street, -		-	-	-		7 (	Cases.
83 Drygate Street, -		-	-	-	-	19	,,
312 High Street, -	-	-	-	-	-	6	,,
61 Rottenrow Street,		-	-	-	-	8	,,
57 New Vennel, -	-	-	-	-		6	,,
	ABS	TRAC'	T.				
Localities in which 19				100	1 =	19	Cases.
Do. 7	do.,	10	-	-	1 =	7	,,
Do. 8	do.,		-	-	1 =	8	- "
Do. 6	do.,		-	- "	2 =	12	"
Do. 4	do.,		-	-	6 =	24	,,
Do. 3	do.,		-	-	11 =	33	,,
Do. 2	do.,		-	-	19 =	38	,,
Do, 1	do.,		-		95 =	95	"
					136 =	236	"
	+	1	-				
No. 2	EASTE	ERN	DIS	STR	ICT.		
-72 Abercromby Street,	-	-	-	-	-	14	Cases.
	ADS	TRAC	T				
						14	G
Localities in which 14			-	-	1 =		Cases.
Do. 3	do.,		-		$\frac{3}{10} =$	9	"
Do. 2 Do. 1	do.,				50 =	20 50	,,
Do, 1	do.,					50	"
					64 =	93	,,
	-	-	-				
N.o. 3.—1	ORTH	ERI	d N	IST	RICT		
114 Bishop Street, Por	t-Dundas,	-	-	-		6	Cases.
41 Burnside Street, C	owcaddens	, -	-	-		5	,,
151 Castle Street, -	-	1		-	-	5	,,
238 Castle Street, -		-	-	-	-	5	,,
12 Charlotte Street, I	Port-Dunda	s, -	-	-	-	5	,,
163 Cowcaddens Stree	t, -	- 75	-	-	1	11	,,
281 Dobbie's Loan, -		-	-	-		5	"
127 Garngad Road, -	100	-	-	-	177	6 31	"
Institutions					W	-0.1	- 33
Ellio olo de olo de olo			150	100			- 22
42 Maitland Street,			0			6	,,
42 Maitland Street, 3 Middleton Place,						6	"
42 Maitland Street, 3 Middleton Place, 38 Milton Lane,						6 7 5	"
42 Maitland Street, 3 Middleton Place,	ad, -					6	"

64 Parson Stree	et, -	-	-	-	-	-	6	Cases.
37 Russell Stre		-	-	-	-		7	,,
5 Scott Street			-	-	-	-	6	,,
75 Stirling Stre	et, -				-		7	33
58 Tennant Str	eet, -	-	-	-	-		8	,,
		AB	STRAC	T.				
Localities in whi	ch 5 or 1	more Cas	ses occi	irred.	-	19 =	143	Cases.
Do.	4	do.			-	11 =		,,
Do.	3	do.			-	19 =	57	,,
Do.	2	do.	,		-	46 =	92	,,
Do.	1	do.,			-	163 =	163	,,
						258 =	499	"
WY .	, ,,	***			c ==			
No.	4,-50	UTH	ERI	N DI	51	RIGI		
175 Caledonia Ro			-	-		-	5	Cases.
7 Canal Street,	+	12	-	-	-	-	7	"
40 Rose Street,			-		-	-	5	,,
		ABS	TRAC'	r.				
Localities in which	h 7 Case	es occum	ho-			1 =	7	Classes
Do.	6	do.,	cu,			1 =	6	Cases.
Do.	5	do.,				2 =	10	"
Do.	4	do.,			-	5 =	20	"
Do.	3	do.,		-		6 =	18	"
Do.	2	do.,			12	20 =	40	"
Do.	1	do.,		-	-	82 =	82	"
		777			-			,,
						117 =	183	22
	-			-				
No.	5.—W	ESTE	RN	DIS	TF	RICT.		
3 Richard Street,							199	
o menard street,			-	5-1-	-	-	6 (	Cases.
		A DO	TRACT	n				
27 DOM: 12 DOM								
Localities in which	h 6 Case	s occurr	ed,	-	-	1 =	6 (	Cases.
Do.	4	do.,			-	$\frac{1}{3} =$	4	,,
Do.	3	do.,		-	-	3 =	9	"
Do.	2				-	8 =	16	,,
Do.	1	do.,			-	43 =	43	,,
					-	-	100	100
						56 =	78	,,

TABLE XIII.

able showing the Subdivisions, giving the higher and

Fable showing the Subdivisions, giving the higher and lower Deathrates for the Year 1871.

70000 507 0100 1011.									
SUBDIVISIONS.	Death-R 100 of Li Popul	00	Per Centage of Deaths under 5 Years to total Deaths.	Per Centage of Uncertified Deaths to total Deaths.					
SCDDIVISIONS.	All	Under 5 Years.	Per Cer Deaths un to total	All Ages.	Under 5 Years.				
High Street (West),	52	188	49	26	35				
Bridgegate and Wynds,	48	189	49	38	60				
High Street (East),	45	167	50	43	58				
Brownfield,	42	128	42	21	32				
Gorbals,	42	155	50	36	53				
Port-Dundas,	40	149	57	34	43				
St. Andrew's Square,	39	153	50	35	51				
St. Luke's Church,	39	146	52	26	36				
Cowcaddens,	36	130	56	34	43				
Hydepark,	36	138	55	16	23				
St. Rollox,	34	113	53	9	10				
Whole City,	33	117	48	24	33				
Greenhead and London Road,	33	116	54	34	42				
St. Enoch Square,	33	113	40	22	32				
Bellgrove and Dennistoun,	32	102	48	26	36				
Barrowfield,	32	117	50	43	58				
Laurieston,	31	105	46	8	9				
Woodside,	. 27	100	52	24	32				
Charlotte Street,	. 26	94	42	17	20				
Hutcheson Square,	. 26	90	50	13	15				
Kingston,	. 25	87	47	7	11				
Exchange,	. 24	90	45	14	21				
Blythswood,	. 22	84	39	10	13				
Cranstonhill,	. 20	69	41	10	15				

The following Tables show an Analysis of the Sanitary Operations during the year ended 30th April, 1872:—

		1	DISTRICT	8.		WHOLE
I. NUISANCES.	Central.	North.	East.	South.	West.	CITY.
Complaints Registered (each Complaint may include several Nuisances),	2607	1747	1097	1751	1386	8588
Nuisances Removed (including those of last year not disposed of at 29th April, 1871), repre- senting the following Improve- ments, viz.:—			- 11			
Courts, &c., Paved or Asphalted, Courts, &c., Drained, Privies erected or reconstructed, W.C. accommodation provided, Ashpits or Dungsteads erected, Ventilation provided or im-	63 62 54 12 54	105 50 29 3 42	174 208 145 32 146	101 86 34  28	74 111 62 6 6 62	517 517 324 53 332
Light provided or improved, Jawbox Accommodation pro-	100 36	32 1	120 1	32 15	121 10	405 63
vided,	17 45 17 10	<sub>7</sub>	66	8 12 12 2	9 11 12 	100 83 48 12
Outside of Dwelling-houses, Common Staircases, and Lob-	36	2	′	3		41
Interior of Dwelling-houses	494	278	178	548	636	2134
Ashpits abolished and substitu-	616	73	194		79	962
others not enumerated above, such as the Repair of Court Pavements, Drains, Privies, Ashpits, Rain and Soil Pipes.	9	6	6			21
Roofs, Stairs, Internal Fit- tings of Dwelling-houses, &c.,	1025	1234	597	1056	420	4332
	2650	1869	1875	1937	1613	9944
Reported to Master of Works (defective Street Causeway, Sewers, &c., included above),	10	27	8	20	1	66
Reported for Prosecution— To Clerk of Health Committee, To Chief Constable,	71 181	26 39	44 17	22 9	6 41	169 287
Carry over,	252	65	61	31	47	456

		1	DISTRICT	8.		WHOLE
	Central.	North.	East.	South.	West.	CITY.
Brought forward,	252	65	61	31	47	456
Of these there are removed, Still under consideration of Courts,	218 34	44 21	43 18	23 8	47	375 81
77 77 4 7 7 7 7	252	65	61	31	47	456
Full Ashpits reported to Inspector of Cleansing,	350	739	715	209	663	2676
II. LODGING-HOUSES.						
Day Inspection.						
Houses Let in Lodgings— Number Measured and Registered, under the Public Health (Scotland) Act, 1867—	40	05	,	20		150
Consisting of One Apartment, .  Do. Two Apartments,  Do. Three do.  Do. Four or more do.,	42 121 22 2	25 283 14 	75 95 10	28 215 62 6		170 714 108 8
	187	322	180	311		1000
Of these there were found Clean, Do. Dirty,	146 41	109 213	180	209 102		644 356
	187	322	180	311		1000
Number Re-inspected (including those formerly Registered), .	2443	5878	1220	2032	2890	14,463
Found Clean,	2026 417	5836 42	1185 35	1872 160	2354 536	13,273 1,190
	2443	5878	1220	2032	2890	14,463
Lodging-houses— Number Registered and Tick- eted, under The Glasgow Police Act, 1866,	30			1		31
Act, 1866,	3186		22	185		3393
Found Clean,	3061 125		22	182		3265 128
	3186		22	185		3393
Prosecutions for Contravening Magistrates' Bye-laws enacted for securing cleanliness and ventilation,	50 36					50 36

	DISTRICTS.					WHOLE
	Central.	North.	East.	South.	West.	CITY.
Night Inspection.						
Number of Houses Inspected for the Detection of Overcrowding,	10,474	16,980	12,097	19,147	10,454	69,152
Found overcrowded, Once, Do. Twice, .	675 65	434 49	272 23	513 56	687 155	2581 348
Do. Thrice, . Do. Fourormore times,	5 6	14	7	11 2	68 23	105 32
Cases pending at 1st May, 1871,	751 8	498 6	302 6	582	933 46	3066 66
	759	504	308	582	979	3132
Of these the Keepers were Fined or Imprisoned, Admonished, Non-apprehensions, on ac-	330 136	292 172	135 125	223 284	496 333	1476 1050
count of removals, &c., . Cases still pending,	257 36	40	37 11	71 4	138 12	543 63
01 II II 01-1	759	504	308	582	979	3132
Of the Houses Overcrowded, Lodgers were found in	725	392	209	309	586	2221
Contraventions of Sec. 10 of Magistrates' Bye-laws enacted for separating the sexes, and enforcing order and good con- duct,	54		10			64
Keepers fined for same, .	37		. 8			45
Admonished,	13 1		1			13 2
	54	***	10		.,.	64
		-				
III. EPIDEMICS.			1			
Number of Cases Registered, including Typhus, Relapsing, Scarlet, and other Epidemic Fevers, Small-pox, Measles, Hooping-cough, and Diphtheria,	3416	2117	1777	1086	1264	9660
Of these there were—Males, . Do. Females, .	1708 1708	1111 1006	872 905	487 599	653 611	4831 4829
	3416	2117	1777	1086	1264	9660

	DISTRICTS.					WHOLE	
	Central	North,	East.	South.	West.	CITY.	
Under 8 years, 8 Years, and under 20 years, 20 " " 40 " 40 " 60 " 60 " and upwards,	1660 825 621 266 44	1006 528 442 122 19	675 460 403 198 41	228 400 - 294 135 29	745 253 184 76 6	4314 2466 1944 797 139	
	3416	2117	1777	1086	1264	9660	
Number Treated in Hospitals, . Number Treated at Home,	1521 1895	862 1255	940 837	682 404	367 897	4372 5288	
Disinfecting Measures Carried Out.	3416	2117	1777	1086	1264	9660	
Apartments Fumigated, Apartments Whitewashed, Ceilings only Whitewashed, Articles of Clothing Washed, . Straw supplied for Beds, Courts or Passages Washed, . Courts, Stairs, or Lobbies Disin-	2558 1670 58 16,948 2172 55	1097 819 96 10,835 934 2	1209 995 90 10,689 1592 5	937 687 58 9498 1070	673 425  4766 499 7	6474 4596 302 52,736 6267 69	
fected, and Ashpits Emptied or Disinfected,	82	623	63	1	193	962	
House-to-House Visitation.		-					
Number of Houses Visited, Number of Cases Found, viz.:—	59,701	26,071	20,324	23,249	15,367	144,712	
Fever,	201 10	56 74	57 5	15 1	4 4	333 94	
Measles, Hooping-cough, and other Infectious Diseases, . Undefined,	231 54	11 6	1 10	166	108	351 236	
	496	147	73	182	116	1014	
IV. FEMALE VISITA-		-3444			ed to	10.040	
Number of First Visits,	3737	3550	3661	2295	point	13,243	
Houses and Inmates found Clean, Do. found Dirty,	2616 1121	3036 514	3112 549	1594 701	or ap	10,358 2885	
	3737	3550	3661	2295	Visit s Dis	13,243	
Number of Re-visits,	837	2641	2126	3212	nale	8816	
Houses and Inmates found Clean, Do. Partially Improved, Do. Dirty,	564 137 136	2379 138 124	1763 203 160	1940 884 388	(No Female Visitor appointed to this District.)	6646 1362 808	
	837	2641	2126	3212		8816	

	DISTRICTS.					WHOLE	
v. unwholesome	Central.	North.	East.	South.	West,	CITY.	
FOOD.		1000000	-5125				
Number of Inspections, Number of Seizures, and the Food	1082	461	604	549	441	3137	
destroyed with consent of Owners,	36	24	21	31	7	119	
Number of Prosecutions, Number of Convictions,	7 4		9 8		7 2 2	18 14	
VI. WORKSHOPS.					-		
(Up till August, 1871, when the powers conferred on the Local							
Authority were transferred to the Inspector of Factories.)							
Number Registered,	77 738	29 177	19 125	29 317	66 397	220 1754	
Number of Contraventions, Number of Prosecutions,	40 9	1	6	11 11		58 21	
Number of Convictions,	10	1		7		18	
VII. BAKEHOUSES.							
Number Registered,	1 240	4 166	. 5 216	4 160	 53	14 835	
Transcranspector,	210	100	210	100	00	000	
VIII.—INDOOR SERVICE.							
Number of Applications for Hospital Accommodation,							
Do. do. for Intermed to Lair-Holders or their Relati	nt in Ca	lton Bu	rying (	Fround,	grante	d 58	
	,						

