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SEVENTEENTH
ANNUAL REPORT
ON THE
HEALTH OF SALFORD,

BY

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MEDICAL OFFICER OF HEALTH; AND
MEDICAL SUPERINTENDENT TO THE FEVER HOSPITAL.

1885.

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SEVENTEENTH
ANNUAL REPORT
HEALTH OF SALFORD

JOHN TAYLOR ESQ. M.D. F.R.C.S.

REPORT

FOR THE YEAR 1888

PRINTED BY J. H. COLEMAN, 10, MARKET STREET, SALFORD.

1888

W. A. COLEMAN, 10, MARKET STREET, SALFORD.

Town Hall, Salford,

July 8th, 1886.

TO THE GENERAL HEALTH COMMITTEE.

GENTLEMEN,

I beg herewith to submit to you my Report on the Health of Salford, for the year 1885; which document, like its three immediate predecessors, has been drawn up in conformity with the general order of the Local Government Board.

Ever since the census of 1881 it has been my privilege to record, year after year, a marked and progressive improvement in the state of the Public Health; and now, at the end of 1885, I am able to congratulate the Committee on the result of yet another year's successful combat against preventible disease, and the misery and death which follow in its train.

As in previous years, I beg thus publicly to acknowledge my indebtedness to all those who have in various ways assisted me in the work of sanitation during the past year. My thanks are especially due to the members of the medical profession in Salford, who have rendered me efficient and willing assistance in my new and difficult duties under the Notification Act; and I desire once again to offer my grateful acknowledgments to the editors, respectively, of the Manchester and Salford press, for the generous assistance they have rendered the cause of Public Health, by the prompt and gratuitous publication of my weekly and quarterly returns.

I am, Gentlemen,

Your obedient servant,

JOHN TATHAM.

Wm. H. H. H.

July 24, 1924

TO THE GENERAL HEALTH COMMITTEE

I have the honor to acknowledge the receipt of your letter of the 17th inst. in relation to the matter of the health of the people of the State of New York. I am very glad to hear that the health of the people is so good, and I am sure that the health of the people will continue to be so good.

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REPORT.

1. *An Account of the Health and Sanitary Condition of the Borough of Salford.*

Public Health and Sanitary Progress.—The evidence of steady improvement in the health of Salford, furnished by the vital statistics relating to the first four years of the current decennium, has been fully sustained by the records of the year 1885, which are herewith submitted. At no period since A.D. 1861, in which year detailed enumerations of Births, Deaths and Marriages were first made the subject of local concern, has the annual rate of mortality* in the borough, taken as a whole, been so low as in the year just closed. Even after making the fullest allowance for the diminished rate of increase, which is believed to have characterised the Salford population in recent years, the annual rate of mortality in the year 1885 did not exceed 22·2† per 1,000 living. Reference to the accompanying section on vital statistics will show that the average annual rate of mortality in Salford during the five years which have elapsed since 1880 has been lower than the average rate in the five years which preceded that year, by not less than 4·5 per 1,000. Had the deaths in Salford during the quinquennium just completed, been equal to the corrected number in the preceding five years, more than 4,000 persons would have died since 1880, who, under existing circumstances, were alive at the end of 1885. In my last report I predicted that the decline in the birth-rate, which had, even at that time, become so serious as to attract special attention both here and elsewhere, would eventually have to be taken into account in connection with the decrease in the death-rate. As the births and deaths in 1885 have still continued to show a decline in relation to the population, it may be well to indicate the limits of influence which the lowered birth-rate can exercise on the rate of mortality. In case the birth-rate during 1885 had been equal to the average rate in the preceding decennium 1,019 more infants would have been born in that year; and with an infantile death-rate of 174 per 1,000 births, there would have occurred 177 additional infant deaths, which would have raised the aggregate death-rate from 22·2 to 23·1 per 1,000. Particulars of the amount of life saved and the amount lost in 1885, as compared with the mean annual mortality in the preceding decennium, under the more important headings

SECTION I.

State of the Public Health at the end of 1885

Life-saving during the last five years

Limits of influence of birth-rate on mortality

* See table A on page 22.

† The Registrar General puts it at 21·1 per 1,000.

SECTION I. in the list of causes, are given in the section of this report which relates to vital statistics. In that section also will be found particulars as to the variation in the rates of mortality in the several districts which constitute the borough.

General reduction in death-rates throughout England and Wales

Throughout the whole of England and Wales, but especially in the larger urban communities, a marked reduction has been observed in the local rates of mortality since the end of last decade, but in no case has the rate of decrease been so rapid as in our own town. In another portion of this report the respective rates of decrease are shown in the mortality of eight of the principal towns of this part of England; it there appears that whereas in seven of the towns the decrease in the last five year period, as compared with that which preceded it, varied from 2.6 per cent. to 12.2, the decrease was equal to not less than 16.4 per cent. in the borough of Salford.

Reasons for revising population estimates

Revision of Estimates of Population.—The Registrar General's estimate of the Salford population at the end of 1885 was 204,075 or 11,295 in excess of the estimate of the Medical Officer of Health which is given on page 21. In a previous report* I expressed my conviction that the population estimate, upon which the birth and death rates of 1884 were calculated by the Registrar General, was too high. My suspicions were first aroused as to the probable over-estimate of the population, at the end of 1883, on observing that, instead of the increase in the number of children born since 1881 being approximately proportional to the assumed growth of the population, there were actually fewer children born in 1883 than in the census year. In framing annual local estimates, the Registrar General ordinarily assumes that the rate of increase or of decrease in a population which obtained in the last intercensal period, has been maintained during the years which have elapsed since the last census; and experience shows that the method of the Registrar General is generally trustworthy. With regard, however, to the case of Salford, it is beyond question that the serious decline in the birth-rate—which commenced in the year 1881 and has steadily continued ever since—has so modified the rate of increase of the population as to make it unsafe, at this distance from the census, to trust to the old method for the estimation of our population.

Decline in the English marriage and birth-rates

The decline in the English marriage and birth-rates in recent years, brought about by the long-continued period of commercial depression, which still overshadows the country, is an established fact. The average birth-rate in England and Wales during the five years ending with 1885 was only 33.4 per 1,000, and was therefore in defect of the average in the five years immediately preceding by 5.7 per cent. In Salford, however, the average rate of birth fell from 43.8 per 1,000 in the earlier

* Sixteenth Annual Report on the Health of Salford, pages 7 and 8.

quinquennium to 37.7 in the latter; thus showing a decrease in the five years ending with 1885, equal to 14 per cent. In the face of this fact it seems difficult to believe that the population of Salford is still increasing at the old rate.

SECTION I.
Revised estimate
of population

The principle which I have adopted in framing my present estimate of the population has been to assume the same rate of increase, in the case of the population, as that which is known to have taken place in the inhabited houses, as tested by the rate books. Accordingly, I have added to the enumerated population at the last census, $4\frac{1}{4}$ times the annual rate of increase observed in the number of inhabited houses since 1881, and have thus arrived at 192,780 as the estimated population to the middle of the year 1885, and this number has been used in calculating the rates of birth and death for the present report.

Principles upon
which it is based

Retrospect—A decade of Sanitary experience in Salford.—Ten complete years having now elapsed since the passing of the statute which may be said to have inaugurated the era of practical sanitation in England, it will be interesting, and I trust profitable, to review the past sanitary history of Salford, and to glance very briefly at the successive steps, for the improvement of the health of the people, which have been taken by our sanitary authority since the passing of the Public Health Act, 1875.

Sanitation in Sal-
ford since the
passing of the
Public Health
Act, 1875

The health condition of Salford during the five years which terminated with 1875 was most unsatisfactory. The annual rate of mortality in the entire borough averaged 28.4 per 1,000, and was therefore in excess of the normal or life table rate by more than 45 per cent.; whilst in the Salford district proper, which is the oldest portion of the town, the rate of death averaged 31.5 in every thousand persons living. The death-rate from the seven zymotic diseases, in this quinquennium, averaged 6.3 per 1,000; and the measure of infantile mortality was 190 deaths under one year, out of every thousand children born. In those pre-notification days the only means at our disposal for checking the ravages of contagion, was the comparatively powerless one of disinfection, and even this measure could only be applied in the few instances in which our aid was solicited by the attendants of the suffering sick; except, of course, in those cases in which the death register informed us, as it did only too frequently, of the fatal termination of attacks which in reality might readily have been prevented. However, in the cases which terminated by death, amounting probably to from eight to ten per cent. of the persons attacked, a certain amount of preventive action was invariably attempted. For instance: the Inspector was able to secure in most cases the removal of the dead from amongst the living; the disinfection of rooms, bedding and clothing, and the isolation in a separate apartment, of any sick persons still remaining in the infected house; he was also able to attend to the removal of nuisances

Sanitary condi-
tion and death-
rate of Salford at
the time of pas-
sing of the Act

Limited powers
of sanitary au-
thorities in pre-
notification
times

SECTION I. Unrestricted spread of infec- tion	and to the rectification of structural defects likely to engender disease. But, after every possible effort on our part, it will be readily understood that, ignorant as we were of fully nine-tenths of the existing centres of infection, and practically without hospital accommodation for the isolation of the cases of which we had knowledge, the Sanitary Officers were quite unable to exercise appreciable control over the spread of infection; and it is little to be wondered at that in those days epidemics of smallpox, of typhus and of scarlet fever, succeeded one another in regular rotation; their several ravages subsiding only after all unprotected people had either succumbed to, or had proved insusceptible of, infection.
Smallpox epide- mic, 1875-76	In the year 1875, whilst the Public Health Act was actually under discussion by parliament, the Salford small pox epidemic began, which in the following spring raged with such violence as to compel the Corporation to provide hospital provision for the isolation of the infectious sick. The block of buildings now known as Wilton Hospital was consequently purchased, and after considerable alteration was opened for the receipt of small pox patients during the month of October, 1876. As is usual in such cases, the hospital was not ready for occupation until the small pox epidemic had spent much of its virulence; but what is of more importance, is the fact that the hospital, which was called into existence by the epidemic referred to, has remained open to the public up to this day; and, having been improved and enlarged from time to time, has formed the basis of a fever hospital which has proved a boon and a priceless blessing to thousands of Salford residents who have sought asylum within its walls.
Resulting in per- manent hospital accommodation for Salford	
Demolition of dilapidated pro- perty	The action of the Corporation in promoting the destruction of old and dilapidated property, dates back to a period considerably anterior to the year 1875. But subsequently also to that date the Highway Committees of the borough have been commendably active in providing for the widening of streets and the cutting of new and capacious thoroughfares, the construction of which has necessitated the demolition of large areas of pestilential and ill-ventilated dwellings, and the admission of the light of day to premises which for scores of years had been immured in perpetual dinginess and gloom. I do not of course claim that these demolitions have been undertaken otherwise than as a means of providing for the exigencies of commerce, but I very gratefully acknowledge the great advantage which the public health has derived from these acts of the Corporation, whatever may have been the object which they were primarily designed to serve.
(a) For street improvements	
(b) For sanitary purposes	There is, however, one great work of demolition which the Corporation has undertaken for the single and avowed object of improving the health of the people. I refer to the condemnation and destruction under our local Act, of the pestilential block

of property in Greengate, consisting of about 57 tenements, formerly known as Birtles Square. For many years before the Health Committee determined to raze this wretched property, it was well known as a prolific fever nest, and as the resort of persons of the worst possible character. The demolition of Birtles Square, although a tedious and, in my judgment, needlessly expensive proceeding, is unquestionably one of the most useful works which the Corporation has ever undertaken in the interests of the public health.

SECTION I.
Condemnation
and demolition
of Birtles Square

In all large industrial centres the safe disposal of street sweepings, midden refuse, and other non-manurial rubbish becomes an increasingly difficult task, as the population grows in density; and where (as in the case of Salford) there is practically a certainty that any available site, even though it consist of decomposing rubbish, will sooner or later be seized upon by speculative builders for the erection of dwellings for the working classes, it becomes a matter of necessity so to dispose of refuse of this kind that the residue shall be harmless, whatever may be its ultimate destination. In the year 1883 the Salford Scavenging Committee solved the difficulty so far as their own district is concerned, by erecting a large and an efficient destructor, on Fryer's principle, of sufficient capacity to deal with the whole of the refuse for the disposal of which they are responsible, and which in earlier times was deposited on tips and other waste places in the borough, where its presence frequently gave rise to complaints. It gives me pleasure to offer the Salford Scavenging Committee my congratulations on the excellent and inoffensive manner in which they dispose of this troublesome and unprofitable material.

Disposal of mid-
den refuse and
street sweepings

Erection of des-
tructor by Sal-
ford Scavenging
Committee

In the year 1875 the Health Committee first put into operation the provisions of the Adulteration of Foods Act. Mr. Joseph Carter Bell, F.I.C., the public analyst, has since that date examined not less than 4,435 samples of food or of drugs submitted to him by officers of this department. The table in a later portion of this report* shows that the adulteration of the principal necessities of life has fallen from 66.6 per cent. in the year 1875, to 5.2 in the year just closed. It will surely be conceded that this result is a re-assuring one to the food-consumers of the borough.

Proceedings
under the Adul-
teration of Food
and Drugs Act

In the year 1879 it became the duty of the Health Committee to put into operation the provisions of the "Dairies, Cowsheds and Milkshops Order" of that year, and accordingly nearly 700 establishments, coming under one or other of these designations, were at once placed on the register. This Order (which has the force of an Act of Parliament) gave the Corporation, as the local sanitary authority, power to make bye-laws† regulating

Supervision of
milk supply

* See page 70.

† A copy of the Bye-laws made by the Corporation of Salford, in accordance with this Order, will be found at page 45 of my Annual Report for the year 1880.

SECTION I. the sanitary arrangements of places used for the storage or the sale of milk; and there is no doubt that the bye-laws which have been issued by the Corporation have enabled us to effectually supervise the manipulation and sale of milk, as far as the dairies and milk-shops of Salford are concerned. I have, however, repeatedly drawn attention to the fact that the source of the principal and most pernicious contamination of the milk supply is usually the farm from which the milk is derived, and that there, if at all, the filthy water with which it is sometimes contaminated, finds its way into the milk. It is obvious, therefore, that our milk supply will never be effectively protected, until the adoption of the Dairies and Milk Shops Order is made compulsory throughout the country generally, and especially in the farming districts.

Dairies and Milk-shops Order should be applied compulsorily to farming districts as well as to towns

Inspection of bakehouses

The sanitary supervision of retail bakehouses, which in the year 1879 had been transferred from our care to that of Her Majesty's Inspectors of Factories, was in the year 1883 restored to the rightful guardianship of the local sanitary authorities. As a consequence, the sanitary condition of the retail bakehouses of the borough has received the needful attention, and the health and comfort of the workpeople engaged in the manufacture of bread has been correspondingly improved.

Public baths in Greengate and Pendleton

The baths, which have been provided by the Corporation, (one in Greengate the other in Pendleton) have done good service to the cause of public health in the borough. Some idea may be formed of the extent in which these establishments are resorted to by the public on referring to the last report of the Baths Committee, where it appears that not less than 111,000 bathers visited one or other of the baths during one year. Within the last decennium, the three several districts of the borough have been provided with public parks, for the recreation of the people; so that the residents of Broughton, Pendleton and Salford respectively have, within easy reach of their homes, a spacious airing ground to which they may resort after the day's work is done. These parks are thoroughly appreciated by the inhabitants of our crowded by-ways, and are doubtless productive of great public good.

Public parks

Provisional Order for Compulsory Notification of Infectious Disease

But it is in regard to their preventive action against infectious disease that the Health Committee have, in my judgment, achieved their most signal success. I refer of course to their action in requiring, compulsorily, from medical practitioners, notification of the whereabouts of infection, and in providing suitable accommodation for badly isolated infectious cases when discovered. In another portion* of this report the subjects of disease notification and hospital isolation are fully dealt with, and to the details there given I beg to refer the reader for interesting and, I hope, useful information.

* See pages 59 and 61

INFLUENCES AFFECTING THE PUBLIC HEALTH.

SECTION I.

Persistence of hopelessly unhealthy Areas.—In my last annual report I inserted a sketch map in which were depicted in dark blue colour those of the enumeration districts of the borough which possessed, during the five years 1879-83, an average death-rate in excess of 30 per 1,000. Reference to that map will show that the areas responsible for this terrible mortality are invariably situated in the older and more crowded portions of the borough; and a very intimate acquaintance with these localities has convinced me that no merely structural amendment will suffice to render them reasonably fit for human occupation. I have already condemned two of these areas, under the Artizans' and Labourers' Dwellings Act, and one of them (Birtles Square) has recently been demolished by the Corporation under powers of their own. In these hard times, however, the Corporation will probably hesitate to undertake further extensive demolitions of insanitary property until other expedients have failed. What then is the alternative? In most instances it is simply that of closing the houses, one by one, as unfit for habitation: and this means ruin to the owners; for they are, in most cases, quite unable to afford the cost of such fundamental alterations as would render their cottages fairly healthy, and the effect of forcing the owners to undertake such work, would be, like that of depopulating the property, to drive them to the poor-house. Only this very morning I have been waited upon by the unhappy owner of a few dilapidated cottages of this description, which she inherited from her late father. With tears in her eyes this poor woman implored me to postpone for a time some necessary repairs in the few cottages she owned, and of which the precarious rent constitutes her only means of living. This case is by no means an exceptional one: I meet with dozens of similarly heart-rending incidents in the course of a year; and, under existing circumstances of unexampled trade depression, I frankly own that I am at a loss to know how to treat such cases, with due regard to the health of the tenants on the one hand, and on the other to the pitiable circumstances of the wretched owners. The statesman has yet to appear who shall devise a really equitable and efficient method of dealing with unhealthy areas such as those to which I have referred.

Sanitary survey and chart

Insanitary areas

Administrative difficulties in the way of their amendment

Further legislation necessary

Want of medical Attendance and of skilled Nursing amongst the Poor.—It is difficult to form even a rough estimate of the extent in which the poor suffer from want of medical attendance, but statistics of the cases terminating fatally show that in the year 1885 at least one person out of every 25 passed away without receiving professional assistance during his last illness. In several previous reports I have drawn attention to the subject of non-certification of the cause of death in this connection, and I only revert to it here in order to reiterate my previous contention, that with a view of obviating the danger inherent in the present

Aid to the poor during sickness

SECTION I. statutory system of death-registration, it is expedient that the duty of investigating the cause of death, in all uncertified cases, should be transferred from the Coroner's officer, who is usually a policeman, to the Medical Officer of Health, or to some equally responsible member of the medical profession.

Inquiries into cause of death in uncertified cases
Appeal on behalf of Ladies' Sanitary Association and Day Nurseries Association

In my last annual report I made a special appeal to those of the ladies of Salford who have spare time at their disposal, for aid in behalf of the Ladies' Branch of the Manchester and Salford Sanitary Association, and also in behalf of the Day Nurseries' Association, both of which institutions are still doing excellent work amongst the poor, but which are seriously crippled for want of personal assistance, and of funds. Shall I be considered importunate if I once more renew my appeal? It is to me a discouraging fact that the bulk of charitable effort manifested by the inhabitants of our residential neighbourhoods finds its way to the byways of Manchester, and is consequently diverted from the necessitous poor of Salford, owing to the prevalent notion that these districts belong territorially to the neighbouring City. It may be well, therefore, again to intimate that both Pendleton and Broughton—the latter district including Kersal and part of Cheetham Hill—are constituent parts of the Borough of Salford, and that consequently the poor of Salford have a prior claim to the good offices of the charitably disposed residents in these districts. If proof were required that the presence of sympathising lady visitors and their mission women is urgently needed in our poorer neighbourhoods, I have only to refer to that portion* of my report which treats of the subject of infantile mortality; where it appears that notwithstanding all the efforts of our sanitary authority, out of every thousand children born in Salford, 177 die, on the average, before reaching the end of their first year, and that the proportion reaches the appalling figure of 361 per 1,000 in the case of children born out of wedlock.

Smallpox sporadic cases in 1885

Prevalence of Epidemic Disease.—The Health Department received information of the occurrence of eleven cases of smallpox in the borough during the year 1885. The first case occurred in March, at a tobacconist's shop in Chapel Street. The patient—who brought the disease into Salford from Newton Heath, where she had been staying on a visit—suffered a very slight attack, and recovered at home, without communicating the disease to others. Towards the end of April, a group of cases occurred at Hightown, a district far removed from, and having no discoverable connection with Chapel Street before referred to. Four seizures occurred almost simultaneously in three houses in one street, and one in another street, in Hightown. These appear to have had their origin in three unrecognised cases in the same street, which had

* See Table B, page 24; and also remarks on page 29.

previously been treated as chicken-pox; these latter patients having imported the infection from a district outside the borough. Four of the above five patients, and another in the same neighbourhood—who developed the disease a month later—were removed to hospital, and this local manifestation of the disease was consequently stamped out. Two other sporadic cases occurred in May, and two more in June; one of them residing in Broughton, two in Greengate, and one in Regent Road; but except in the case of the Greengate attacks, where the father died unvaccinated, after having infected his son, there is nothing to connect these cases with one another.

SECTION I.

Smallpox sporadic cases in 1885

Measles is the only infectious disease which seems to have shown excessive fatality here last year, but of the numerical frequency of the attacks, the only measure we possess is the merely approximate one of the death-rate. The fatal cases of measles in 1885 numbered 178, and were therefore in excess of the corrected Salford average, which during the last ten years was 141 per annum. The reported cases of scarlet fever in 1885 were fewer than in either of the two preceding years, the proportion of attacks to population being 3.28 per 1,000 in that year, against 4.4 in 1883, and 6.1 in 1884. This disease showed last year a relatively greater prevalence in Greengate than in any other part of the Borough, the sickness-rate in that district being more than double the rate observed in Broughton during the same period. The average rate of sickness due to scarlet fever in the forty protected towns* was equal last year to 3.64 per 1,000 of the population, and was therefore in excess of the Salford rate. Diphtheritic attacks were less frequent last year in Salford than in either of the years 1883 or 1884: the reported seizures in the year under present notice being equal to 2.8 per 10,000 of the population, as compared with 4.0 and 5.2 in the two preceding years. Typhus fever was reported to have occurred in 32 instances during 1885, as compared with 35 in the year immediately preceding.

Excessive measles fatality

Typhus fever incidence

There are one or two points worthy of notice in relation to the sequence of three groups of these cases. The first attacks which occurred in the spring, appear to have originated at 3, Foden's Court. From this house the infection was traced to 10, Weaver Street, where three cases occurred: thence the disease spread to West Charles Street, and thence, probably by means of old clothes and bedding, to Chapel Court. The history of the New Bury Street cases is the following—The father and son, bricklayers, who had been unsuccessfully seeking work during the winter, came home in great distress in March. On the 9th of that month, a girl aged 15 was removed to hospital with typhus. On May 1st the brother, on May 3rd the father, and on May 12th, a sister of this girl were also removed, the father dying in hospital. The Cook Street cases seem to

History of three groups of typhus cases

* See page 41.

SECTION I. have had a somewhat similar history. The father, a bricksetter out of work, came home early in the year feeling ill, but he did not seek medical advice, until the 31st of January, when his child aged 13 sickened with typhus, and was removed to hospital. On the 20th of February this case was followed by a second in the same house, another child aged 10 years, who was also removed and recovered in hospital. From this centre, the disease spread to 84, Melbourne Street, 21, Ayr Street, and 46, Robinson Street. It was impossible to trace the sequence of infection in the remaining cases in the above list. It is somewhat disappointing to find from the history of typhus in Salford, that the disease has occurred again and again in the same house, although the Sanitary Officers are most careful to disinfect all clothing and bedding which has been in contact with the sick, and to thoroughly purify the room from which patients are removed. It must be remembered however, that the poor have a habit of secreting their bedding and clothing, either by hiding or by pawning it, and thus the officers of the Health Department are frequently foiled in their attempts at removing all the articles which are likely to retain and to communicate infection.

History of typhus in 1885

It is a matter for regret, that during the year 1885, Dr. Mullen, the able and conscientious Medical Officer at the hospital, and Miss Glanville, an admirable fever nurse, took typhus whilst attending to their duties at the bedside. It is satisfactory however, to know that both these officers have eventually made good recoveries, although the Resident Medical Officer barely escaped with his life.

Enteric fever in 1885

Enteric fever appears to have been less common here in 1885 than in recent previous years—the reported attacks numbering only 205 in the year just ended, against 293 and 422 severally in the years 1883 and 1884.

Contagious disease amongst cattle in 1885

Prevalence of Epizootic Disease.—The year 1885 was one of unusual immunity from contagious disease amongst cattle in Salford. No part of the borough was declared an “infected area” during the year in respect of “foot and mouth disease.” Altogether 29 animals suffering from “swine fever,” were destroyed in the course of 1885; and in addition to these, 97 infected pigs, which had been in contact with infected animals, were slaughtered, with the object of stamping out this most contagious disease. The action of the Meat Inspector, with reference to the infected cases of swine fever from East Dereham, in Norfolk, is fully detailed at another page.* The machinery at present in operation, under the direction of the Privy Council, is evidently most effective in controlling epizootic disease in Salford.

* See page 67.

Suggestions for future Preventive Action.—Notwithstanding the material improvement which the accompanying pages show to have been achieved within the last few years in the sanitary condition of the borough, there still remain what I have designated “weak spots in our sanitary armament,” which urgently call for reform. Our general death-rate, although much reduced in recent years, is still higher than it should be, especially in the older parts of the borough; and our infantile mortality even yet compares unfavourably with that of other manufacturing towns. The experience of the year 1885 has suggested no reason to modify the advice which in my two previous reports I felt it right to offer to the Committee, as regards future practical sanitation in Salford: and as I am unable to discover any marked improvement under either of the categories there referred to,* I take leave again to ask the attention of the Committee to the following defects in our present sanitary condition, and to express the confident hope that I shall shortly have the pleasure of acknowledging a substantial improvement under one or more of the undermentioned headings. The principal “weak points” to which I refer are as follows:—(1) The unsatisfactory condition of the homes of the people, and of the sewerage, in the oldest parts of the borough; (2) The filthy condition of the River Irwell; (3) The objectionable system still adopted in certain districts for the removal of night-soil; and (4) the continuance of the private slaughter-house nuisance amidst the homes of the people.

SECTION I.

Weak spots in
our local sani-
tary armament

* See Salford Health Report, 1883, page 10; and 1884 Report, pages 13 and 14

VITAL STATISTICS.

II.—VITAL STATISTICS.

Area.—The Municipal Borough of Salford—comprising the Townships of Salford, Pendleton, and Broughton, together with a detached portion of Pendlebury—contains an area of 5,170 acres, or rather more than eight square miles.*

SECTION II.

General statistics

Elevation.—The population of the Borough resides at a mean elevation above sea level, of 140 feet. The greatest height is 250, and the least 85 feet. The low-lying land predominates in extent over that at higher elevations.

Inhabited Houses.†—There were 37,228 inhabited houses in the Borough, at the rate laying in 1885. At the Census enumeration in 1881, each house was found to contain an average of 5·15 persons.

Annual Rateable Value.—The annual rateable value of the Borough in 1885 was £757,643. In the year 1875 it was £679,318. The increase in the rateable value of Salford within the last decade, has therefore been equal to 11·5 per cent.

Population.—The Registrar General's estimate of the Salford population at the middle of 1885, exceeds 204,000. For the reasons, however, which are set forth at an earlier page‡ in this report, it has been found expedient to depart from the principle upon which the Registrar General's estimates of local populations are ordinarily computed, and, for the present, to base our estimate on the assumption that the rate of increase of the population has been identical with that of inhabited houses, as tested at the rate laying in each year.

New estimate of the Salford population

Estimated in this way, we find that the population of this Borough at the middle of 1884, would number 192,780, or 11,295 less than the estimate of the Registrar General.

Natural Increase of the Population.—The excess of births over deaths in Salford during the year 1885 was 2,706, and this excess—which is equal to 1·43 per cent of the number estimated

* Areas of Registration Sub-Districts:—Regent Road, 1,006 acres; Greengate, 263; Pendleton, 2,415, and Broughton, 1,426.

† Number of Inhabited Houses in the several Townships of the Borough of Salford, in each of the years, 1881 to 1885:—

	1881.		1882.		1883.		1884.		1885.
Borough	34,213	....	35,354	....	35,865	....	36,249	....	37,228
Salford	19,464	....	20,100	....	20,483	....	20,612	....	20,919
Pendleton	8,587	....	8,852	....	8,843	....	8,786	....	9,344
Broughton	6,162	....	6,402	....	6,539	....	6,851	....	6,965

‡ See page 8.

TABLE A.

POPULATION, BIRTHS, DEATHS, AND MARRIAGES, IN THE BOROUGH OF SALFORD, AND IN ITS FOUR REGISTRATION SUB-DISTRICTS, IN EACH OF THE TWENTY-FIVE YEARS, 1861-1885.

	Population.					Births.					Marriages.	Deaths.				
	Boro'.	Regent Road.	Green-gate.	Pendle-ton.	Brough-ton.	Boro'.	Regent Road.	Green-gate.	Pendle-ton.	Brough-ton.		Boro'.	Regent Road.	Green-gate.	Pendle-ton.	Brough-ton.
1861	102920	33756	37519	21649	9996	4090	1352	1647	822	269	632	2526	938	979	471	138
1862	104975	34928	37458	22139	10450	4087	1351	1592	873	271	552	2654	1027	1040	433	154
1863	107075	36134	37389	22636	10916	4072	1371	1570	837	294	646	2783	1021	1089	509	164
1864	109212	37374	37313	23132	11393	4210	1392	1654	883	281	714	2895	1071	1155	503	166
1865	111393	38646	37231	23633	11883	4207	1443	1594	856	314	739	3239	1248	1220	595	176
1866	113614	39949	37144	24136	12385	4307	1536	1590	860	321	786	3268	1286	1257	556	169
1867	115885	41294	37045	24644	12902	4517	1681	1561	911	364	856	3267	1319	1182	563	203
1868*	118198	42674	36941	25152	13431	4715	1669	1632	1033	381	807	3661	1486	1238	734	203
1869	120526	44087	36823	25658	13968	4681	1725	1589	982	385	874	3182	1287	1075	599	221
1870	122965	45551	36704	26177	14533	4870	1900	1581	949	440	896	3167	1384	1002	559	222
1871	125890	47195	36517	26920	15258	5127	2055	1613	1060	399	950	3815	1649	1184	734	248
1872	130301	49301	36145	28357	16498	5399	2235	1593	1011	560	1012	3299	1423	1039	579	258
1873*	134883	51463	35747	29847	17826	5691	2285	1560	1220	617	996	3884	1684	1092	805	303
1874	139618	53670	35319	31386	19243	5884	2463	1447	1169	805	1164	3935	1748	1029	782	370
1875	144518	55921	34868	32977	20752	6421	2737	1431	1350	903	1304	4271	1944	1115	784	428
1876	149591	58219	34393	34617	22362	6806	2778	1488	1527	1013	1582	4407	2003	1039	863	502
1877	154842	60561	33898	36308	24075	6866	2844	1379	1567	1076	1564	4079	1924	889	795	471
1878	160277	62945	33379	38054	25899	7161	2928	1420	1633	1180	1479	4336	1878	959	898	601
1879*	165899	65371	32843	39848	27837	7240	3022	1367	1719	1132	1290	4495	1831	1056	1001	607
1880	171727	67839	32291	41697	29900	7102	2801	1343	1778	1180	1468	4799	2138	1074	970	617
1881	177167	70154	31758	43421	31834	6880	2826	1243	1698	1113	1489	4000	1745	790	936	529
1882	180948	71922	31320	44654	33052	7130	2974	1285	1711	1160	1552	4265	1824	924	931	586
1883	184809	73502	31320	45778	34209	6778	2882	1214	1584	1098	1494	4287	1862	901	957	567
1884*	188752	75112	31320	46922	35398	7139	2938	1296	1670	1235	1517	4486	1921	893	1025	647
1885	192780	76741	31320	48092	36627	6989	2969	1149	1686	1185	1538	4283	1859	879	961	584

DENSITY (PERSONS TO AN ACRE), ANNUAL RATES OF BIRTHS, MARRIAGES, AND DEATHS, IN THE BOROUGH OF SALFORD, AND IN ITS FOUR REGISTRATION SUB-DISTRICTS, IN EACH OF THE TWENTY-FIVE YEARS, 1861-1885.

Quinquennial Means.	Density (persons per acre).					Annual rates per 1000 of the Population.										
						Births.					Marriages.	Deaths.				
	Boro'.	Regent Road.	Green-gate.	Pendle-ton.	Brough-ton.	Boro'.	Regent Road.	Green-gate.	Pendle-ton.	Brough-ton.		Boro'.	Regent Road.	Green-gate.	Pendle-ton.	Brough-ton.
1865-69	22'4	38'7	140'8	10'2	9'1	38'6	38'8	42'9	37'5	27'2	13'6	28'6	32'0	32'2	24'6	15'0
1870-74	25'3	46'4	137'1	11'8	11'7	41'1	44'0	43'1	37'8	33'3	14'0	27'6	31'8	29'6	24'1	16'7
1875-79	30'0	56'9	128'8	15'0	17'0	44'4	47'1	41'7	42'7	43'8	18'1	27'8	31'7	29'8	23'8	21'5
1880-84	34'9	67'3	120'1	18'4	23'1	38'7	40'1	40'2	37'9	35'2	16'2	24'1	26'5	29'0	21'6	17'9
1861	19'9	31'7	142'8	9'0	7'0	39'7	40'0	42'9	38'0	26'9	11'9	24'6	27'8	26'1	21'8	13'8
1862	20'3	32'7	142'4	9'2	7'3	39'0	38'7	42'5	39'4	25'9	10'2	25'3	27'4	27'8	19'6	14'7
1863	20'7	33'9	142'2	9'4	7'7	38'0	37'9	42'0	37'0	26'9	11'7	26'0	28'3	29'1	22'5	15'0
1864	21'1	35'0	141'8	9'6	8'0	38'6	37'3	44'3	38'2	24'7	12'7	26'5	28'7	31'0	21'7	14'6
1865	21'6	36'2	141'5	9'8	8'3	37'8	37'3	42'8	36'2	26'4	12'9	29'1	32'3	32'8	25'2	14'8
1866	22'0	37'4	141'2	10'0	8'7	37'9	38'5	42'8	35'6	25'9	13'4	28'8	32'2	33'9	23'0	13'6
1867	22'4	38'7	140'8	10'2	9'1	39'0	40'7	42'2	37'0	28'2	14'3	28'2	31'9	31'9	22'8	15'7
1868*	22'9	40'0	140'4	10'4	9'4	39'3	38'5	43'5	40'4	27'9	13'3	30'5	34'3	33'0	22'7	14'9
1869	23'3	41'3	140'0	10'6	9'8	38'9	39'1	43'2	38'3	27'6	14'1	26'4	29'2	29'2	23'3	15'8
1870	23'8	42'7	139'4	10'8	10'2	39'6	41'7	43'1	36'3	30'3	14'1	25'8	30'4	27'3	21'3	15'3
1871	24'3	44'2	138'8	11'1	10'7	40'7	43'6	44'2	39'4	26'2	14'6	30'3	34'9	32'4	27'2	16'2
1872	25'2	46'3	137'4	11'7	11'6	41'4	45'3	44'1	35'7	34'0	15'1	25'3	28'9	28'8	20'4	15'6
1873*	26'1	48'3	135'7	12'4	12'5	41'5	43'7	43'0	40'5	34'1	14'3	28'3	32'2	30'1	26'6	16'7
1874	27'0	50'3	134'3	13'0	13'5	42'1	45'9	40'9	37'3	41'8	16'2	28'2	32'6	29'2	24'9	19'5
1875	27'9	52'4	132'6	13'6	14'6	44'4	48'9	41'0	40'9	43'5	17'5	29'5	34'8	32'0	23'7	20'6
1876	28'9	54'7	130'6	14'3	15'7	45'5	47'7	43'3	44'1	45'3	20'5	29'5	34'5	30'2	24'9	22'4
1877	29'9	56'8	128'8	15'0	16'9	44'4	47'0	40'7	43'1	44'7	19'6	26'3	31'8	26'3	21'9	19'6
1878	31'0	59'1	126'9	15'8	18'2	44'7	46'5	42'5	42'9	45'6	17'9	27'1	29'8	28'8	23'6	23'2
1879*	32'1	61'4	124'9	16'5	19'5	43'0	45'5	40'9	42'5	40'0	15'2	26'7	27'5	31'6	24'7	21'5
1880	33'2	63'6	122'8	17'2	21'0	41'4	41'3	41'6	42'7	39'5	16'6	27'9	31'5	33'2	23'3	20'6
1881	34'2	65'8	120'7	18'0	22'3	38'8	40'3	39'1	39'1	35'0	16'3	22'6	24'9	24'9	21'6	16'6
1882	35'0	67'5	119'0	18'5	23'2	39'4	41'3	41'0	38'3	35'1	16'7	23'6	25'4	29'8	20'8	17'7
1883	35'7	69'0	119'0	18'9	24'0	36'7	39'2	38'8	34'6	32'1	15'7	23'2	25'3	28'8	20'9	16'6
1884*	36'5	70'4	119'0	19'4	24'8	37'3	38'5	40'7	35'0	34'3	15'6	23'4	25'2	28'1	21'5	18'0
1885	37'3	72'0	119'0	19'9	25'7	36'2	38'7	36'7	35'1	32'3	15'5	22'2	24'2	28'1	20'0	15'9

* In the years 1868, 1873, 1879, and 1884 the facts are those registered in 53 instead of 52 weeks; corrections have therefore been made in calculating the rates

to be living in the middle of 1884,—is the *natural* increase of the population. The *actual* increase, however, is estimated to amount to 4,028. The balance, therefore, must be due to the excess of immigration over emigration.

SECTION II.

Increase of the population

Density.—In the year 1885, the mean density of the Borough population was equal to 37·3 per acre. The density, or proximity of person to person, varies widely in the several Registration Sub-Districts. In the year referred to, it did not exceed 20 per acre in Pendleton, and 26 in Broughton, whereas it was equal to 72 in Regent Road, and 119 in Greengate.

Marriages.*—1,538 marriages were contracted within the Registration District of Salford during 1885, against 1,517 in the year immediately preceding. The rate of persons married was therefore equal to 15·5 per 1,000 of the estimated population in 1885, as compared with 15·6 in 1884. Reference to Table A shows that throughout the last ten years, the decline in the Salford marriage rate has been remarkably steady and uninterrupted. In the first year (1876) of the decade, the rate had attained the highest point ever reached in the Borough, namely 20·5 per 1,000, whilst in the last, it had fallen to 15·5,—a decline in ten years equal to 24·4 per cent.

Decline in Salford marriage rate

Births.—During the 52 weeks of 1885, the births of 6,989 children were registered, namely :—3,532 males and 3,457 females. These births are equal to a rate of 36·2 per 1,000 of the estimated population, which is the lowest rate observed in Salford since the establishment of local registration. The birth-rate in 1876 was equal to 45·5 per 1,000, and as in the case of the marriage rate, attained in that year the highest point ever recorded. Like the marriage-rate too, the fall in the birth-rate has been continuous from that year down to the present time. The decline within the last ten years has been equal to more than 20 per cent.

And in Salford birth-rate

Illegitimacy.—Of the 6,989 births registered last year, 270 were illegitimate. The proportion of illegitimate births was therefore equal to 3·9 per cent of the total births in 1885, as compared with 4·5 per cent, the mean ratio in the preceding 6 years. The proportion of illegitimate births was highest last year in Greengate, where it was equal to 4·8 per cent, and lowest (3·2 per cent) in Pendleton. The relation of illegitimacy to infantile mortality is very important ; the subject is further referred to at pages 14 and 29.

Vaccinations.—I am indebted to the Vaccination Officers of the Borough for the following information with respect to vaccination. Of the 7,177 children whose births were registered in Salford within the twelve months ending midsummer, 1885, 80·16

* The marriage rates are unavoidably those of the Registration District of Salford, which includes in addition to the Borough, a small extra municipal area. As, however, the marriages are calculated on the population of the entire district, the rates may be accepted as practically identical with those of the Salford Borough.

TABLE B.

BIRTHS IN THE BOROUGH OF SALFORD AND IN ITS FOUR REGISTRATION SUB-DISTRICTS—DISTINGUISHING LEGITIMATE AND ILLEGITIMATE BIRTHS; ALSO THE PROPORTION OF MORTALITY AMONG LEGITIMATE AND ILLEGITIMATE INFANTS UNDER ONE YEAR OLD.

IN 52 WEEKS OF THE YEAR 1885.

	Births.		Percentage of Illegitimate Births to Total Births.	*Deaths under One Year.		Proportion of Deaths under One Year per 1,000 Births.		
	Total.	† Illegit.		Total.	Illegit.	Total.	Legit.	Illegit.
Borough	6989	270	3·9	1216	87	174	168	322
Regent Road District ...	2969	115	3·9	552	40	186	179	348
Greengate „	1149	55	4·8	233	21	203	194	382
Pendleton „	1686	54	3·2	279	15	165	162	278
Broughton „	1185	46	3·9	152	11	128	124	239

CORRESPONDING DATA FOR THE SIX YEARS 1879-1884.

Borough	42269	1895	4·5	7483	684	177	168	361
Regent Road District ...	17443	876	5·0	3294	308	189	180	352
Greengate „	7748	379	4·9	1483	146	191	181	385
Pendleton „	10160	416	4·1	1678	144	165	157	346
Broughton „	6918	224	3·2	1028	86	149	141	384

* The gross numbers referred to in the above table are the deaths registered in the Borough, without correction for mortality in Public Institutions.

† The Illegitimate Births occurring in the Workhouse during 1885, have been distributed to the districts from which the mothers came to the Workhouse before confinement.

per cent had been successfully vaccinated by the end of July. **SECTION II.**
 0·14 per cent had been certified to be insusceptible of vaccination, **Vaccinations**
 11·16 per cent had died unvaccinated, the vaccination of 2·56 per
 cent had been postponed by medical certificate, 5·20 per cent had
 removed to other Districts, and 0·78 per cent remained unac-
 counted for at the close of that month.

Deaths.—During the 52 weeks of the year under notice, 4,263
 deaths were recorded as having taken place within the Salford
 boundaries, and the deaths of 54 Salford residents were registered
 as having occurred either in the Manchester Infirmary, or in the
 Hospitals of Monsall or of Pendlebury. On the other hand 34
 persons died at the Salford Royal Hospital who had been attracted
 to that institution from rural districts outside the Borough, and
 who, therefore, cannot properly be considered to have been
 residents of Salford. The Salford death roll thus corrected,*
 records the deaths of 4,283 persons in the year 1885,
 as compared with 4,484 in the immediately preceding year.
 The annual rate of mortality in 1885, was therefore equal to 22·2
 per 1,000, or one in every 45 of the estimated population. This
 rate, which is below that of 1884 by 1·2 per 1,000, is the lowest on
 record. The annual death-rate in Salford during the five years
 1876-80, averaged 27·5 per 1,000. In the five years ending
 with 1885, it did not exceed 23·0. Comparing then, the latter
 period with the former, we find that the mean rate of death in the
 more recent quinquennium was in defect by 16 per cent. Locally,
 the rate of mortality in 1885, varied extremely; in Broughton, it
 did not exceed 15·9 per 1,000 of the population, whilst in Green-
 gate, it was equal to 28·1—a difference in the death-rate of two
 contiguous areas in the same town, amounting to 12·2 per 1,000.

Correction of the
 death-roll

Meteorology† and Seasonal Mortality.—The mean
 temperature in Bexley Square during the year 1885, was 48·2°
 Fahrenheit, which is lower by 2·1 degrees than that of the
 immediately preceding year, and also lower by 0·6 degrees, as
 compared with the average of the annual mean temperatures of the
 previous decade. The mean temperature at Greenwich was 48·8°,
 which is 0·6° in excess of the mean temperature in Salford. Rain
 fell in Salford on 188 days of the year, to the aggregate measure of
 27·1 inches, which is in defect of the decennial local average by
 not less than 8·8 inches, whilst it still exceeds the rainfall recorded
 at Greenwich during 1885, by 3·1 inches.

Fall in annual
 mean tempera-
 ture and defect
 in rainfall during
 1885

On comparing the several quarters of 1885, with the corres-
 ponding periods in the previous decade, in respect of their
 meteorological constitution,‡ we find (a) that in the autumn

* See table on page 22

† The usual meteorological table (for 1885) will be found at page 79.

‡ Difference in 1885, as compared with the decennial means.

	Spring Qr.	Summer Qr.	Autumn Qr.	Winter Qr.
Mean Temperature....	+0·4°	+0·2°	-1·8°	+0·9°
Rainfall (inches).....	-1·22	-1·54	-3·54	-2·5
Rate of Mortality	-21·3%	-9·5%	-8·7%	-17·8%

SECTION II. quarter alone, was the mean temperature below the average; the mean temperature in each of the remaining quarters of the year being in excess: and (b) that in each of the four quarters of 1885, the rainfall was markedly below the average amount measured in the ten previous corresponding quarters. The table just given further indicates that the rate of mortality in the several quarters of last year showed in every case a notable reduction as compared with the respective decennial mean rates, the decline in the first quarter of the year amounting to more than one-fifth.

Decline in recent years, in the mortality of the country generally

Mortality in other parts of the Kingdom.—The death-rate in England and Wales during 1885, was equal to 19 per 1,000 persons living, and was lower by 6·9 per cent than the mean of the annual rates in the preceding ten years. It is worthy of note, that the annual rate of death, throughout England and Wales, in the first half of the current decennium (1881-90), averaged only 19·3 per 1,000, a rate which is lower than that of any previous year since civil registration began.*

Comparison of the rate of mortality in 1885 in the 28 great English towns, and in the 50 other considerable towns of England

The average rate of mortality during 1885, in the 28 Great English Towns of the Registrar General, which contain an estimated population of nearly nine millions, was equal to 20·5 per 1,000. Of these 28 towns, seven had individually a higher, and twenty-one a lower rate of death than that of Salford. The mean rate of the former group being 25·1, and that of the latter, 19·7 per 1,000. In "fifty other town districts" of England, which, although not so large as any of the 28 great towns, are yet of considerable size, and between them contain an estimated population of more than 2½ millions, the recorded death-rate last year was equal to 19·6 per 1,000, and therefore exceeded the rate in England and Wales by 0·6 per 1,000. With a view of comparing the rate of mortality in our own Borough, with that of the other neighbouring large towns, I have extracted from the Registrar General's Annual Summaries for recent years, the figures given below,† which represent the local rates of mortality from all causes without correction, either for age, or for sex constitution of the population. In the middle of 1885, these seven towns contained an aggregate population which is estimated to exceed two millions.

Although the relative position which our Borough occupies in the list of neighbouring towns, is only better by one place in the more

* See Registrar General's Quarterly Return, No. 148.

† Average annual rate of mortality in two recent quinquennia from all causes, and at all ages, in seven neighbouring English Towns, and in London.

	Quinquennial Average,		Decrease per cent in later quinquennium.
	1876-1880.	1881-1885.	
Manchester	27·4	26·5	3·3
Liverpool	27·6	25·8	6·5
Salford	27·5	23·0	16·4
Oldham	24·2	23·2	4·1
Leeds	23·0	22·4	2·6
Sheffield	22·7	21·8	4·0
Bradford	22·1	19·4	12·2
London	22·6	20·6	8·9

TABLE C.

ESTIMATED POPULATION, AND ANNUAL RATES OF MORTALITY, AT ALL AGES, AND AT FIVE GROUPS OF AGES, IN THE FIFTY-TWO WEEKS OF THE YEAR 1885, AND IN EACH YEAR OF THE PRECEDING DECADE:—COMPARED WITH THE CORRESPONDING RATES OF THE NEW ENGLISH LIFE TABLE—FOR PERSONS, MALES AND FEMALES.

	PERSONS		MALES		FEMALES	
	Estimated Population, 1885.	Deaths 1885.	Estimated Population, 1885.	Deaths, 1885.	Estimated Population, 1885.	Deaths, 1885.
All Ages.....	192,780	4,283	92,554	2,188	100,226	2,095
Under 5 years.....	28,272	1,994	14,112	1,072	14,160	922
5-20 years.....	62,318	315	30,872	169	31,446	146
20-40 years.....	62,553	572	29,692	294	32,861	278
40-60 years.....	30,881	699	14,416	349	16,465	350
60 and upwards.....	8,756	703	3,462	304	5,294	399

ANNUAL DEATH-RATES,* PER 1,000 LIVING IN 1885, AMONG

	PERSONS.		MALES.		FEMALES.	
	Salford.	New Engl. Life Table.	Salford.	New Engl. Life Table.	Salford.	New Engl. Life Table.
All Ages.....	22.2	19.5	23.6	20.5	20.9	18.5
Under 5 Years.....	70.5	61.0	76.0	65.6	65.1	56.3
5-20 years.....	5.1	4.8	5.5	4.9	4.6	4.7
20-40 years.....	9.1	8.5	9.9	9.0	8.5	8.1
40-60 years.....	22.6	18.3	24.2	20.4	21.2	16.4
60 and upwards.....	80.3	71.9	87.8	75.2	75.4	69.8

ANNUAL RATES OF MORTALITY, IN EACH OF THE TEN YEARS, 1875-1884.

		1875.	1876.	1877.	1878.	1879.*	1880.	1881.	1882.	1883.	1884.*	Mean 1875 to 1884.
PERSONS	All Ages,	29.5	29.5	26.3	27.1	26.7	27.9	22.6	23.6	23.2	23.4	26.0
	Under 5 Years,	96.3	99.0	87.5	96.2	89.6	102.9	69.4	80.3	73.3	78.5	87.3
	5-20 ...	7.1	7.9	5.0	6.1	6.1	7.0	5.0	4.5	5.8	5.5	6.0
	20-40 ...	11.4	12.5	11.4	9.8	9.9	9.7	9.4	9.5	8.9	9.2	10.2
	40-60 ...	30.6	27.3	27.5	24.7	25.9	24.3	24.5	23.8	24.3	22.5	25.5
	60 and upwards	99.7	87.7	83.7	84.6	92.5	77.4	83.8	75.9	83.0	77.6	84.6
MALES	All Ages,	31.1	31.4	28.5	28.3	28.7	30.0	24.1	24.5	25.0	24.7	27.6
	Under 5 Years,	101.3	105.0	92.8	100.7	99.4	109.5	75.0	83.5	78.1	85.6	93.1
	5-20 ...	7.1	7.5	5.1	6.5	6.3	7.3	5.9	4.5	6.0	5.7	6.2
	20-40 ...	12.2	14.4	13.5	10.3	9.5	10.8	9.8	9.5	9.9	9.0	10.9
	40-60 ...	33.2	29.9	32.1	25.6	29.0	27.3	27.4	26.8	29.3	23.2	28.4
	60 and upwards	112.0	97.2	88.0	94.9	105.7	86.1	89.6	81.3	89.5	85.1	92.9
FEMALES	All Ages,	28.2	27.6	24.4	25.8	24.8	26.0	21.1	22.7	21.5	22.2	24.4
	Under 5 Years,	91.1	92.8	82.3	91.8	80.1	96.4	63.8	76.9	68.5	71.4	81.5
	5-20 ...	7.1	8.3	4.8	5.7	5.9	6.7	4.2	4.6	5.6	5.2	5.8
	20-40 ...	10.9	10.7	9.5	9.3	10.2	8.8	9.1	9.4	8.0	9.4	9.5
	40-60 ...	28.4	24.9	23.5	24.0	23.3	21.7	22.0	21.3	20.0	21.8	23.1
	60 and upwards	91.5	81.5	80.9	77.9	83.8	73.2	80.0	72.5	78.8	72.8	79.3

* The years 1879 and 1884 contained 53 weeks each, instead of 52. The death-rates have therefore been corrected for this difference.

SECTION II. recent, than in the earlier quinquennium, it is nevertheless encouraging to find that Salford is effectually striving to amend her position; for the third column in the foot note shows that her death-rate is decreasing at a greater rate than that of any other town in the list.

Rapidity of decrease in the Salford death-rate

Normal Rate of Mortality, Male and Female.—Of the 4,283 persons whose deaths were registered last year in Salford, 2,188 were males, and 2,095 females.* The death-rate at all ages amongst males, was equal to 23·6 per 1,000, whilst it did not exceed 20·9 amongst females. The normal rate of mortality, calculated for Salford, on the basis of the new English Life-Table, being 20·5 for males, and 18·5 for females—it follows that the recorded Salford rates in 1885 exceeded those of the life-table by 15 and 13 per cent, respectively. The mortality of both males and females showed a considerable decline in 1885, as compared with that of the year immediately preceding, when the proportion was 24·7 per 1,000 amongst the former sex, and 22·2 amongst the latter. In equal numbers living, the deaths of males last year, were as 104 to 100 females.

Comparison of Salford male and female mortality in 1885, with corresponding rates of English life-table at all ages

Mortality at different Ages.—In Table C* the Salford rates are shown at several age groups for the year 1885, and for each year of the previous decade. The table also furnishes the means of comparing the local recorded rates at the various ages, with the standard or life-table rates at the corresponding ages. In the five years 1881-85, the recorded mean death-rate of persons at all ages, and of both sexes, was 23·0 per 1,000, and therefore exceeded the life-table rate by 17·9 per cent, the excess in the preceding five years having amounted to 23·6 per cent. Among children under five years in the quinquennium ending 1885, the mean rate was equal to 74·4 per 1,000 living, and to 95·0 per 1,000 in the five years immediately preceding. The recorded Salford rate was therefore in excess of the life-table rate by 55·7 per cent in the earlier of these quinquennia, and by 22·3 per cent in the more recent. In the year 1885, the child death-rate† fell to 70·5 per 1,000, and with the exception of the year 1881, this is the lowest death-rate experienced in Salford in any year on record. Amongst persons at ages from five years to twenty, the recorded Salford rates in 1885 do not differ materially from those of the English life-table. In fact, the recorded female rate is seen by Table C to be actually lower than it. The reason for this has been explained in previous reports.‡ There has been a gradual reduction in the rates at these ages within the last few years. At the age 5-20 years, the mean rate of mortality, which, in the five years 1876-80, had been equal to 6·4 per 1,000, fell to 5·1 in the five years terminating with 1885, the life-table rate at this age being 4·8. In the following age group, 20-40 years, the rate fell from 10·7

* See page 27.

† i.e. the mortality under five years of age.

‡ See Sixteenth Annual Report on the Health of Salford, page 42.

in the first quinquennium, to 9.2 in the last, the corresponding rate of the English life-table being 8.5. At the age 40-60 years, the Salford rate averaged 25.9 in the earlier of these quinquennia, and 23.5 in the later. Whilst at ages over 60 years, the rate declined from 85.2 in the first quinquennium, to 80.1 in the last.

SECTION II.
Mortality at
different ages

Infantile Mortality.—Measured by the proportion of deaths under one year to births registered, infantile mortality in Salford was equal to 174 per 1,000 last year, as compared with 179, the average rate in the preceding five years. In the first, or March quarter of the year, the rate was equal to 130, or 29 per 1,000 below the average rate in the five previous first quarters. In the second, or June quarter, it was 149, or 4 per 1,000 in excess of the average. In the third, or September quarter, it rose to 260, or 25 per 1,000 in excess, whilst in the fourth, or December quarter, it fell to 162, or 18 per 1,000 in defect of the average rate in the corresponding quarters of the preceding five years. As in past years, so in 1885, the incidence of infantile mortality in different parts of the Borough, varied extremely. For, whereas, it did not exceed 128 per 1,000 in Broughton, it ranged upwards to 186 in Regent Road, and to 203, which is considerably above the local average, in Greengate. In all England and Wales, the proportion of deaths of infants in the first year of life to 1,000 registered births, was equal last year to 138. In the 28 Great Towns, it was equal to 155, and to 150 in the 50 other considerable town districts of England.

Variation of in-
fantile mortality
with season

And with locality

In the table at foot I give the mean infantile rates in each of the 28 Great English Towns, during the ten years 1875 to 1884, together with the rates in the year 1885. The towns are arranged in the increasing order of their death-rates. In the ten years ending 1884, the mean annual rate in these 28 towns was 168 per 1,000 births, but in the year 1885 the rate fell to 158 per 1,000.

Infantile mortal-
ity in other great
towns

Illegitimacy in relation to Infantile Mortality.—Table B on page 24 shows that 270 illegitimate children were born in Salford last year. In the seven years 1879 to 1885, not less than 2,165 children have been born here out of wedlock. Of the 270 children illegitimately born during 1885, there died within the first year of life 87: in other words, 322 per 1,000 of these little

Rate of Mortality amongst Infants under one year per 1,000 births.

Ten years, 1875-84.			Ten years, 1875-84.		
	1885.			1885.	
Portsmouth.....	135	131	Hull.....	168	128
Derby.....	142	137	Bradford.....	169	143
Birkenhead.....	144	137	Oldham.....	170	166
Bristol.....	147	152	Huddersfield.....	173	157
Brighton.....	152	131	Manchester.....	174	175
London.....	154	148	Leeds.....	176	155
Plymouth.....	158	156	Norwich.....	178	136
Sunderland.....	158	158	Salford.....	178	174
Wolverhampton.....	161	140	Nottingham.....	179	157
Newcastle.....	163	172	Bolton.....	180	160
Cardiff.....	163	189	Blackburn.....	185	170
Halifax.....	164	132	Liverpool.....	188	174
Sheffield.....	164	164	Leicester.....	205	193
Birmingham.....	167	157	Preston.....	213	218

TABLE D.

ANALYSIS OF MORTALITY—ANNUAL RATES PER 1000 LIVING IN EACH OF THE REGISTRATION SUB-DISTRICTS OF SALFORD IN THE 52 WEEKS OF THE YEAR 1885 AND THE AVERAGE ANNUAL RATES IN THE PREVIOUS QUINQUENNIUM 1880—1884—INSTITUTION DEATHS DISTRIBUTED

REGISTRATION SUB-DISTRICTS	ANNUAL RATE OF MORTALITY AT ALL AGES FROM ALL CAUSES AND FROM FIVE CLASSES OF DISEASE.											
	All Causes		Zymotic		Constitutional		Developmental		Local		Other Classes	
	Five Years 1880-84.	1885	Five Years 1880-84.	1885	Five Years 1880-84.	1885	Five Years 1880-84.	1885	Five Years 1880-84.	1885	Five Years 1880-84.	1885
REGENT RD	26.4	24.2	5.8	4.5	4.3	4.5	1.6	1.6	11.9	11.1	2.8	2.4
GREENGATE	28.9	28.1	5.7	4.8	5.2	5.3	1.4	1.2	14.2	14.6	2.4	2.3
PENDLETON	21.6	20.0	4.1	3.6	4.2	4.7	1.4	1.3	10.0	9.0	1.9	1.3
BROUGHTON	17.9	15.9	3.5	2.8	3.6	2.9	0.9	1.0	8.3	8.3	1.6	1.0
BOROUGH...	24.1	22.2	4.9	4.0	4.3	4.4	1.4	1.4	11.2	10.6	2.3	1.8

REGISTRATION SUB-DISTRICTS	FROM ALL CAUSES				AT ALL AGES FROM							
	Under 1 Year per 1000 Births.		Over 60 years.		Six Miasmatics.		Diarrhoea.		*Acute Lung Diseases.		Phthisis	
	Five Years 1880-84.	1885	Five Years 1880-84.	1885	Five Years 1880-84.	1885	Five Years 1880-84.	1885	Five Years 1880-84.	1885	Five Years 1880-84.	1885
REGENT RD	191	186	82.7	82.7	3.3	2.6	1.9	1.5	5.6	5.3	2.7	2.6
GREENGATE	192	203	88.8	92.4	3.3	2.6	1.8	1.7	7.0	7.4	3.2	3.0
PENDLETON	166	165	70.7	74.1	2.5	2.3	1.3	1.0	4.3	4.1	2.5	2.7
BROUGHTON	149	128	74.0	71.1	2.0	1.7	1.2	0.8	3.4	3.5	1.8	1.6
BOROUGH...	179	174	79.5	80.3	2.9	2.3	1.6	1.3	5.1	5.0	2.6	2.5

REGISTRATION SUB-DISTRICTS	ANNUAL RATE OF MORTALITY UNDER FIVE YEARS PER 1000 LIVING AT THAT AGE.											
	All Causes.		Nervous Diseases.		Six Miasmatics.		Diarrhoea.		*Acute Lung Diseases.		Scrofulous Diseases.	
	Five Years 1880-84.	1885	Five Years 1880-84.	1885	Five Years 1880-84.	1885	Five Years 1880-84.	1885	Five Years 1880-84.	1885	Five Years 1880-84.	1885
REGENT RD	88.5	79.3	12.8	9.4	16.3	14.3	12.0	9.7	16.5	15.6	6.4	7.0
GREENGATE	96.8	87.9	14.3	13.8	18.4	13.8	12.3	11.1	19.6	19.3	8.4	11.1
PENDLETON	72.3	63.0	11.3	7.9	12.6	12.2	7.7	6.2	14.1	12.6	9.1	8.5
BROUGHTON	59.0	47.1	7.6	6.3	8.9	8.6	7.9	4.6	11.6	13.0	6.2	4.0
BOROUGH...	80.6	70.5	11.8	9.2	14.4	12.7	10.2	8.1	15.6	14.9	7.4	7.5

*True Croup is not included amongst "Acute Lung Diseases" in this table, although it forms part of the Sub-order "Respiratory diseases" of the Registrar General. It is however included in the "Local Class" of diseases at the head of the table.

unfortunates perished. Amongst children born in wedlock, the proportion was 168 per 1,000. In the six years ending 1884, the contrast is even more striking; for whereas amongst children legitimately born, the mortality was the same as in the year 1885, the illegitimate rate in these six years amounted to not less than 361 per 1,000 births.

SECTION II.

Illegitimacy in relation to infantile mortality

The following table gives the rate of infantile mortality in Salford during 1885, and the average rates in the previous ten years, from the principal diseases to which children at this early age are susceptible.

Causes of infantile mortality

RATES OF MORTALITY UNDER ONE YEAR, PER 1000 BIRTHS.

	Borough Total.		Registration Sub-Districts (1885)			
	1875-84.	1885.	Regent road.	Green-gate.	Pendle-ton.	Brough-ton.
All Causes	178	174	186	203	165	128
Ten Causes—						
Measles	4.0	5.0	5.1	5.2	5.3	4.2
Scarlet Fever	1.3	0.4	0.3	...	0.6	0.8
Whooping Cough ..	7.5	7.3	7.8	8.7	5.9	6.8
Diarrhoea	25.1	26.2	31.0	30.4	21.9	16.0
Lung Diseases	31.7	31.2	28.3	39.1	31.4	30.4
Tubercular Diseases	13.1	16.9	14.8	24.4	21.9	7.6
Premature Birth.....	13.0	16.5	19.5	10.4	20.7	8.4
Brain Disease and } Convulsions..... }	31.2	25.5	23.9	36.5	24.3	20.3
Found dead in bed...	...	4.9	6.7	4.3	3.6	2.5
Syphilis.....	4.6	5.2	6.1	7.0	4.1	2.5

Classification of Causes of Death.—The 4,283 deaths registered in the 52 weeks of the year 1885, were thus distributed:—774 deaths, or 18 per cent of the total mortality were referred to the zymotic class; 844, or 20 per cent to the constitutional class; 263, or 6 per cent to the developmental class; and 2,048, or 48 per cent to the local class of disease; whilst 354, or 8 per cent. remain undistributed. The deaths which thus remain unclassified, are those which have been referred by the Registrars to violence, or to some ill-defined cause, such as “Sudden death,” “Dropsy,” “Found dead in bed,” “Natural causes, &c.” It has therefore been considered advisable to place in a group by themselves, the deaths thus imperfectly described.

Ill-defined causes of death

In the upper section of Table D, are given the local rates of mortality per 1,000 persons living during 1885, from all causes, and from four principal classes of disease. In the middle and lower sections of the table, the rates are also shown from the several prevalent diseases, or groups of disease, which are believed to have an intimate relation to what is known as sanitary condition: and throughout the table, the 1885 rates—which are distinguished by heavy type—are compared with the means of the corresponding

Mortality from principal classes of disease

TABLE E.

ANNUAL RATE OF MORTALITY IN SALFORD IN THE 52 WEEKS OF THE YEAR 1885,
—FROM EIGHT CLASSES, AND FROM CERTAIN SUB-CLASSES OF DISEASE, AT
FIVE GROUPS OF AGES,—PER 1,000 PERSONS ESTIMATED TO BE LIVING AT
THOSE AGE-GROUPS, RESPECTIVELY.

52 WEEKS OF THE YEAR 1885, ENDING JANUARY 2ND 1886.

	All Ages.	0-5 Years.	5-20 Years.	20-40 Years.	40-60 Years.	60 and upwards.
ALL CAUSES.....	22.2	70.5	5.1	9.1	22.6	80.3
I.—SPECIFIC FEBRILE OR ZYMOTICS.....						
1.—Miasmatic Diseases	2.3	12.7	0.9	0.4	0.3	0.1
2.—Diarrhoeal Diseases	1.3	8.1	...	...	0.2	1.0
3.—Other Zymotics	0.4	1.8	...	0.3	0.2	0.3
II.—PARASITIC DISEASES	...	0.2	...	...	...	...
III.—DIETIC DISEASES.....	0.1	...	...	0.1	0.4	0.3
IV.—CONSTITUTIONAL DISEASES	4.4	7.6	1.7	4.7	5.7	6.4
V.—DEVELOPMENTAL DISEASES.....	1.4	4.9	...	...	...	14.0
VI.—LOCAL DISEASES						
1.—Diseases of Nervous System	2.8	9.2	0.8	0.5	2.6	12.8
2.—Diseases of Circulatory System	1.1	0.1	0.2	0.6	2.9	8.6
3.—Diseases of Respiratory System	5.2	16.1	0.5	1.2	6.5	26.9
4.—Diseases of Digestive System	0.8	1.8	0.2	0.2	1.4	4.1
5.—Other Local Diseases	0.7	0.5	0.3	0.7	1.2	2.9
VII.—VARIOUS FORMS OF VIOLENCE.....	0.6	1.1	0.4	0.3	0.6	1.8
VIII.—ILL-DEFINED CAUSES	1.1	6.4	0.1	0.1	0.6	1.1

TABLE E1.

AVERAGE ANNUAL RATES OF MORTALITY AT CERTAIN AGE-GROUPS IN THREE SUCCESSIVE QUINQUENNIA.

CAUSES OF DEATH.	All Ages.			Under 5 years.			5-20 years.		
	Quinquennial means.			Quinquennial means.			Quinquennial means.		
	1871-75.	1876-80.	1881-85.	1871-75.	1876-80.	1881-85.	1871-75.	1876-80.	1881-85.
All Causes.....	28.4	27.6	23.0	94.9	95.4	74.7	6.7	6.4	5.2
Smallpox	0.5	0.5	...	1.1	1.0	...	0.4	0.5	...
Measles	1.0	0.8	0.7	6.7	5.1	4.5	0.1	0.1	0.1
Scarlatina	1.0	1.2	0.5	4.8	5.8	2.4	0.9	1.0	0.4
Diphtheria	0.1	0.1	0.1	0.5	0.5	0.5	0.1	0.1	0.1
Croup (not spasmodic)	0.3	0.2	0.2	1.8	1.5	1.4	0.1	0.1	0.1
Whooping Cough.....	0.9	0.9	0.7	5.9	6.2	4.7	0.1	0.1	0.1
Cont'd Fevers. } Typhus	0.1	0.1	...	0.1	...	...	0.1	...	...
} Enteric	0.5	0.4	0.3	0.9	0.8	0.3	0.5	0.4	0.4
} Continued	0.1	0.1	...	0.3	0.4	0.1	0.1	0.1	...
Diarrhoea and Dysentery.....	2.2	1.8	1.3	13.7	11.2	8.3	0.1	0.1	...
Puerperal Fever	0.1	0.1	...	...	...	...	...	...	...
Other Zymotics.....	0.5	0.6	0.4	2.2	3.0	1.9	0.1	0.1	0.1
Phthisis	2.8	2.7	2.5	0.8	0.7	1.0	1.5	1.2	1.1
Other Tubercular Diseases	0.9	1.2	1.1	5.3	6.9	6.1	0.3	0.3	0.4
Brain Diseases	3.3	3.4	3.1	13.6	13.9	10.9	0.5	0.5	0.6
Heart Diseases	1.2	1.0	1.1	0.3	0.2	0.2	0.3	0.2	0.3
Lung Diseases	5.1	6.0	5.0	14.6	19.4	14.7	0.4	0.6	0.5
CAUSES OF DEATH.	20-40 years.			40-60 years.			Over 60 years.		
	Quinquennial means.			Quinquennial means.			Quinquennial means.		
	1871-75.	1876-80.	1881-85.	1871-75.	1876-80.	1881-85.	1871-75.	1876-80.	1881-85.
All Causes.....	11.5	10.6	9.3	28.1	26.0	23.6	91.3	85.5	80.3
Smallpox	0.5	0.6	...	0.2	0.3	...	...	0.1	...
Measles	...	...	...	...	...	...	...	...	...
Scarlatina	0.1	0.1	...	...	...	...	...	...	...
Diphtheria.....	...	...	...	...	...	...	...	...	...
Croup (not spasmodic)	...	...	...	...	...	...	...	...	...
Whooping Cough.....	...	...	...	...	...	...	...	...	...
Cont'd Fevers. } Typhus	0.1	0.1	0.1	0.1	0.1	0.1	0.2	...	0.1
} Enteric	0.4	0.3	0.3	0.3	0.3	0.3	0.8	0.5	0.1
} Continued	0.1	...	...	0.1	0.1	...	0.2	0.3	0.1
Diarrhoea and Dysentery.....	0.1	0.1	...	0.2	0.2	0.1	2.1	1.7	1.4
Puerperal Fever	0.1	0.1	0.2	...	...	...	...	...	...
Other Zymotics.....	0.1	0.1	0.1	0.4	0.3	0.3	0.6	0.8	0.5
Phthisis	4.5	4.3	4.0	4.0	4.9	4.2	1.3	1.9	1.6
Other Tubercular Diseases.....	...	0.1	0.1	0.1	0.1	0.1	0.1	0.1	...
Brain Diseases	0.6	0.6	0.6	2.7	2.8	2.8	11.2	11.9	13.7
Heart Diseases	0.9	0.7	0.7	3.1	2.4	2.5	6.6	6.5	7.5
Lung Diseases	1.2	1.3	1.1	8.0	7.6	6.8	26.8	29.5	26.6

SECTION II. rates recorded in the five years immediately preceding. It appears from this table, that, as compared with the quinquennial average, the death-rates from the zymotic and local classes of disease were lower during 1885, whilst the rate from constitutional diseases was somewhat higher.

Mortality from prevalent diseases in 1885, compared with that of previous years

The lower section of the table further shows that amongst children under 5 years of age, the mortality from miasmatic, *i.e.*, common infectious complaints, was lower during 1885 than the average, and that this decline was common to all the districts in the Borough. The same remark applies to the child mortality from nervous diseases and from diarrhoea, and with a single exception, that of the Broughton District, to the mortality from acute lung diseases amongst children. It is, however, unsatisfactory to note that in the District of Regent Road, and especially in that of Greengate, scrofulous diseases have been more fatal in the year just past, than in recent previous years. In order to compare the rate of death in recent years from certain prevalent diseases, with that which obtained during the five years immediately preceding the passing of the Public Health Act, I have constructed a new table, E1, in which the mean death-rates from certain causes, in the five years 1871-75, are compared with the corresponding mean rates in the two succeeding quinquennia.

Number of lives saved, and number lost in 1885, from certain causes

Comparative Nosological Table.—Table F, which is abridged from the classified list of diseases recently issued by the London College of Physicians, furnishes the means of comparing the mortality of present with that of previous years. The following summary, calculated from columns 1 and 2 of Table F, indicates at a glance the diseases which have shown, respectively, a greater or a less fatality in 1885, as compared with the average annual numbers recorded in the previous decennium:—

Causes of Death.	Diminution in 1885.	Excess in 1885.
Smallpox.....	56	—
Measles	—	37
Scarlet Fever	123	—
Typhus Fever.....	—	—
Whooping Cough	36	—
Diphtheria	6	—
Ill-defined Fever.....	12	—
Enteric Fever.....	27	—
Diarrhoeal Diseases	65	—
Cancer.....	—	7
Phthisis	22	—
Premature Birth.....	—	13
Old Age	23	—
Apoplexy and Paralysis.....	—	13
Other Nervous Diseases	109	—
Carried forward	479	70

TABLE F.

DEATHS FROM SEVERAL CAUSES, AT ALL AGES, AND AT SIX GROUPS OF AGES, IN THE BOROUGH AND IN ITS REGISTRATION SUB-DISTRICTS, DURING THE YEAR 1885.

	All Ages.		Deaths at the following ages.						Deaths in the Registration Sub-districts.			
	Corrected Average age, 1875-84.	1885.	Under 5 years.		5-20.	20-40.	40-60.	60 and upwards.	Regent Road.	Greengate.	Pendleton.	Broughton.
			0-1.	1-5.								
All Causes	4987	4283	1216	778	315	572	699	703	1859	879	961	584
Small Pox	57	1	...	1	...	...	...	...	...	1	...	...
Measles	141	178	35	137	6	...	...	...	73	28	59	18
Scarlet Fever	185	62	3	40	18	1	...	...	25	16	15	6
Typhus	10	10	...	1	1	7	1	...	4	2	3	1
Whooping Cough	165	129	51	72	6	...	...	...	69	22	18	20
Diphtheria	23	17	5	10	2	...	...	...	5	3	1	8
Ill-defined Fever	17	5	...	...	2	1	1	1	...	1	2	2
Enteric Fever	75	48	...	3	22	17	6	...	21	7	11	9
Simple Cholera	2	2	1	...	...	...	1	...	...	1	1	...
Diarrhoea, Dysent:	309	244	182	46	1	2	4	9	116	52	47	29
Venereal Affections	45	41	36	4	...	1	...	...	19	10	8	4
Erysipelas	20	21	8	1	1	4	5	2	10	3	6	2
Pyæmia	6	1	...	...	...	1	...	...	...	1	...	...
Puerperal Fever	10	11	...	...	...	11	...	...	5	2	3	1
Other Zymotics	23	4	...	3	...	...	...	1	2	...	1	1
Parasitic Diseases	3	5	5	...	...	...	...	...	3	...	2	...
Dietic Dis: Intemp:	21	21	1	...	...	5	12	3	6	6	6	3
Rheumatic Fever	21	13	...	...	5	6	2	...	7	2	2	2
Cancer	89	96	...	...	1	16	43	36	37	17	29	13
Tabes Mesenterica	88	84	52	26	6	...	...	...	24	23	26	11
Tubercul: Mening:	94	95	34	40	17	3	1	...	47	16	19	13
Phthisis	509	487	8	13	71	258	123	14	201	94	132	60
Scrofula	32	41	24	14	2	...	1	...	21	9	10	1
Constit: Dis: (other)	22	28	1	3	5	8	5	6	10	4	7	7
Prem: Birth	102	115	115	...	...	...	...	...	58	12	35	10
Devel Dis: and Cong: Def: ..	20	25	24	...	1	...	...	...	10	4	6	5
Old Age	146	123	...	...	...	...	1	122	56	22	23	22
Apoplexy and Paralysis	148	161	2	1	3	10	61	84	63	36	38	24
Epilepsy	22	18	3	...	4	5	2	4	6	5	2	5
Convulsions	255	190	147	37	5	1	...	...	87	43	38	22
Brain and Nerv: Dis: (other) ..	202	162	31	38	35	16	18	24	68	33	36	25
Heart Diseases	200	220	2	2	15	35	91	75	93	45	40	42
Croup	48	36	6	26	4	...	...	...	17	9	7	3
Bronchitis	663	559	115	79	4	26	136	199	258	141	99	61
Pneumonia	337	350	89	112	16	47	59	27	128	80	89	53
Lung and Respir: Dis: (other) ..	78	54	14	13	7	5	6	9	20	11	10	13
Teething	16	7	5	2	...	...	...	...	4	1	1	1
Diges: Org: Dis: of	178	151	33	12	13	14	43	36	54	26	37	34
Urinary Org: Dis: of	75	68	2	3	6	11	26	20	26	11	22	9
Parturition, dis: of	31	33	...	...	3	26	4	...	18	5	7	3
Gener: Orgs: dis: of	8	6	...	...	...	3	2	1	2	2	...	2
Locomot: Sys: Dis: of	15	33	4	4	9	6	6	4	9	8	9	7
Accident	114	98	18	14	22	13	16	15	49	25	15	9
Homicide	2	1	...	...	...	1	...	...	...	1	...	...
Suicide	10	7	...	...	...	2	4	1	4	...	...	1
Atrophy	278	174	142	19	1	2	5	5	98	34	25	17
Ill-defined Causes	72	48	18	2	1	8	14	5	26	5	12	5

TABLE F1.

CAUSES OF DEATHS REGISTERED IN EACH OF THE TEN YEARS 1875-84, AND IN THE SEVERAL QUARTERS OF 1885.

Years	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885.			
											Quarter ending			
Mean Temperature	49'4	49'3	48'8	48'6	45'8	49'3	48'3	49'6	49'0	50'2	Apr. 4th.	July 4th.	Oct. 3rd.	Jan. 2nd, 1886
All Causes	4271	4407	4079	4336	4495	4799	4000	4265	4287	4486	1050	1053	1115	1065
Smallpox	32	347	93	1	...	...	7	18	...	...	...	1	...	...
Measles	138	145	137	76	139	134	38	167	156	100	3	48	63	64
Scarlet Fever	251	178	119	185	203	279	84	81	82	144	19	20	11	12
Typhus	9	9	8	12	4	20	7	12	3	10	2	7	...	1
Whooping Cough	142	155	102	132	144	219	160	152	105	131	39	40	19	31
Diphtheria	25	10	13	19	24	22	20	18	24	22	6	3	2	6
Ill-defined Fever	32	19	19	22	6	26	9	5	6	8	1	1	1	2
Enteric Fever	70	47	83	82	52	84	42	46	64	81	6	20	7	15
Simple Cholera	...	4	...	4	1	3	4	3	...	3	...	...	2	...
Diarrhoea, Dysent:	283	263	207	340	141	477	160	237	210	374	15	19	192	18
Venereal Affections	28	33	39	45	41	33	21	38	56	53	10	11	10	10
Erysipelas	19	15	22	11	12	14	15	25	19	15	7	5	2	7
Pyæmia	4	4	9	5	3	...	4	7	9	6	...	1	...	...
Puerperal Fever	15	5	3	4	7	10	15	13	9	8	3	4	1	3
Other Zymotics	2	1	39	60	38	31	11	4	6	5	...	1	...	3
Parasitic Diseases	6	9	...	...	...	...	2	2	4	4	...	1	3	1
Dietic Dis: Intem:	29	22	11	13	13	7	22	26	17	15	7	4	8	2
Rheumatic Fever	17	19	34	23	17	14	6	11	15	19	4	4	...	5
Cancer	73	73	81	80	66	74	89	77	73	93	22	22	32	20
Tabes Mesent:	63	84	64	75	66	91	76	98	82	74	16	24	29	15
Tubercul: Mening:	82	62	68	87	86	90	75	82	96	93	21	30	23	21
Phthisis	382	405	413	434	480	459	451	437	489	477	116	129	123	119
Scrofula	20	10	39	29	59	33	16	19	27	31	3	6	20	12
Constit: Dis: (other)	...	2	16	19	17	17	27	23	33	40	9	7	7	5
Prem: Birth	63	91	55	64	91	85	117	106	97	121	34	29	26	26
Devel: Dis: and Cong: Def:	10	16	20	11	28	14	9	19	20	20	6	4	7	8
Old Age	159	138	114	95	122	143	108	132	144	119	35	33	25	30
Apoplexy and Paralysis	113	98	105	99	121	117	150	150	182	160	41	31	33	56
Epilepsy	20	15	18	14	23	22	18	18	27	16	4	4	2	8
Convulsions	164	201	238	258	298	246	197	269	171	178	44	48	50	48
Brain & Nerv: Dis: (other)	157	157	152	196	173	170	178	212	188	180	56	48	28	30
Heart Diseases	144	142	140	172	191	159	192	191	211	194	65	64	34	57
Croup	43	42	27	47	48	30	28	46	54	52	11	9	9	7
Bronchitis	585	537	582	577	711	583	636	495	544	524	171	130	96	162
Pneumonia	239	250	280	285	304	329	292	314	317	317	95	96	76	83
Lung & Respir: Dis: (other)	66	55	65	84	87	91	56	49	71	54	16	15	9	14
Teething	24	43	9	6	4	4	5	3	13	32	3	2	1	1
Diges: Org: Dis: of	126	150	156	132	172	170	142	153	181	168	41	27	40	43
Urinary Org: Dis: of	66	51	70	56	68	73	64	63	65	75	21	18	14	15
Parturition, Dis: of	33	22	21	20	27	19	39	48	12	30	9	9	6	9
Gener: Orgs: Dis: of	7	6	4	6	5	11	7	7	11	6	3	2	1	...
Other Local Dis:	11	14	10	16	14	16	11	5	19	13	5	6	13	9
Accident	101	100	116	115	112	102	86	80	90	91	32	21	18	27
Homicide	1	...	1	5	3	3	3	3	3	2	...	1	...	...
Suicide	3	14	4	9	12	9	7	8	12	8	...	...	3	4
Atrophy	274	295	253	307	244	246	208	187	186	218	33	33	63	45
Ill-defined Causes	140	49	20	4	18	20	86	106	84	102	16	15	6	11

	Diminution in 1885.	Excess in 1885.	SECTION II.
Brought forward.....	479	70	Number of lives saved, and number lost in 1885
Heart Diseases	—	20	
Pneumonia	—	13	
Other Lung Diseases (except Croup)	128	—	
Atrophy and other ill-defined causes	128	—	
	735	103	
All other causes.....	117	45	
Total diminution in 1885 ...	704		

On referring to page 51 of my sixteenth Annual Report, it will be seen that the number of lives saved in 1884, although very large, was less than the number saved in the year under present notice.

I.—SPECIFIC FEBRILE OR ZYMOTIC DISEASES.

1. **Six Miasmatic Diseases.**—The following diseases, which are included in Class 1 of the new nomenclature,* constitute the group which I have designated the six miasmatic or common infectious diseases: Smallpox, measles, scarlet fever (or scarlatina), whooping cough, diphtheria, and continued fever—the latter term including under it the three forms known as typhus, enteric, and simple continued fever.

Infectious Cases reported under the Notification Act.—The following are particulars of the cases of infectious disease reported to the Health Department during the year 1885, under the Salford Notification Act:—

Districts.		Small- pox.	Scarlet Fever.	Diph- theria.	Typhus Fever.	Enteric Fever.	Puer- peral Fever.
Regent Road		2 ...	270 ...	15 ...	21 ...	81 ...	8
Greengate		2 ...	128 ...	9 ...	6 ...	38 ...	2
Pendleton		— ...	160 ...	7 ...	4 ...	55 ...	3
Broughton		7 ...	74 ...	23 ...	1 ...	31 ...	2
Borough (Total)		11 ...	632 ...	54 ...	32 ...	205 ...	15
Borough	Rate per 1000 living.	0·06 ...	3·28 ...	0·28 ...	0·17 ...	1·06 ...	0·08
	Percentage fatality	9·1 ...	10·1 ...	31·5 ...	31·2 ...	24·4 ...	86·7

Care has been taken that the figures given in the lowest line of this table shall accurately represent the *proportional fatality* incidental to the recorded cases. Each reported case of infectious sickness is registered on a separate printed form, and at its termination—whether by recovery or by death—the result is recorded on that

* Nomenclature of Diseases, by the Royal College of Physicians, of London, 1885.

SECTION II. form, which is then filed for future use. From this table it appears that the proportional fatality amongst the scarlet fever cases was lower during 1885 than in the year immediately preceding—when it was as high as 12·1 per cent. ; and almost identical with the ratio prevailing in 1883, which was 9·9 per cent. The proportional fatality, however, of all the other diseases in the list, was higher in 1885 than in either of the two preceding years. The fatality amongst the 205 completed cases of enteric fever, especially, being higher during last year—almost one in four—whereas it did not exceed 20·4 per cent. in the year 1883, and 18·2 in 1884.

Prevalence and fatality of infectious disease

Relatively to population,* both scarlet fever and enteric fever were less prevalent in 1885 than in either of the two previous years. The ratio of attacks to population in the year 1885 having been below that of the average in the two previous years by 37·1 per cent. in the case of the former disease, and by 42·1 per cent. in that of the latter.

Local incidence of infectious attacks

The following table shows, for each of the four registration districts of the Salford borough, (a) the corrected numbers, and (b) the proportion per 1,000 persons living, of cases of infectious disease notified under the Local Act during the last three years :

A.—NUMBER OF SICK CASES NOTIFIED.												
Diseases.	Regent Road.			Greengate..			Pendleton.			Broughton.		
	1883.	1884.	1885.	1883.	1884.	1885.	1883.	1884.	1885.	1883.	1884.	1885.
Smallpox	...	3	2	...	...	2	...	1	...	6	1	7
Scarlet Fever .	356	405	270	109	276	128	246	237	160	94	236	74
Diphtheria ...	11	40	15	14	12	9	26	24	7	30	23	23
Typhus Fever.	5	20	21	5	10	6	4	5	4	...	...	1
Enteric Fever.	112	197	81	34	36	38	85	125	55	62	64	31
Puerperal Fev:	12	6	8	4	...	2	3	6	3	2	2	2
Cholera	...	...	...	...	...	...	...	...	...	...	...	...

B.—PROPORTION OF SICK CASES PER 1,000 PERSONS LIVING.												
Smallpox	...	...	...	...	...	0·1	...	...	...	0·2	...	0·2
Scarlet Fever .	4·8	5·4	3·5	3·5	8·8	4·1	5·4	5·1	3·3	2·8	6·7	2·0
Diphtheria ...	0·1	0·5	0·2	0·4	0·4	0·3	0·6	0·5	0·1	0·9	0·7	0·6
Typhus Fever.	0·1	0·3	0·3	0·2	0·3	0·2	0·1	0·1	0·1	...	...	...
Enteric Fever.	1·5	2·6	1·1	1·1	1·2	1·2	1·9	2·7	1·1	1·8	1·8	0·9
Puerperal Fev:	0·2	0·1	0·1	0·1	...	0·1	0·1	0·1	0·1	0·1	0·1	0·1
Cholera	...	...	...	...	...	...	...	...	...	...	...	...

* Borough of Salford.—Proportion of attacks to 1,000 persons living:

Year.	Scarlet Fever.	Enteric Fever.
1883	4·4	1·6
1884	6·1	2·2
1885	3·3	1·1

With respect to scarlet fever incidence, it appears from the above figures that during the last three years the disease has been most prevalent in the district of Greengate—Regent Road and Pendleton coming next; whilst, as might have been expected from the character of its population, Broughton stands lowest in the list. It is by no means easy to understand why, in the case of enteric fever, the district of Greengate, which is unquestionably the most unhealthy in the Borough, should enjoy a greater immunity from this filth-bred disease, than does any other division of the Borough; and yet the statistics given above, which are based on a large number of cases, extending over three years, seem on the whole suggestive of that conclusion. The following figures show the seasonal prevalence of infectious sickness during the several months of the year 1885, together with the fatality incidental to the reported cases.

SECTION II.

Scarlet fever, its local incidence

Seasonal prevalence of infectious disease

	Small Pox.		Scarlet Fever.		Diphtheria.		Typhus Fever.		Enteric Fever.		Puerp. Fever.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Year	11	1	632	64	54	17	32	10	205	50	15	13
January ...	-	-	63	8	2	2	-	-	12	4	4	3
February...	-	-	40	7	1	1	9	1	7	-	1	1
March.....	1	-	52	6	6	3	9	1	14	3	-	-
April	4	-	39	8	5	-	5	3	38	11	2	2
May.....	4	-	41	9	7	3	4	2	12	7	1	1
June	2	1	37	2	7	-	4	2	14	1	3	2
July.....	-	-	25	1	1	-	-	-	8	1	-	-
August ...	-	-	38	5	2	2	-	-	17	4	-	-
September	-	-	73	4	3	-	-	-	14	3	1	1
October ...	-	-	94	10	11	2	-	-	22	4	1	1
November.	-	-	83	3	6	2	1	1	21	7	2	2
December.	-	-	47	1	3	2	-	-	26	5	-	-

In the year 1885, as in previous years, scarlet fever showed the greatest proportional prevalence in the Autumn, the attacks reported during the months of September, October and November being equal respectively to 12, 15, and 13 per cent. of the number recorded in the entire year. The period of seven months from February to the end of July, being that of least prevalence. Enteric fever was apparently most prevalent last year in the month of April, when not less than 38 fresh cases were reported; in addition to this however, a well marked recrudescence of the disease is clearly traceable in the returns of 1885, towards the end of the year.

The following table shows the age distribution of the cases of infectious sickness reported during 1885, it also indicates the varying fatality of these diseases at the several ages. Reference will be made to this table when the respective diseases, of which it treats, come under special consideration.

Age distribution of infectious attacks

AGES IN YEARS.	SCARLET FEVER.		DIPHTHERIA.		TYPHUS FEVER.		ENTERIC FEVER.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Under 1 ...	20	5	5	5	1	...	...	...
1 to 2 ...	50	12	2	1	...	...	1	...
2 to 3 ...	54	11	4	2	2	1	3	2
3 to 4 ...	73	9	7	3	...	...	3	...
4 to 5 ...	78	6	7	4	1	...	4	1
5 to 6 ...	69	6	6	1	1	...	8	1
6 to 7 ...	58	4	7	1	...	...	6	1
7 to 8 ...	50	2	1	...	2	...	8	1
8 to 9 ...	39	2	...	...	...	...	11	1
9 to 10 ...	31	2	1	...	1	...	4	1
10 to 11 ...	18	...	...	...	1	...	4	...
11 to 12 ...	26	3	2	...	1	...	10	1
12 to 13 ...	13	...	...	...	1	...	6	1
13 to 14 ...	8	...	2	...	2	...	7	1
14 to 15 ...	16	...	1	...	1	...	11	1
15 to 20 ...	12	1	2	...	4	1	38	14
20 to 30 ...	9	...	1	...	7	2	45	11
30 to 40 ...	6	1	3	...	6	5	25	7
Over 40 ...	2	...	3	...	1	1	11	6
All Ages ...	632	64	54	17	32	10	205	50

SECTION II.

Relative prevalence of infectious attacks, in other protected towns, and in Salford

Disease notification in the protected towns of Great Britain.

I am indebted to my medical brethren of the public health service, either directly or through their respective publications, for the means of compiling the accompanying table, which shows for the years 1884-5, the relative prevalence of certain forms of infectious sickness in the British towns which possess compulsory powers for the notification of infectious disease. The forty towns to which these statistics refer contain in the aggregate a population scarcely less numerous than that of the metropolis itself. In the middle of 1885, these towns are estimated to contain not less than 3,577,677 persons, and amongst them 20,192 cases of dangerous infectious sickness are reported to have occurred during the year, namely:—672 cases of smallpox, 13,043 of scarlet fever, 1,297 of diphtheria, 396 of typhus, and 4,784 of enteric fever.

The 20,192 reported attacks, calculated on the aggregate population of the forty towns, were equal to a rate of 5.64 per 1,000, as compared with 5.82 the average rate obtaining in the 38 protected towns during the year 1884. We have now the means of comparing the rates of infectious sickness in our own Borough, with the corresponding rates in this vast urban population. Taking the mean of the rates of 1884 and 1885, we find that with

RATES OF SICKNESS PER 1,000 OF THE POPULATION, FROM THE SEVERAL
COMMON INFECTIOUS DISEASES, NOTIFICATION OF WHICH IS REQUIRED
UNDER THE LOCAL ACTS OF PARLIAMENT.

Towns.	Smallpox.		Scarlet Fever.		Diphtheria.		Typhus Fever.		Enteric Fever.	
	1884.	1885.	1884.	1885.	1884.	1885.	1884.	1885.	1884.	1885.
Aberdeen	0'05	...	1'59	5'78	0'77	0'49	0'51	0'10	0'91	1'09
Accrington	...	...	1'32	2'74	0'18	0'06	...	...	1'18	1'17
Barrow-in-Furness...	0'06	0'20	2'12	10'03	0'84	1'42	0'12	...	2'60	1'82
Birkenhead	1'34	0'26	3'08	5'97	0'17	0'23	0'17	0'03	0'79	0'41
Blackburn	...	0'04	1'91	1'61	...	...	...	...	2'43	1'15
Blackpool	0'06	0'11	1'68	1'39	0'41	0'44	...	...	1'51	1'22
Bolton	0'12	0'05	2'75	1'69	0'09	0'07	0'06	...	1'44	0'52
Bradford (Yorks.) ..	0'01	0'04	2'35	3'67	0'11	0'20	0'01	0'01	0'95	0'71
Burnley	...	0'17	2'49	4'97	0'08	0'10	...	...	1'01	1'31
Burton-on-Trent ...	...	...	1'93	8'02	0'75	1'52	...	0'02	0'59	0'61
Bury	0'06	0'02	2'11	2'80	0'13	0'09	0'07	0'02	1'52	0'51
Chadderton	...	...	3'22	3'58	...	0'16	...	...	1'94	0'31
Derby	0'08	...	4'44	1'87	0'01	0'01	...	...	3'93	0'55
Dundee	...	...	2'86	1'23	1'15	0'53	0'19	0'39	0'79	0'71
Edinburgh	...	0'05	5'67	4'34	0'73	0'59	0'17	0'23	2'36	2'35
Greenock	...	0'08	3'03	1'22	0'45	0'38	0'44	2'05	1'27	0'68
Halifax	0'01	0'09	3'52	2'74	0'05	0'32	0'01	0'01	0'90	0'72
Hartlepool	...	8'78	...	0'72	...	0'17	...	1'72	...	3'28
Heywood	...	...	0'56	0'08	0'08	0'04	...	...	1'12	1'12
Huddersfield	...	0'03	1'37	2'87	0'09	0'03	...	...	1'00	0'79
Jarrow	0'14	0'37	3'14	8'80	0'03	0'30	0'28	0'03	1'38	0'63
Lancaster	0'50	...	0'86	4'84	...	...	0'58	...	0'72	1'86
Leek	...	...	6'96	1'11	...	...	...	0'07	0'45	0'15
Leicester	0'01	0'06	5'28	13'34	0'36	0'40	...	...	0'90	1'59
Llandudno	...	...	0'57	0'55	0'19	4'61	...	...	0'19	0'37
Macclesfield	...	...	1'55	1'67	0'24	0'05	...	...	0'37	0'32
Manchester	0'08	0'79	4'78	2'30	0'18	0'12	0'18	0'08	0'91	0'80
Newcastle-on-Tyne...	1'15	0'46	14'33	8'00	0'50	0'61	0'11	0'06	1'72	1'65
Norwich	0'01	0'01	0'97	3'06	0'19	0'13	0'01	0'02	1'34	6'40
Nottingham	0'05	0'04	1'87	1'70	0'55	1'11	...	...	1'06	1'37
Oldham	0'01	0'03	2'32	1'81	0'16	0'22	...	...	0'82	0'46
Portsmouth	0'01	0'08	1'97	1'15	1'22	0'66	...	...	4'00	5'23
Preston	0'03	0'11	2'58	2'91	0'18	0'16	...	...	2'18	1'24
Reading	0'04	0'06	4'65	9'03	0'63	0'45	...	...	0'52	0'34
Rotherham	0'11	0'08	4'09	8'05	0'14	0'11	...	...	3'82	1'66
Salford	0'03	0'06	6'12	3'28	0'52	0'28	0'19	0'17	2'24	1'06
Stafford	0'05	...	0'98	0'24	0'05	0'10	...	...	0'39	0'05
Stalybridge	...	0'11	4'97	1'29	0'15	...	...	0'04	0'67	0'66
Warrington	0'09	...	0'49	0'44	...	0'13	0'05	0'07	0'81	0'42
York	...	...	...	0'92	...	0'01	...	...	...	0'59
Total 38 or 40 Towns	0'12	0'19	3'71	3'64	0'38	0'36	0'10	0'11	1'51	1'34

SECTION II. the exception of smallpox, all the diseases in the table showed a greater relative prevalence in Salford than in the thirty-eight or forty protected towns taken together.

Miasmatic mortality

Mortality from Infectious Disease.—The Salford rate of death in 1885, from the six common miasmatic diseases, was equal to 2·33 per 1,000, a rate which is lower than the Salford average in the previous four years by nearly five per cent. The following figures, which have been calculated from the Registrar General's returns, supply the means of comparing the Salford death-rates from these diseases with the rates obtaining in other parts of England and Wales:

	1881.	1882.	1883.	1884.	Mean.	1885.
England and Wales	1·76	2·09	1·64	1·72	1·80	1·64
28 Great English Towns .	2·47	2·73	2·09	2·29	2·39	2·04
London	2·81	2·93	2·07	2·41	2·56	2·11
Salford	2·07	2·71	2·31	2·47	2·45	2·33
50 other towns	—	2·18	1·80	1·76	1·91	1·88
Rural Districts	—	1·60	1·37	1·39	1·45	1·37

Decrease much greater in large towns than in rural districts

The most remarkable point in this table is, that whereas in all the larger urban populations of England, miasmatic mortality has shown a considerable reduction in 1885, as compared with recent previous years—amounting in the case of London to 17 per cent.—yet the reduction in the rural districts of England has amounted to only $5\frac{1}{2}$ per cent; and in the fifty smaller town districts, the decrease in the year 1885 has been less than two per cent. This would seem to imply that although infectious diseases continue to be excessively rife in densely-crowded populations, nevertheless the sanitary efforts for their repression are commonly more successful in the great towns than in the smaller urban communities.

Smallpox.—11 fresh cases of smallpox were reported in Salford during last year, against 6 and 5 cases respectively, in the two preceding years.

Distribution of smallpox throughout England and Wales

According to the return on page 41, one or more cases of smallpox were reported last year in 26 out of the 40 protected towns of Great Britain. The disease however does not seem to have been seriously prevalent in any of these areas, with the single exception of Hartlepool, where the attacks during 1885 represented a rate of 8·78 per 1,000 of the population.

The following figures show the distribution of smallpox mortality throughout the kingdom in 1885, and in recent previous years:—

	1881.	1882.	1883.	1884.	Mean.	1885.
England and Wales	0·12	0·05	0·04	0·08	0·07	0·10
28 Great English Towns..	0·30	0·08	0·05	0·14	0·14	0·12
London	0·62	0·11	0·03	0·22	0·25	0·22
Salford	0·04	0·10	0·00	0·00	0·04	0·00
50 other Towns	—	0·06	0·07	0·03	0·05	0·02
Rural Districts	—	0·03	0·02	0·06	0·04	0·10

If mortality is to be trusted as a guide, it appears that in all the urban districts smallpox has shown a diminished prevalence in 1885, as compared with the average; although in London the amount of decrement is not great. In the rural parts of England, however, instead of a reduction, an actual increase has been observed in the year just closed. Only one death from smallpox has occurred in Salford since the end of the year 1882.

SECTION II.
Diminished smallpox mortality in great English towns, during 1885

Measles.—This disease was unusually prevalent and fatal in Salford during 1885, accounting for not less than 178 deaths in that year, as compared with 100 in the preceding year, and 141, the decennial average number, corrected for increase of population. Measles was most fatal in the third and fourth quarters of the year 1885, and least so in the first quarter.* The following statement shows the incidence of measles mortality in various parts of the kingdom. The figures represent annual rates per 1,000 of the population.

Excessive measles mortality in 1885

	1881.	1882.	1883.	1884.	Mean.	1885.
England and Wales	0·28	0·48	0·35	0·42	0·38	0·51
28 Great English Towns ..	0·51	0·67	0·50	0·60	0·57	0·69
London	0·66	0·60	0·62	0·55	0·61	0·72
Salford	0·22	0·92	0·84	0·52	0·63	0·92
50 Other Towns	—	0·58	0·41	0·45	0·48	0·75
Rural Districts	—	0·33	0·23	0·28	0·28	0·37

The year 1885 thus appears to have been one of excessive measles fatality throughout the country generally—but the excess seems to have been greatest, not in the 28 great towns, but in the 50 second-rate towns, whilst it was least in London. The Salford rate of mortality from measles last year, was higher than that of any of the other areas in the table; when compared, however, with the measles rate of the other great centres of population, taken separately, the Salford rate was exceeded by that of Sunderland (3·05); Newcastle (2·25); Cardiff (1·98); Liverpool (1·24); and Manchester (1·12).†

Throughout the country generally, but especially in the 50 second-rate towns

Scarlet Fever.—Information of the occurrence of 632 cases of scarlet fever reached the Health Department during the year 1885, against 1,154 cases in 1884, and 805 in 1883. Of the 632 cases reported last year, 64 terminated fatally, the proportion of fatal cases to attacks, being therefore 10·1 per cent, as compared with 12·1 per cent in 1884, and 9·9 per cent in the preceding year. As regards the seasonal incidence* of scarlet fever during 1885, it appears that the largest number of attacks occurred towards the latter end of the year, the reported cases bearing to the population, the ratios of 4·4 per 1,000 in the December quarter—2·5 and

Decrease of Scarlatinal incidence in 1885

* Seasonal incidence of measles mortality in Salford:—

	March Qr.	June Qr.	September Qr.	December Qr.
Year 1885	3	48	63	64
Corrected average, 1875-84	31	33	21	38

† See Registrar General's Annual Summary for 1885, page XXI.

SECTION II. 2'9, respectively, in the June and September quarters, and 3'2 in the March quarter. The disease, however, seems to have assumed a milder type as the year advanced; for, whereas in the first half of the year, the mortality averaged 14'2 per cent of the attacks, in the remaining half-year, the percentage fell to less than one-half, or 7'0 per cent.

Scarlatinal attacks in relation to age

From the figures given in the table on page 40, it would appear that the incidence of Scarlatina is mainly on children between the ages of one year and eight. It is notorious that infants under twelve months old, enjoy a far greater immunity from attack than do children a year or two older—but the statistics of 1885 confirm those of previous years, in showing that the mortality amongst scarlet fever patients at this early age is very great. On reference to present and past returns, I find that out of more than 2,500 reported cases at all ages, not more than 59 were infants under one year, but of these, more than one-fourth part succumbed to the disease! With regard to the prevalence of scarlet fever amongst children above the age of eight or ten years, it is necessary to accept with much reservation the evidence of the above and similar statistics. At present I am not in a position to affirm so much, but there are strong grounds for believing that the immunity from scarlet fever which these figures attribute to young adults, is apparent only, and will disappear when the proportion can be ascertained of persons at these ages who have been protected by an attack during early childhood. Relatively to population, the seizures were most prevalent last year in Greengate,† where they were equal to a rate of 4'1 per 1,000 persons living; whilst in Broughton, the proportion did not exceed 2'0 per 1,000. The proportional fatality was also the heaviest in Greengate, where 11'7 per cent of the persons attacked succumbed to the disease.

Prevalence of scarlatina in forty protected English towns

The table on page 41 gives valuable information as to the prevalence of scarlatinal sickness in the protected towns of the Kingdom. Within the area represented by these towns containing an aggregate population of more than three-and-a-half millions, the rate of scarlatinal sickness in 1885 was equal to 3'64 per 1,000 persons living. Thirteen out of the 40 towns in the list had individually a rate in excess of the mean, the highest rates amounting to as much as 10 per 1,000 in Barrow-in-Furness, and

* Seasonal distribution of scarlatina:—

	March Qr.	June Qr.	September Qr.	December Qr.
Reported attacks.....	155	121	142	214
Annual Rate per 1,000 living.....	3'2	2'5	2'9	4'4
Percentage Fatality.....	13'5	14'9	7'0	7'0
Percentage of removals to Hospital.....	43'2	58'7	55'6	49'1

† 1885.—Local distribution of scarlet fever in Salford:—

	Regent Road.	Greengate.	Pendleton.	Broughton.
Reported attacks.....	270	128	160	74
Rate per 1,000 living.....	3'5	4'1	3'3	2'0
Percentage Fatality.....	10'0	11'7	9'4	9'5

13 in Leicester. In each of the remaining 27 towns (including Salford) scarlet fever incidence was in defect of the mean. The lowest rates being 0·24 in Stafford and 0·08 in Heywood.

SECTION II.
Scarlatinal prevalence in protected English towns

The following statement, based on the Quarterly Returns of the Registrar General, gives the annual rates of scarlatinal mortality in the various parts of the Kingdom.

	1881.	1882.	1883.	1884.	Mean.	1885.
England and Wales ...	0·55	0·52	0·47	0·40	0·49	0·23
28 Great English Towns	0·64	0·55	0·57	0·45	0·55	0·24
London	0·55	0·52	0·51	0·36	0·49	0·17
Salford	0·47	0·45	0·44	0·75	0·52	0·32
50 other Towns.....	—	0·65	0·55	0·51	0·57	0·25
Rural Districts	—	0·47	0·39	0·34	0·40	0·21

It appears from this statement that, as compared with past years, the year under report was one of exceptionally light scarlatinal fatality in all parts of the Kingdom; but what strikes one as surprising is, that the scarlet fever rate should be lowest in the metropolis, where in years gone by we have been accustomed to look for an excessive fatality from this disease.

Diphtheria.—During the year 1885, this department received information of the occurrence of 54 cases of diphtheria, 17 of which terminated fatally. In addition to the 17 fatal cases referred in the certificates to diphtheria, there were registered in Salford during the year 36 other deaths, which were attributed to membranous or true croup, but which for practical purposes may be treated as essentially diphtheritic in character: and if we assume for every fatal case of croup, the same proportion of non-fatal seizures, as that observed in the case of patients whose illness was certified as diphtheritic during life, it is probable that instead of 54 cases, as given in the table on page 39, there actually occurred in Salford not less than from 160 to 170 cases of diphtheria during the year 1885.

Relation of membranous croup to diphtheria

The proportional prevalence of diphtheritic sickness in other parts of the country is shown by the table on page 41. It there appears that the disease was less prevalent amongst the people of Salford than amongst the aggregate population of the 40 protected towns. Omitting the case of Nottingham, the disease seems to have shown greater prevalence in the smaller towns than in the larger. In proportion to the population the attacks were most numerous last year in Burton-on-Trent (1·52) and Barrow-in-Furness (1·42). In four of the towns namely:—Blackburn, Lancaster, Leek, and Stalybridge, the disease was not reported to have been present at all, whilst the recorded rates did not exceed 0·01 per 1,000 in the important towns of Derby and York.

Prevalence of diphtheria in other protected towns

The following statement shows the distribution of mortality from diphtheria throughout the kingdom, the figures represent annual rates per 1,000 of the population.

SECTION II.		1881.	1882.	1883.	1884.	Mean.	1885.
Mortality from diphtheria in England and Wales	England and Wales ...	0'12	0'15	0'16	0'19	0'16	0'15
	28 Great English Towns	0'14	0'16	0'16	0'17	0'16	0'17
	London	0'17	0'22	0'24	0'24	0'22	0'22
	Salford	0'11	0'10	0'13	0'12	0'17	0'09
	50 other Towns.....	—	0'08	0'08	0'10	0'09	0'09
	Rural Districts	—	0'14	0'15	0'19	0'16	0'16

The rate of death from diphtheria throughout the country generally in 1885, does not differ materially from the average; the Salford rate was lower in that year than at any period since 1880; the numbers however are small, upon which the rate is based, and the latter would therefore be considerably affected by reference of even a few deaths to "croup" instead of to diphtheria.

Variation of mortality with age of patients

Diphtheria, or at any rate fatal diphtheria is shown by the table on page 40, to be confined principally to young children, and our experience in Salford, which now extends to 234 completed cases, goes to show that, as in the case of scarlatina, the fatality of this disease decreases rapidly as age advances. Thus, amongst children under five years of age, the fatality amongst the cases reported during the last three years was more than 55 per cent. whereas it was less than 14 per cent. amongst persons above that age.

Mortality from whooping cough

Whooping Cough.—129 deaths from this disease were reported by the Salford Registrars during 1885, as compared with 131 in the year immediately preceding, and 105 in the year 1883; the decennial average corrected for increase of population, being 165. In the year 1885 as in previous years, the fatality of the disease was greatest in the March and June quarters, and least so in the autumn*. The following figures give the rates of mortality from whooping cough in the various parts of the kingdom.

	1881.	1882.	1883.	1884.	Mean.	1885.
England and Wales ...	0'42	0'58	0'39	0'42	0'45	0'44
28 Great English Towns	0'57	0'90	0'46	0'64	0'64	0'60
London	0'51	1'20	0'40	0'79	0'73	0'61
Salford	0'90	0'84	0'57	0'68	0'75	0'67
50 other Towns.....	—	0'47	0'37	0'33	0'39	0'53
Rural Districts	—	0'37	0'32	0'27	0'32	0'34

Decrease of, in great towns, and increase, in the smaller

From this we see, that although in the great centres of English population, the mortality from whooping cough as compared with the average, has greatly declined in 1885, nevertheless it has shown increased fatality in the rural districts, and a considerably increased fatality in the 50 smaller towns.

* Whooping Cough, 1885 :—Seasonal distribution.

	March Quarter.	June Quarter.	Sept. Quarter.	Dec. Quarter.
Year, 1885.....	39	40	19	31
Corrected average, 1875-1884.	48	39	24	32

Typhus Fever.—This disease was reported to have attacked 32 persons in Salford during the year 1885, as compared with 35 in 1884, and 14 in 1883. The first case reported occurred in February, when the disease was recognised in Cook Street, Salford; this case was followed during the same month by 8 other cases, and by 9 more in March. In April 5 cases were reported, 4 in May and 4 in June. After which date only one case occurred during the year, the patient being a child two years of age. The following are the particulars of the dates of attack, and of the localities infested, during 1885:—

		[SECTION II.]	
		Typhus prevalence in 1885	
Jan.	31—20, Cook Street, child æt 13 years— recovered in hospital.	Dates of attack	
Feb.	4—3, Foden's Court, child aged 4 years— do.		
	6—10, Weaver Street, infant aged 7 months— do.		
	6—10, do. child aged 12 years— do.		
	8—10, do. female aged 39 years—died in hospital.		
	11—18, W. Charles St., female æt 19 years—recov'd in hospital.		
	16—27, Ross Street, female aged 27 years— do.		
	20—20, Cook Street, child aged 10 years (2nd case) do.		
	21—21, Hereford Street, female aged 32 years— do.		
	23—27, Ross Street, (2nd case) child aged 7 years—do.		
Mar.	7—Wilton Hospital, fever nurse, aged 22 years—do.		
	7—21, Ayr Street, child aged 9 years— do.		
	9—21, „ mother of above, aged 38 years—do.		
	9—4, New Bury Street, female aged 15 years— do.		
	10—84, Melbourne Street, child aged 7 years— do.		
	10—3, Foden's Court, child æt 2 years (2nd case)—do.		
	11—46, Robinson Street, female aged 14 years— do.		
	16—31, Young St., Pendleton, child aged 11 years—do.		
	29—2, Primrose Hill, male aged 24 years—died in hospital.		
	31—3, Chapel Court, female æt 21 y'rs—recov'd in hospital.		
Apr.	2—17, Kent Street, female aged 30 years—died in hospital.		
	7—15, Pimlot St., male æt 35 years—died in hospital.		
	8—Wilton Hospital, Resident Medical Officer—recovered.		
May	1—4, New Bury St., m. æt 18 y'rs (2nd case)—recov'd in hospital.		
	3—1 do. male æt 59 y'rs, (3rd case)—died in hospital.		
	7—109, Sussex Street, female aged 18 years—died at home.		
	10—14, Primrose Street, male aged 34 years—died in hospital.		
	12—4, New Bury St., fem. æt 13 (4th case)—recov'd in hospital.		
June	6—2, Wain's Court, child aged 5 years— do.		
	10—2, do. father of above, aged 27 years—do.		
	13—2, do. mother of do., æt 27 y'rs—died in hospital.		
Nov.	9—7, Davidson Street, child aged 2 years—died at home.		

The following statement shows the rate of typhus fatality in Salford, in England and Wales, and in London—compared with that during the years which have elapsed since the last census.

	1881.	1882.	1883.	1884.	Mean.	1885.
England and Wales ...	0'02	0'04	0'03	0'01	0'03	—
London	0'02	0'01	0'01	0'01	0'01	0'01
Salford	0'04	0'07	0'02	0'05	0'05	0'05

Typhus fatality in Salford and in other parts of England

SECTION II.

Typhus—decrease of in England, during recent years.

The mortality from this loathsome disease, the very existence of which is discreditable to English civilisation, has gradually declined of late years throughout the country generally, although in Salford sporadic cases are now and then imported from districts outside the Borough: and on every such occasion, it requires all the attention of the Sanitary Inspectors, aided by powers of notification and isolation, to prevent the disease from becoming seriously epidemic amongst us.

Prevalence of Enteric Fever in 1885

Enteric, or Typhoid Fever.—During the year under present report, 205 fresh cases of Enteric fever were reported to the Health Department under the Notification Act, as compared with 422 cases in 1884 and 289 in the preceding year. As 50 deaths occurred among the reported cases during 1885, the proportional fatality was equal to 24·4 per cent, as compared with 20·4 and 18·2 per cent respectively in the years 1883–84. Locally, the disease appears to have been most prevalent in the district of Greengate, where the attacks bore to the population the ratio of 1·2 per 1,000. In Broughton the proportion was 0·9*, but in the latter district the ratio of deaths to completed cases was higher† than in the other parts of the Borough. The seasonal distribution of the Enteric attacks during 1885 was as follows: 33 cases occurred in the first quarter, 64 in the second, 39 in the third, and 69 in the fourth quarter of the year.

Mortality from enteric fever

The rates of mortality in recent years in England and Wales, in London, and in Salford were as follows:

	1881.	1882.	1883.	1884.	Mean.	1885.
England and Wales	0·21	0·23	0·23	0·24	0·23	—
London	0·25	0·25	0·24	0·23	0·24	0·14
Salford	0·24	0·25	0·35	0·42	0·32	0·25

The returns of 1885 confirm those of recent previous years in attributing to Enteric Fever a very unstable character. No age seems to be free from danger of attack, and although Salford Statistics with reference to this disease lend support to the statement that the fatality increases generally with advancing years, yet we find that in some years at any rate the disease is terribly fatal even in infancy. During the three years ending 1885, the proportional fatality from Enteric attacks, amongst children aged from 1 to 5 years, was equal to 23 per cent.

"Fever" mortality in England and Wales

Continued Fever.—Under this unsatisfactory heading are included, in addition to Typhus and Enteric Fevers, various ill-defined pyrexial maladies—such as "febricula," simple continued fever, &c. The Annual Reports of the Registrar General furnish

* See Table on page 38.

† Enteric Fever—Local prevalence and fatality.

	Regent Road.	Greengate.	Pendleton.	Broughton.
Attacks	81	38	55	31
Percentage fatality	25·9	23·7	20·0	29·0

the means of comparing the great English Towns with one another, in respect of their mortality from "Fever," but they do not differentiate between the various forms of the disease.

SECTION II.

Local prevalence
of "Fever" fatal-
ity

The following figures, which give the annual rates of death per 1,000 of the several populations, will show the mortality from all forms of continued fever in 1885 and in recent previous years.

	1881.	1882.	1883.	1884.	Mean.	1885.
England and Wales ...	0·27	0·31	0·29	0·27	0·29	0·21
28 Great English Towns	0·31	0·37	0·35	0·29	0·33	0·22
London	0·30	0·28	0·27	0·26	0·28	0·17
Salford	0·33	0·35	0·40	0·52	0·40	0·33
50 other Towns.....	—	0·34	0·32	0·34	0·33	0·24
Rural Districts	—	0·26	0·26	0·25	0·26	0·19

It is satisfactory to note, that not only in Salford, but throughout the country generally, the fever death-rate in 1885 was considerably below the average.

Diarrhoeal Diseases.—During the year under report, 246 deaths were referred by the registrars to diarrhoeal diseases, as compared with 377 in 1884, and 311 the corrected decennial average. Of the 246 deaths at all ages in 1885, not less than 229 were children under 5 years of age, including 183 infants, who had not completed their first year's existence. The Salford rate of diarrhoeal mortality last year, was equal to 1·26 per 1,000 living at all ages, and was consequently somewhat below the average rate in the preceding four years.

Diarrhoea and
dysentery

The following figures show the proportional incidence of diarrhoeal mortality, in the various divisions of the kingdom.

	1881.	1882.	1883.	1884.	Mean.	1885.
England and Wales ...	0·56	0·65	0·60	0·97	0·70	0·46
28 Great English Towns	0·79	0·86	0·77	1·21	0·91	0·69
London	0·80	0·55	0·67	0·97	0·75	0·66
Salford	0·90	1·31	1·14	1·95	1·33	1·26
50 other Towns.....	—	0·78	0·67	1·09	0·85	0·47
Rural Districts	—	0·48	0·43	0·72	0·54	0·34

From this statement it appears that throughout the country generally, the mortality from diarrhoea in 1885 was much below the average, but the decrease in Salford was proportionally far smaller than in any of the areas or groups of towns in the above list. As compared with the 27 other Great Towns of England, for which the Registrar General publishes uniform statistics of diarrhoeal mortality, Salford occupies an unenviable position. She is grouped with Preston and Leicester, as possessing the highest diarrhoeal mortality; and unfortunately her position in this respect, in relation to other great towns, does not improve as years roll on.

SECTION II.

Mortality from
diseases of the
constitutional
class

Apparent in-
crease in mortali-
ty from cancer

Constitutional
mortality in Sal-
ford and in Lon-
don

IV.—CONSTITUTIONAL DISEASES.

To this important class of diseases, 844 deaths were referred during 1885, a number equal to 19·7 per cent. of the deaths from all causes. The rate of mortality from constitutional diseases was therefore equal to 4·4 per 1,000 of the population at all ages, which is slightly in excess of the average rate in the five previous years. Of the diseases included in the "Constitutional" class, rheumatic fever, tabes mesenterica, and phthisis showed a decline last year in Salford, as compared with the corrected decennial average*, but the deaths from ill-defined forms of scrofula showed an increase, and those from cancer were also more numerous last year than in recent previous years. The continuous increase in the number of deaths attributed to cancer in recent, as compared with earlier years, is a disquieting but an unquestionable fact, and the question as to whether this increase is actual, or whether it is only apparent, is one which now exercises some of the best minds in the profession. In the recently issued report of the Registrar General, Dr. Ogle gives his reasons for still adhering to the belief that the increase of mortality under the heading of cancer is mainly due to improvement in medical diagnosis, and does not imply an actual increase in the prevalence of malignant disease. Since Dr. Ogle in virtue of his position as chief of the Statistical Department at Somerset House, enjoys exceptional opportunities for arriving at a sound judgment on this important question, it is reassuring to receive his testimony to the above effect.

The average rate of mortality from constitutional diseases in Salford during the five years 1881-85, was 4·28 per 1,000, the corresponding rate in London, being 4·04. The London mortality during this period from cancer, was equal to 6·4 per 10,000 of the population, and was therefore considerably in excess of that recorded here, which did not exceed 4·6. The London rates of death from rheumatic fever and from diabetes, were also in excess of the corresponding Salford rates, but with these exceptions our local constitutional rates were higher than those of the metropolis.

V.—DEVELOPMENTAL DISEASES.

Mortality from
diseases of the
developmental
class

263 deaths or 6·1 per cent. of the total mortality from all causes, were referred to this small class, which relates mainly to two death causes, premature birth, and decay of nature, or "old age". The rate of mortality from developmental diseases scarcely varies in Salford from year to year. In 1885 it was equal to 1·4 per 1,000, which is also the decennial average rate. The Salford rate of mortality from this class of diseases (1·38) in the five years 1881-85, exceeded the corresponding rate in London for the same period, which was 1·21 per 1,000. The excess was most marked in

* See table F on page 35. Columns 1 and 2.

the case of premature birth, the Salford rate of death from which cause, was equal to 6.0 per 10,000 of the population, whilst in London it did not exceed 4.5.

SECTION II.
Developmental
diseases

VI.—LOCAL DISEASES.

Not less than 2048 deaths or 47.8 per cent. of the mortality from all causes, were referred to this class of diseases during the year 1885; these deaths were equal to a rate of 10.6 per 1,000 of the population, as compared with 11.2, the average rate in the five previous years. Of the 2048 deaths, composing this important group, not less than 963, or nearly one half were referred to bronchitis, pneumonia, and pleurisy, &c. As in past years^o acute lung diseases were far the most fatal during 1885, in the unhealthy district of Greengate, where the deaths were equal to 7.4 per 1,000 of the population, whilst the rate did not exceed 3.5 in Broughton, and 4.1 in Pendleton. It is satisfactory to record that nervous diseases, which usually form so important a factor in the mortality of children, still continue to show a decline in Salford, the death-rate under 5 years amongst children living at that age, having fallen from an average of 11.8 per 1,000, to a rate of 9.2 per 1,000 in the year under report. The mean rate of mortality from the local class of diseases in the city of London, during the 5 years 1881-5, was equal to 99 per 10,000 of the population, as compared with 110 in our own Borough. The London rate due to apoplexy and paralysis was equal to 5.4 per 10,000, in Salford to 8.7. In London the deaths referred to convulsions equalled 6.2 per 10,000, of the population, in Salford 10.9. In the City acute lung diseases were fatal in the ratio of 41 per 10,000 of the population, in the Borough the proportion was 50. On the other hand, heart diseases appear to have been more fatal to London residents than to us; the London rate having been equal to 13.5 in 10,000 living, that of Salford, to 10.9 only. Diseases of the digestive, and of the urinary organs were also more fatal in London than with us, during the recent quinquennium.

Mortality from
the local class of
diseases in Sal-
ford

And in London

VII.—VIOLENT DEATHS.

The Deaths referred to violence in 1885, numbered 106, and were equal to a rate of 6 per 10,000 of the population, which is almost identical with the average rate during the previous decennium.

Violence

VIII.—DEATHS FROM ILL-DEFINED CAUSES.

The satisfactory reduction to which I have adverted, in recent previous reports, as noticeable in the ill-defined group of death causes, has been continued throughout the year under notice. The deaths thus classified are those returned by the Registrars as

Ill-defined
causes of death

* See table D on page 30.

SECTION II.
Ill-defined causes
of death

due to "Dropsy" "Debility" "Atrophy" "Inanition" "Mortification" "Hæmorrhage" "Sudden Death" "Found dead in bed" &c., or to some other cause equally objectionable and worthless for purposes of scientific classification. Ill-defined deaths which in the decade ending with 1884, had been equal to a rate of 18 per 10,000 at all ages, showed a rate in 1885, which did not exceed 11 in the same number living. It is satisfactory to find that this reduction has been effected mainly in the case of deaths of children under five years of age.

TABLE G.

CERTIFICATION OF THE CAUSES OF DEATH IN THE BOROUGH OF
SALFORD, AND ITS FOUR REGISTRATION SUB-DISTRICTS.
IN THE YEAR 1885.

	Total * Deaths.	Certified by		Not Certified.	Proportion per cent. of Deaths.		
		Registered Medical Practitioners.	Coroner.		Certified by		Not Certified.
					Registered Medical Practitioners.	Coroner.	
Borough	4293	3941	179	173	91·8	4·2	4·0
Regent Road District	1853	1690	82	81	91·2	4·4	4·4
Greengate	892	813	49	30	91·1	5·5	3·4
Pendleton	969	895	30	44	92·4	3·1	4·5
Broughton	579	543	18	18	93·8	3·1	3·1
CORRESPONDING DATA FOR THE SIX YEARS 1879-84.							
Borough	26249	23810	1174	1265	90·7	4·5	4·8
Regent Road District	11264	10220	466	578	90·7	4·1	5·1
Greengate	5622	4971	344	307	88·4	6·1	5·5
Pendleton	5822	5342	241	239	91·8	4·1	4·1
Broughton	3541	3277	123	141	92·5	3·5	4·0

* The gross numbers referred to in the above table are the deaths registered in the Borough, without correction for deaths occurring in Institutions outside Salford.

TABLE OF DEATHS DURING THE YEAR 1885, IN THE URBAN SANITARY DISTRICT OF SALFORD, CLASSIFIED ACCORDING TO DISEASES, AGES, AND LOCALITIES, AND SHOWING ALSO THE POPULATION OF SUCH LOCALITIES, AND THE BIRTHS THEREIN DURING THE YEAR.

Population at all ages.		Mortality from all Causes, at subjoined Ages.							Mortality from subjoined Causes, distinguishing Deaths of Children under Five years of age.																							
		At all ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 60.	60 and upwards.	Small-pox.	Measles.	Scarlatina.	Diphtheria.	Croup (not spasmodic).	Whooping Cough.	Typhus.	Enteric or Typhoid.	Other or Doubtful.	Diarrhoea and Dysentery.	Cholera. Eng.	Rheumatic Fever.	Erysipelas.	Pyæmia.	Puerperal Fever.	Phthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Injuries.	Other Diseases.				
Total for Borough exclusive of Public Institutions.	Census, 1881.	176233	192780	6989	3748	1181	711	165	178	954	559	Under 5. 5 upwds.	162	17	1432	113	1	3	236	5	218	1	113	9	9	110	...	17	415	4	28	858
	...	...	...	342	9	16	5	27	152	133	Under 5. 5 upwds.	...	6	...	...	6	...	...	...	...	...	...	...	...	...	...	...	396	462	176	41	666
	...	...	...	...	...	...	...	...	...	...	Under 5. 5 upwds.	...	...	...	...	10	...	...	...	2	...	...	...	...	...	...	3	2	...	...	8	
	...	...	...	33	16	8	...	1	2	6	Under 5. 5 upwds.	8	...	...	...	...	...	...	6	1	...	...	...	...	...	...	...	64	70	32	2	142
Public Institutions.	...	...	...	68	2	26	12	7	21	...	Under 5. 5 upwds.	1	27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10
	...	...	...	...	...	...	...	...	...	...	Under 5. 5 upwds.	...	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	
	...	...	...	72	2	3	9	16	33	9	Under 5. 5 upwds.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Totals ...		176233	192780	6989	4263	1210	764	191	229	1162	707	Under 5. 5 upwds.	171	44	1432	123	1	3	946	5	226	1	113	13	9	...	...	20	417	4	31	878
The subjoined numbers have also to be taken into account in judging of the mortality of the Sanitary District.																																
Deaths occurring outside Salford among persons belonging thereto	Children's Hos- pital, Pendleby Manchester Roy- al Infirmary Monsal Hospi- tal	30	6	13	11	...	...	...	...	...	Under 5. 5 upwds.	1	...	1	...	...	...	...	...	2	...	...	...	...	...	...	...	1	5	...	...	9
		23	...	1	2	1	18	1	...	...	...	Under 5. 5 upwds.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	5
		1	...	1	...	...	...	...	...	...	...	Under 5. 5 upwds.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Deaths occurring within Salford among persons not belonging to the Town...		34	...	1	1	6	21	5	...	...	Under 5. 5 upwds.	...	...	1	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	9

NORMAL DEATH-RATE IN SALFORD, CALCULATED ON THE **HEALTHY DISTRICT** LIFE TABLE STANDARD, WITH DUE ALLOWANCE FOR SEX AND AGE PROPORTIONS OF THE POPULATION.

AGES.	Males.		Females.		Deaths in 1,000 of the population.		
	Annual Rate of Mortality per 1,000, according to Healthy District Life Table.	Salford. ——— Proportion to 1,000 persons, 1881.	Annual Rate of Mortality per 1,000, according to Healthy District Life Table.	Salford. ——— Proportion to 1,000 persons, 1881.	Males.	Females.	Persons.
Cols.	(1.)	(2.)	(3.)	(4.)	(5.)	(6.)	(7.)
All Ages	20·3715	480·10	20·0121	519·90	7·352	7·979	15·331
0-5	42·1993	73·20	36·6129	73·45	3·089	2·689	5·778
5-20	5·3957	160·14	6·1925	163·12	0·864	1·010	1·874
20-40	8·0961	154·02	8·8238	170·46	1·247	1·504	2·751
40-60	13·3406	74·78	12·6498	85·41	0·998	1·080	2·078
60 and upwards ...	64·2745	17·96	61·7625	27·46	1·154	1·696	2·850

The annual rates in cols. (1) and (3), have been obtained from Mr. Humphrey's paper on "The value of Death-rates as a test of Sanitary Condition, 1874, page 467." Reprinted from the journal of the Statistical Society

WORK OF THE HEALTH
DEPARTMENT.

WORK OF THE HEALTH
DEPARTMENT.

WORK OF THE HEALTH DEPARTMENT.

III.—Summary of the action taken during the year for limiting the spread of infectious disease.

Compulsory notification of infectious disease.—Three complete years have now elapsed since the inauguration in Salford of the Compulsory Notification Act; and the accumulating experience of the Health Department, tends more and more to confirm my conviction that the possession by a Sanitary Authority of such powers as those conferred by our Notification Act, is essential to the due fulfilment of the most important of its functions, namely:—The control of infectious disease amongst the people. As far as Salford is concerned, I can affirm that the powers with which we have been entrusted under the Act, have from the first worked well, and with comparatively little friction. I do not know that at any time the liberty of the subject has been interfered with, except in cases where we have interposed to prevent the spread of infection by exposure of infected persons and things, or where children from infected houses have been prohibited from attending school. I desire however, very cordially to acknowledge my indebtedness to my brethren of the medical profession, for the generous assistance they have rendered me in connection with my delicate functions under the Act. It goes almost without saying, that in default of such support, the Health Department would never have known of a sufficient proportion of existing centres of infection to enable them to operate effectually against its spread. It gives me extreme pleasure, therefore, to record my belief that the medical profession in Salford are loyally supporting the Corporation in their duties under the Act for the Notification of Infectious Disease. There is, however, one consideration to which I would advert as considerably modifying the good effect of disease notification in protected towns like our own. I refer to the fact that, inasmuch as only about forty of the English Urban communities at present enjoy the protective advantage of notification, the towns which are still unprotected are continually sending into our midst, patients imperfectly recovered from infectious disease, and thus the active germs of infection are almost constantly being imported amongst us from towns which have not taken the necessary steps for protecting the populations under their charge. It is only necessary to point to the great

SECTION III.

Salford
experience of
compulsory noti-
fication

Conditions modi-
fying good effect
of notification in
protected towns

SECTION III. communities of London and Liverpool, between which cities and this Borough, there is notoriously the closest and most frequent communication, and to state that the vast populations of these towns are still without protection, in order to show how real and how constant is the danger to which I refer. The experience of Salford, affirmative of the paramount importance of disease notification, is substantially that of every other English Town which possesses, and duly utilizes the powers with which it has been invested. Compulsory notification having been now adopted by the Authorities of forty of the large towns of England, most of whom have had considerable experience of its operation, it may fairly be said that the system has now passed beyond the experimental stage, and has achieved general success. If the Local Government Board could be induced to issue a commission of enquiry into the already accomplished results of this beneficent measure in the protected towns of England, there is no doubt that they would obtain evidence which would warrant them in promoting legislation for the extension of notification throughout the country generally. At any rate medical opinion, as represented at the Annual Congress of the British Medical Association recently held at Brighton, has declared itself in favour of the general extension of notification. For the Public Medicine Section of that Association after considerable discussion, carried the following resolution, which I had the honour to propose, and which was seconded by Dr. Grimshaw, the Registrar General for Ireland. "That the Public Health Section of the British Medical Association, having considered the papers read and the remarks made upon them, are of opinion, that the time has arrived when the protection afforded under the Act for the Compulsory Notification of Infectious Diseases should be extended to the population generally; and they recommend the council to consider at an early date the advisability of endeavouring to promote general legislation, with this object in view."

Compulsory notification of infectious disease

Should be extended generally

Resolution to this effect, passed by Public Health Section of British Medical Association, 1886

Spread of infection by elementary schools

Measures for checking the spread of infection by Schools.—Experience under the Education Act has abundantly justified the contention of sanitarians that children convalescing from infectious disease, or coming from infected houses, should be prevented from joining their school-fellows, until all risk of communicating infection has ceased. In no one respect has disease notification proved more uniformly advantageous to us, than in the control which it has enabled us to exercise over the dissemination of infection by schools. On visiting an infected house, where children in attendance at school are found, it is the duty of the Sanitary Inspectors to notify the fact to me on their return to the office. The school authorities are consequently notified of the fact, and by taking timely precautions the necessity for temporarily closing the school is frequently obviated. During the year 1885, not less than 800 letters conveying informa-

tion of this nature have been written from the Health office to the Authorities of the various schools in the Borough. SECTION III.

Hospital isolation of infectious disease.—During the year 1885, the Salford Health Committee have removed from the crowded houses of the poor, 507 cases of dangerous infectious disease, and isolated them in hospital for the protection of the public health; the number admitted during 1884 being 713. Of the 507 isolated cases, 479 were accommodated at Wilton Hospital, and the remainder either at Pendlebury or at Monsall. Of the patients admitted to hospital, 9 were certified to be suffering from small-pox, 18 from Measles, 331 from scarlet fever, 7 from diphtheria, 29 from typhus fever, 66 from enteric fever, and 47 from other acute febrile diseases. With a view of indicating how steadily the Wilton Hospital is gaining favour with the public, I here subjoin a statement showing the increasing proportion of Hospital admissions for scarlatina, to total deaths in the Borough from that disease. Fever report hospital

	1876-84.	1885.
Deaths in Salford from Scarlet fever	1710	62
Sick cases admitted to Hospital	1784	331
Proportion of admissions to Borough deaths 1'04 to 1		5'3 to 1

These figures leave no doubt that the people of Salford are really appreciative of this beneficent provision for their welfare, at a time when affliction renders them powerless to help themselves. During the period of nearly ten years, which has elapsed since the opening of the Wilton Hospital in 1876, the Salford Health Department has secured the isolation in our fever hospitals of not less than 3213 persons, and it should be remembered that this has been effected by simple persuasion on the part of the Sanitary Inspectors. In no single instance have the powers of the Public Health Act been called into requisition for the compulsory removal of a patient to hospital. Public appreciation of Wilton Hospital

The following table shows the number of patients coming under treatment, and the diseases for which they were admitted, during the period which has elapsed, since the opening of the Hospital in 1876. It also shows the number of deaths which have occurred amongst the patients admitted. Hospital admissions and deaths since 1876

	All Causes.	Small Pox.	Measles.	Scarlet Fever.	Typhus Fever.	Enteric Fever.	Other Diseases
Admissions	3213	306	218	1617	196	578	298
Deaths	617	68	38	253	53	120	85

HOSPITAL REPORT FOR THE YEAR 1885.

(52 Weeks ending January 2nd, 1886.)

	WILTON HOSPITAL.				MONSAL & PENDLEBURY HOSPITALS				Total
	Males.		Females.		Males.		Females.		
	Under 5	Over 5	Under 5	Over 5	Under 5	Over 5	Under 5	Over 5	
I.—Patients remaining in Hos- pital on Jan 3rd, 1885. affected with									
Scarlet Fever	8	15	10	18	...	...	...	1	52
Enteric Fever.....	1	6	...	3	...	...	...	...	10
Erysipelas	...	...	...	1	...	...	...	...	1
Other Acute Diseases	...	1	...	2	...	...	...	...	3
Total.....	9	22	10	24	...	...	...	1	66
II.—Admitted during the 52 Weeks ending Jan. 2nd, 1886, affected with									
Small Pox	...	...	...	...	...	4	1	4	9
Measles	8	3	2	1	2	1	...	1	18
Scarlet Fever.....	76	84	63	107	...	1	...	...	331
Diphtheria	...	1	1	1	1	...	...	3	7
Typhus Fever.....	1	11	2	15	...	...	...	...	29
Enteric Fever.....	...	36	1	23	1	3	1	1	66
Erysipelas	...	2	...	1	...	...	...	...	3
Other Acute Diseases	2	17	2	19	...	1	1	2	44
Total.....	87	154	71	167	4	10	3	11	507
Total under Treatment in 1885.	96	176	81	191	4	10	3	12	573
III.—Of the above there were discharged recovered from									
Small Pox	...	...	...	...	...	4	...	4	8
Measles	4	2	...	1	1	1	...	1	10
Scarlet Fever.....	59	81	55	106	...	1	...	1	303
Diphtheria	...	1	1	1	...	...	...	3	6
Typhus Fever.....	1	8	2	11	...	...	...	...	22
Enteric Fever.....	1	32	1	18	1	3	...	...	56
Erysipelas	...	2	...	2	...	...	...	...	4
Other Acute Diseases	2	9	2	11	...	1	...	2	27
Total.....	67	135	61	150	2	10	...	11	436
IV.—Died from									
Small Pox	...	...	...	...	...	...	1	...	1
Measles	...	...	1	...	1	...	...	...	2
Scarlet Fever.....	19	3	8	8	...	...	...	...	38
Diphtheria	...	...	...	...	1	...	...	...	1
Typhus Fever.....	...	3	...	4	...	...	...	...	7
Enteric Fever.....	...	7	...	3	...	...	1	1	12
Other Acute Diseases	...	3	...	9	...	...	1	...	13
Total.....	19	16	9	24	2	...	3	1	74
V.—Remaining in Hospital on Jan. 2nd, 1886, affected with									
Measles	4	1	1	..	...	...	...	...	6
Scarlet Fever.....	6	15	10	11	...	...	...	...	42
Enteric Fever.....	...	3	...	5	...	...	...	...	8
Other Acute Diseases	...	6	...	1	...	...	...	...	7
Total.....	10	25	11	17	...	...	...	...	63
Total under Treatment in 1885.	96	176	81	191	4	10	3	12	573

Disinfection and destruction of Infected Clothing.— SECTION III.

During the year under notice, 666 parcels of infected bedding or clothing have been disinfected at the Wilton Hospital by means of high pressure steam, and 101 articles of worthless clothing have been destroyed by the disinfecting staff.

The following statement shows the cost of maintenance at the Wilton Hospital, during the year 1885, and also the amount received from the Guardians, and from the few patients who were able to contribute something towards their own maintenance.

	£	s.	d.
Salaries of Resident Medical Officer and Matron	250	0	0
Wages of Nurses, &c.	631	12	8
Rates, Taxes and Insurance	189	8	2
Coal, Gas, Water, and Cleaning Materials	411	9	4
Meat, Provisions, and Groceries.....	881	7	1
Medicine and Stimulants.....	377	14	10
Repairs and Alterations	174	1	2
Provender and Farriery	64	18	7
Printing, Stationery, &c. ..	17	19	5
Collecting Hospital Charges	13	7	1
Furniture for Residential House.....	64	8	9
Stamps and Sundries	64	18	10
Maintenance of Patients in Monsall Hospital	£3141	5	11
	178	18	8
	£3320	4	7
Amount Received for Fees.....	£548	2	0

IV.—*Enquiries by the Medical Officer of Health as to conditions injurious to health, existing in the borough, and of the proceedings taken by his advice for the abatement of such conditions.*

Condition of the Homes of the People, and of the Drainage.—SECTION IV.
Although much improvement has been effected within the last few years in the conditions of life obtaining amongst the poorer classes of Salford, it requires but little acquaintance with the by-ways of the borough to convince one that a large proportion of the people are still living under circumstances little conducive to health, either of mind or of body. Like many other comparatively old towns, Salford possesses considerable areas of property which is so old, and of which the structural arrangements are so imperfect, as to be practically incapable of improvement. The houses referred to are low, ill-ventilated and badly situated, with respect to access of light and air; built for the most part without proper

Homes of the people, drainage, &c.

SECTION IV. foundation, they are damp and unhealthy, and as the undrained
 Homes of the midden privies, with which they are provided, adjoin the house
 people walls, the foundations of the houses and their surroundings are
 necessarily sewage sodden. In certain low-lying areas of the
 Drainage borough a further source of evil is the flooding of cottage
 cellars by regurgitation from the sewers, which periodically re-
 curs whenever an excessive downpour of rain takes place.
 Flooding of cel- The cellars are sometimes flooded to a depth of several feet,
 lars and the water, in subsiding, leaves behind it a deposit of filthy
 sludge, which cannot be otherwise than prejudicial to the health
 of the inmates.

When to this is added, that in the very worst districts of the
 borough,—in those, namely, where the death rate for a number
 of years has averaged 40 in a thousand, the private slaughter-
 house is still to be found adding its quota to the aggregate of
 local unhealthiness; I think a case is made out which calls for
 the careful consideration of the Corporation, with a view to early
 amendment. In a coloured chart, which I had the honour to
 present to the Health Committee with my last annual report,
 the districts which I now refer to as notably requiring improve-
 ment are distinguished by a dark blue pigment; and I cannot
 help again reiterating my conviction that it is in these areas
 that Salford would prove especially susceptible to cholera,
 —in case that terrible pestilence should chance to be imported
 amongst us.

River Irwell **Offensive Condition of the Irwell.**—Each returning autumn
 brings to the Health Department its crop of complaints as to
 the insanitary condition of the River Irwell. At the latter end
 of August, 1885, in consequence of the unusually offensive con-
 dition of the river, complaints of a very serious character reached
 this office; but luckily the first week of September brought with
 it an abundance of rain, and thus for a time, the nuisance was
 reduced to its normal amount. On the 3rd of September last
 I presented to the Health Committee the following report,
 which was referred by them to the River Irwell Conservancy
 Committee:—

Report there-
 upon to General
 Health Commit-
 tee
 “In view of the fact that Asiatic Cholera continues to be
 prevalent on the continent, it behoves sanitary authorities in
 this country to be specially vigilant in seeking for and remov-
 ing such nuisances as would probably constitute a source of
 public danger, in case cholera were imported into England. I
 freely confess that I feel considerable uneasiness as to the part
 which the river Irwell might be expected to play in the contin-
 gency referred to. Luckily we have recently been favoured
 with cool weather, but the experience of past years proves that
 whenever a mean temperature exceeding 61° Fahr. prevails for
 any considerable period, the river becomes extremely offensive.
 Permit me, therefore, to recommend the Committee to consider

the advisability of initiating prompt measures for the sanitary improvement of the river, so that before another cholera season comes round our defences against its ravages may, in this particular, be more complete than at present. It will probably be necessary to take the Town Clerk's opinion as to how this question should be approached, but I hope the Committee will adopt this my recommendation at an early date."

SECTION IV.

River Irwell,
condition of

The "Tip" Nuisance.—For several years past the existence, within the borough, of "tips" for the deposit of ashpit refuse and other objectionable material, has been a source of great anxiety to the Medical Officer of Health. These heaps of decomposing refuse will eventually be used for building upon, and as our building bye-laws do not enable the Corporation to exercise selective control over sites for the erection of human habitations, it cannot but eventuate, that houses built on such a foundation will be permanently unhealthy. The "tips," concerning which complaints have been made during 1885, are situate, one at Irlams o' th' Height, two in Pendleton, and one in Broughton (the Marlborough Road "tip").

Deposit of mid-
den refuse on
waste land

The "tip" at Bank Lane, Irlams o' th' Height, has, I understand, been discontinued by order of the Pendleton Committee, and great care has been taken by the officers of that district that only comparatively harmless matters shall be deposited on the other two "tips" in Pendleton. The Marlborough Road "tip," however, is a source of constant perplexity to the Sanitary Inspectors, inasmuch as they find it practically impossible to exercise such supervision as shall prevent the deposit of matter of an objectionable character, especially so long as the scavenging operations are conducted, as at present, during the night. The only available method of solving the "tip" difficulty is the cremation of all such refuse in a properly constructed apparatus, and the utilization of the harmless and valuable product, for the formation of roads, or better still, for the manufacture of mortar.

Solution of the
"tip" difficulty

In one district of the borough an excellent destructor has been already built, and through it is now passed every particle of refuse material which is not saleable as manure, and which used to be tipped in various parts of Salford, to the annoyance and injury of the inhabitants. The operation of refuse destruction is carried on at the Salford Manure Depôt without perceptible nuisance, and at a comparatively small cost in fuel, the ashes and other combustible material which accompany house refuse, being found sufficient to furnish the necessary source of heat. With all deference then, I would again suggest to those Scavenging Committees of the borough which are at present unprovided with a destructor, that they should avail themselves, at an early date, of this ready and inoffensive method of getting rid of a nuisance which must be an ever in-

Fryer's destruc-
tor in use in
Salford District

SECTION IV. Refuse destructor
creasing one, and the treatment of which, in the old way, will become progressively more dangerous, as the density of the population increases.

Fortnightly reports to Health Committee

Periodical Reports of the Medical Officer of Health.—At each of their fortnightly meetings I have presented to the Health Committee a report, in which the current details of official work have been submitted, and the necessary authority obtained for the initiation of legal proceedings, where required. These reports have contained particulars as to the health and sanitary condition of the various districts of the borough from time to time: the fluctuations of the death-rate have been commented on, and the Committee have been kept informed of the local incidence of infectious sickness. They have also been furnished with particulars of the admissions and discharges of patients at the Fever Hospital, and of the number of premises requiring systematic disinfection, or sanitary improvement. Details have likewise been given of the nuisances abated from time to time, of the unwholesome meat destroyed, and of the samples of food and drugs submitted to the Public Analyst. These particulars, together with other matters requiring special attention, have been supplied to the Committee at their periodical meetings, in order to facilitate the administration by them of the various sanitary powers with which they have been invested by the Council.

Systematic inspection of the borough, and abatement of nuisances

Nuisance Inspection and Abatement.—The tables on pages 77 and 78 show that for many past years the duty of systematic inspection and nuisance abatement has been assiduously attended to by the Officers of the Health Department.

It there appears that not less than 9,700 nuisances, injurious to health, were removed from amidst the houses of the people in the year 1885, against 8,280 and 8,790 in the years 1883 and 1884 respectively. It further appears that since the passing of the Notification Act, at the end of 1882, the attention of the Inspectors has been directed much more closely than in previous years to the isolation of patients suffering from infectious disease, and to the consequent disinfection of houses, bedding and clothing. It is a matter of satisfaction to me to acknowledge the readiness with which, generally speaking, the requirements of this department have been complied with, by the owners of property and others, upon whom we have been obliged to serve sanitary notices during the year. Although so large a number of nuisances have been abated, frequently at considerable expense to property owners, the number of the latter who have been proceeded against before the magistrates has been relatively very small.

Meat inspection

Supervision of the Meat Supply.—Under the orders of the Privy Council, it is the duty of the meat inspector to examine all cattle brought to the railway stations of the borough for purposes

of slaughter, whether intended for our own consumption or for transmission to other markets beyond our jurisdiction. In this way large numbers of animals, either diseased or otherwise unfit for food, are annually confiscated at the railway stations, and so dealt with as to prevent their subsequent consumption as human food. In the month of April, 1885, Mr. Fordham detained 88 pigs which were sent here from the county of Norfolk; information having reached him that the animals had been in contact with others affected with swine fever. The inspector found that 7 of the herd were actually suffering from this disease at the time of examination: the whole of the pigs were therefore slaughtered, in compliance with the order of the Privy Council, and ten of them, in addition to the seven found to be infected on inspection, were condemned by the justices as unfit for food.—Altogether 29 animals, suffering from swine fever, were destroyed at Inspector Fordham's request, during the year 1885.

SECTION IV.

Swine fever detected by Meat Inspector

V.—An account of the supervision exercised by the Medical Officer of Health, or on his advice, for sanitary purposes, over houses and places which the Sanitary Authority has power to regulate: with the nature and results of proceedings required, and of action taken with respect to them, during the year.

SECTION V.

Supervision of Common Lodging Houses.—There were 35 common lodging houses* on the books at the end of 1885, against 30 at the date of my previous report. Inspector Wilkinson has paid 454 visits at night to the registered common lodging houses of the borough, which on the whole have been well kept throughout the year, only three summonses having been issued by this department for breach of the regulations. Not a single case of infectious disease has occurred in any of these houses during the year. The weekly average number of lodgers who have availed themselves of accommodation in common lodging houses, has been—88 male, and 14 female regular lodgers, and 354 male and 101 female casual lodgers. The houses have been regularly cleansed and lime-washed according to regulations, and in 11 instances old beds have been replaced by new ones.

Common lodging houses

Houses Sub-let in Lodgings.—In addition to the common lodging houses above referred to, there were at the end of last year, 421 houses, or parts of houses sub-let in lodgings, the registration of which, under special bye-laws is compulsory, but which are not amenable to regulation as common lodging houses. It is to be feared that the register of sub-let houses is

Regulation of sub-let houses, under Sanitary Act of 1866

* Common Lodging Houses on Register, end of 1885.

Districts.	Houses.	Rooms.	Accommodation.
Regent Road.....	19	59	296
Greengate	12	53	272
Pendleton	4	10	35
Borough	35	122	603

SECTION V. very incomplete. Lodging house keepers of this class object to the necessary supervision which registration involves, and as the staff available for inspection is inadequate for the purpose, there is no doubt that the salutary provisions* of our Lodging House Act are frequently evaded. During the year under notice, several violations of the Act were brought to our notice through the agency of the Provisional Order for the Notification of Disease. Under the provisions of that enactment not less than eighty-one cases of dangerous infectious disease† were discovered in houses of the sub-let class, only eight of which houses being on the register at the time. As the result of the vigilance of the Inspectors 42 of the 57 cases of scarlet fever, 2 of the 3 cases of smallpox, and the whole of the cases of typhus were removed to the hospital with all practicable speed; but I think the details here given of the part taken by sub-let houses in spreading infectious disease, will justify the remark previously made by me, and which I now repeat, that lodging houses of this class are a serious danger to the health of the community, and that, as such, they require more extensive and more careful supervision than they at present receive.

Sub-let lodging houses

A source of serious public danger, and require more effective supervision

Experience of Sec. 90 of Salford Improvement Act.

Registration of Lodging Houses under Section 90 of the Salford Improvement Act.—Further experience confirms the opinion which I have expressed in previous reports, as to the beneficial effect of the powers which the above-mentioned Act enables us to exert over un-manageable lodging houses. The 73 houses in Regent Road already registered under the 90th Section, continue to be amenable to regulation, and the Inspector reports with respect to them, that they have given little trouble during the year, and that no complaints have reached him either from the hitherto uproarious tenants, or from their neighbours.

Supervision of milk supply

Dairies, Cowsheds, and Milkshops.—At the end of 1885, there were 528 dairies and milkshops on the register, against 521 in the previous year. 88 persons who could not, or who would not comply with the bye-laws of the Corporation, have discontinued the sale of milk during 1885, and 95 fresh registrations have been effected. In three instances infectious disease was discovered in registered milkshops, with the result, either that the sale of milk

* No person shall let in lodgings, any house, or part of a house, in which more than two adult persons shall sleep in one room; nor shall any person receive lodgers in any house, or part of a house, in which more than two adult persons shall sleep in one room; nor shall any person let any house, or part of a house, to be occupied by members of more than one family, in which more than two adult persons shall sleep in one room; until such house, or part of a house, and the person proposing to let the same, or to receive lodgers therein, are registered, etc. Regulations under Sanitary Act, 1866, Section 1.

† Cases of Infectious Disease reported under the Notification Act in Sub-let Houses.

	Smallpox.	Scarlet fev.	Diphtheria.	Typhus fev.	Enteric fev.
Regent Road	1	24	2	5	5
Greengate	—	14	2	2	3
Pendleton	2	19	—	—	2
Total	3	57	4	7	10
Removed to hospital	2	42	1	7	7

was discontinued during sickness, or that the patient was removed to hospital. The dairies and milkshops have been regularly visited during the year, and 278 notices have been issued for securing compliance with the regulations of the Corporation; Inspector Wilkinson reports that our requirements, which have had relation to cleanliness and care in the storage of milk generally, have been cheerfully complied with.

The following statement gives particulars of the dairies and milkshops at present on the register.

	Borough.	Regent Road.	Green-gate.	Pendle-ton.	Brough-ton.
Number on register, end of 1884 ...	521	238	87	92	104
Registered during 1885	95	36	9	12	38
Discontinued during the year ...	88	39	13	9	27
Remaining on Register	528	235	83	95	115

At the end of the year 1885, there were 30 cowsheds and shippens on the register, as compared with 35 in 1884. Inspector Fordham, M.R.C.V.S., of this department, reports that he has visited these establishments frequently during the year, and that they have been uniformly well-conducted.

Private Slaughter-Houses.—There were 49 private slaughter-houses in the Borough at the end of 1885, or two more than the number on the register at the end of the previous year. I do not know that I can add anything to what I have repeatedly urged, against the continuance of these establishments in their present position. Mr. Fordham, upon whom devolves the duty of supervising the slaughter-houses, assures me that he visits them at frequent intervals, and that compliance with the bye-laws is generally observed. It will be a happy day for Salford when these loathsome nuisances shall have been removed from amidst the homes of the poor.

Seizure of Unwholesome Meat.—The following seizures of bad meat and other unwholesome commodities have been made by Mr. Fordham the Meat Inspector, during 1885. In all cases the condemned meat has been dealt with by a magistrate, according to the provisions* of the Public Health Act.

	No. of Seizures	Weight.			
		Tons.	Cwts.	Qrs.	Lbs.
Beef	25	4	15	1	11
Mutton and Lamb	139	3	11	2	20
Pork	10	1	18	0	23
Veal	25	0	13	1	21
Goat	2	0	0	1	6
Fish	5	0	1	0	26
Eggs	1	0	1	2	7
	207	11	1	3	2

* For details of proceedings before the magistrates, see page 76.

SECTION V.

Proceedings under the Adulteration Act.—During the year 1885, Mr. Joseph Carter Bell, F.I.C. the Public Analyst for Salford, has examined 478 samples of food and drugs, submitted to him by Inspector Thompstone. The figures given below show the number of samples of the various commodities examined, and the percentage of adulteration detected in the several articles analysed during each of the eleven years 1875 to 1885. As in past years, a table is also given showing the number of milk samples taken by Inspector Thompstone at the railway stations, whilst on the way from the producer in the country, to the retailer of Milk in Salford. Particulars of Mr. Carter Bell's reports on the purity of the samples analysed is also appended, with the object of indicating the extent in which the milk consumed in Salford has been tampered with before reaching the Borough.

SAMPLES COLLECTED BY THE FOOD INSPECTOR FROM 1875 TO 1885.

	Total.	Milk.	Butter.	Bread and Flour.	Drugs.	Groceries.	Beer and Porter.	Wines and Spirits.	S'ndries
1875...	60	37	1	1	1	...	7	4	9
1876...	119	43	2	18	34	17	...	...	5
1877...	390	114	7	159	22	30	18	37	3
1878...	418	197	10	35	31	25	24	70	26
1879...	518	306	16	130	15	28	10	13	...
1880...	506	269	12	48	5	52	71	18	31
1881...	478	376	11	1	...	61	...	8	21
1882...	465	300	7	47	13	3	58	20	17
1883...	497	436	1	29	1	12	...	2	16
1884...	507	359	10	35	7	...	64	11	21
1885...	478	399	21	14	4	13	21	...	6

PERCENTAGE OF ARTICLES RETURNED AS ADULTERATED.

	Total.	Milk.	Butter.	Bread and Flour.	Drugs.	Groceries.	Beer and Porter.	Wines and Spirits.	S'ndries
1875..	66.6	62.1	100.0	...	...	...	100.0	75.0	66.6
1876...	40.3	55.8	50.0	27.8	35.3	17.6	...	...	60.0
1877...	27.4	40.3	28.6	11.3	13.6	6.7	...	97.3	...
1878...	29.9	29.4	10.0	2.9	51.6	4.0	4.2	67.1	...
1879...	12.0	13.1	25.0	5.4	26.6	10.7	10.0	2.3	...
1880...	20.2	25.2	75.0	6.3	...	17.3	11.3	11.1	9.7
1881...	16.3	18.1	9.1	...	...	1.6	..	37.5	23.8
1882...	15.5	19.0	14.3	2.1	53.8	...	1.7	10.0	17.6
1883...	6.6	6.7	...	3.4	...	8.3	...	50.0	6.3
1884...	7.1	2.8	40.0	5.7	57.1	...	...	27.3	61.9
Average,									
1875-84	24.2	27.3	35.2	6.5	26.4	8.3	18.2	42.0	29.3
1885...	5.2	4.8	4.8	7.1	...	15.4	...	...	33.2

*List of Samples taken from Farmers during the Year 1885, at the
place of delivery:—*

No.	Name and Address.	Result of Analysis.	Place of Delivery.
1	B. E., Eccles New Road	Pure	Hope Infirmary
2	Do. do. do.	Do.	Do.
3	Do. do. do.	Do.	Do.
4	Do. do. do.	Do.	Do.
5	Do. do. do.	Do.	Do.
6	O. J., Lostock Gralam, Cheshire.	Very poor milk	Old Trafford Station
7	D. R., Plumbley, Cheshire	Contained 1% of water ...	Do.
8	H. W., Tabley, Cheshire	Pure	Do.
9	Do. do. do.	Do.	Do.
10	Do. do. do.	Do.	Do.
11	Do. do. do.	Do.	Do.
12	Do. do. do.	Do.	Do.
13	Do. do. do.	Do.	Do.
14	B. J., Wilpshire, nr. Blackburn ..	Do.	Pendleton Station
15	H. J., Langho, nr. Whalley	Do.	Do.
16	H. W., do. do. do.	Do.	Do.
17	T. J., do. do. do.	Do.	Do.
18	H. J., do. do. do.	Do.	Do.
19	W. J., Heatley Cheshire	Do.	Old Trafford Station
20	B. R., Wilpshire, nr. Blackburn..	Contained 10% of water...	Pendleton Station
21	Do. do. do. do.	Pure	Do.
22	H. T., Thelwall, nr. Warrington.	Do.	Old Trafford Station
23	E. J., Ashley, nr. Knutsford	Do.	Do.
24	L. T., Tabley, Cheshire	Do.	Do.
25	Do. do. do.	Do.	Do.
26	S. W., do. do.	Do.	Do.
27	E. J., Ashley, nr. Knutsford	Do.	Do.
28	W. T., Lostock Gralam	Do.	Do.
29	N. M., Elsby, Cheshire	Do.	Do.
30	Do. do. do.	Do.	Do.
31	N. S. H., do. do.	Do.	Do.
32	J. T., Dunham Hill, Cheshire ...	Do.	Do.
33	W. W., do. do. do.	Do.	Do.
34	L. J., do. do. do.	Do.	Do.
35	A. W., do. do. do.	Do.	Do.
36	N. E., do. do. do.	Do.	Do.
37	H. G., Chatburn, nr. Clitheroe	Do.	Pendleton Station
38	T. A., Gisburn, nr. Blackburn ...	Do.	Do.
39	H. J., Langho, nr. Blackburn ...	Do.	Do.
40	O. J., Clitheroe	Do.	Do.
41	D. J. C., Bamber, nr. Gisburn ...	Do.	Do.
42	G. H., Chatburn	Do.	Do.
43	J. H., do.	Do.	Do.
44	P. T., do.	Do.	Do.
45	B. A., do.	Do.	Do.
46	K. D., Newsholme	Do.	Do.
47	B. R., Wilpshire	Do.	Do.
48	T. A., Gisburn	Do.	Do.
49	H. A., Broughton	Do.	Salford Royal H's'ptal
50	W. J., Heatley, Cheshire	Robbed of 29% of its cream	Old Trafford Station
51	H. W., Tabley, Cheshire	Pure	Do.

*List of Samples taken from Farmers during the Year 1885, at the
place of delivery (Continued):—*

No.	Name and Address.	Result of Analysis.	Place of Delivery.
52	D. J., Plumbley, Cheshire	Pure	Old Trafford Station
53	Do. do. do.	Do.	Do.
54	L. S., Toft, nr. Knutsford	Do.	Do.
55	W. J., Heatley, Cheshire	Do.	Do.
56	Do. do. do.	Do.	Do.
57	S. T., Newsholme	Do.	Pendleton Station
58	H. J., Langho, nr. Blackburn ..	Do.	Do.
59	W. J., Chatburn, nr. Clitheroe...	Do.	Do.
60	A. A., Feniscowles, nr. Bl'ckb'rn.	Do.	Do.
61	O. J., Clitheroe, nr. Blackburn...	Do.	Do.
62	H. W., Mitton, nr. Clitheroe.....	Do.	Do.
63	A. A., Cherry Tree, Feniscowles.	Robbed of 20% of its cream	Do.
64	H. W., Mitton, nr. Clitheroe.....	Pure	Do.
65	G. J., Newsholme	Do.	Do.
66	D. J., Gisburn, nr. Clitheroe.....	Do.	Do.
67	A. M. A., Feniscowles	Do.	Do.
68	H. W., Langho, nr. Blackburn...	Do.	Do.
69	T. J., do. do. do.	Do.	Do.
70	J. H., Gisburn, do. do.	Do.	Do.
71	H. J., Langho, do. do.	Do.	Do.
72	T. A., Gisburn, do. do.	Do.	Do.
73	Do. do. do. do.	Do.	Do.
74	W. J., Toft, nr. Knutsford	Do.	Old Trafford Station
75	Do. do. do.	Do.	Do.
76	D. J., Plumbley, Cheshire	Do.	Do.
77	W. J., do. do.	Do.	Do.
78	J. S., Thelwell, nr. Warrington...	Do.	Do.
79	H. H. W., Tabley, Cheshire	Do.	Do.
80	H. A., Broughton	Do.	Salford Royal H'sp'tal
81	P. J., Kersal, Hr. Broughton ...	Do.	Higher Broughton
82	T. J., Langho, nr. Blackburn...	Do.	Pendleton Station
83	O. G., Chatburn, do.	Do.	Do.
84	S. T., Whalley, do.	Do.	Do.
85	Do. do. do.	Do.	Do.
86	D. C., Gisburn, do.	Do.	Do.
87	H. G., Chatburn, do.	Do.	Do.
88	H. T., Skipton, Yorkshire.....	Do.	Do.
89	R. D., Newsholme	Do.	Do.
90	G. H., High Leigh, Cheshire ...	Do.	Old Trafford Station
91	Do. do. do.	Do.	Do.
92	H. T., Thelwell, nr. Warrington..	Do.	Do.
93	M. W., Knutsford, Cheshire.....	Do.	Do.
94	T. L., Tabley, do.	Do.	Do.
95	J. J., Ashley, nr. Bowdon	Do.	Do.
96	L. S., Toft, nr. Knutsford	Do.	Do.
97	S. T., Whitefield, nr. Bury	Do.	Higher Broughton
98	T. G., Yew Bank, Broughton ...	Do.	Do.
99	B. J., Warrington	Do.	Ordsall Lane Station
100	L. J., Norton, nr. Warrington ...	Do.	Do.
101	Do. do. do. do.	Do.	Do.
102	B. J., do. do. do.	Do.	Do.
103	M. G., Croft, do. do.	Do.	Do.
104	B. J., Kenyon, do. do.	Do.	Do.
105	D. R., Plumbley, Cheshire	Contained 1% of water ...	Old Trafford Station

Supervision of Bakehouses.—At the end of 1885, there were 90 bakehouses on the register, as compared with 83 at the end of 1884. In my report for 1884, I mentioned that at that time—24 out of the total number of bakehouses were in so unsatisfactory a condition, that it was necessary to deal with them under the Act. In many cases ovens were found to adjoin privies and ash-pits, and sundry other objectionable arrangements were brought to light in connection with them, on systematic inspection. It is satisfactory to note that, with two exceptions, the unsatisfactory state of things above referred to has been altered; and with regard to the exceptional cases, it may be mentioned that one of the condemned bakehouses has been closed, and the other is in course of such amendment as will render it in all respects satisfactory.

SECTION V.
Supervision of
the bread supply

PARTICULARS AS TO BAKEHOUSES IN SALFORD AT THE END OF 1885.

Districts.	Number of Bakehouses.		No. of Ovens.	Number of Persons employed.			Description of Ovens.	
	Open.	Closed.		Men.	Women.	Boys.	Flue.	Waggon
Salford	62	6	82	132	14	28	15	67
Pendleton ...	17	...	25	31	6	10	7	18
Broughton ...	11	1	15	24	1	4	3	12
Borough	90	7	122	187	21	42	25	97

VI.—*An account of the action taken by the Medical Officer of Health, or on his advice during the year, in regard to offensive trades, and to factories and workshops.*

Smoke Nuisance.—During the year 1885, the Smoke Inspector has taken 540 observations of the smoke emitted from the various works and manufactories for the Borough. The result of these observations has been that two firms have been convicted before the magistrates, for using imperfectly constructed furnaces; and one firm, for negligently using furnaces of faultless construction. The following table gives the number of boilers and furnaces in use within the four districts of the Salford Borough, at the end of 1885, together with particulars as to the number of notices served, requiring compliance with the bye-laws relating to the consumption of smoke.

SECTION VI.
Regulation of
smoke nuisance
in Salford

SECTION VI.

Smoke nuisance
in Salford

Registration Sub-Districts.	Boilers and Furnaces in use.		Notices to Properly Construct Furnaces.	
	Properly Constructed.	Improperly Constructed.	Number Served.	Number complied with.
Regent Road ...	125	80	14	6
Greengate.....	137	69	2	0
Pendleton.....	195	53	10	5
Broughton	16	19	3	2
Borough total ...	473	221	29	13

Nominal horse
power of steam
boilers now in
operation

During the past year several of the large steam users in Pendleton and in Greengate, convinced of the necessity of augmenting their boiler power, have replaced their old and overworn boilers with new ones of greater capacity, and improved construction. Several firms have built new works, and given rise to new industries within the Borough during the past year. Inspector Thompstone estimates that the "nominal horse power" of the steam boilers now operating in Salford, amounts to 23,268, which is exerted by 694 boilers of various types.

NUMBER OF BLACKSMITHS' FORGES AND BAKERIES IN SALFORD
AT THE END OF 1885.

Blacksmiths' for-
ges and bakery
furnaces

	Borough Total.	Regent Road.	Greengate.	Pendleton.	Broughton
Blacksmiths' Forges	52	21	16	10	5
Bakeries	90	42	20	17	11

One complaint was received during the year 1885 of smoke nuisance from blacksmiths' forges, and, in three cases the emission of dense smoke from bakehouses was complained of. The chimneys have been raised where necessary, in obedience to our requirements, and the nuisances have been abated.

Supervision of
other offensive
trades

General Supervision of Offensive Trades.—During the year under notice, 50 establishments coming under the description of offensive trades, came under constant supervision by this department, namely:—6 india-rubber works, 4 tanneries, 6 oil and tallow works, 3 floor cloth manufactories, 6 varnish or tar distilleries, 3 skin or rop manufactories, 2 telegraph cable works, 2 soap manufactories, and 18 tripe dressing establishments.

The following table shows the distribution in the Borough, of the several offensive trades. SECTION VI.
Offensive trades

	Regent Road.	Green- gate.	Pendle- ton.	Brough- ton.			
Rubber Works.....	1	...	2	...	2	...	1
Tanneries	1	...	2	...	1	...	—
Oil and Tallow Works.....	2	...	3	...	1	...	—
Floor Cloth Works	1	...	2	...	—	...	—
Varnish or Tar Distilleries	1	...	4	...	1	...	—
Rop Cleaning Establishments...	3	...	—	...	—	...	—
Telegraph Cable Works	—	...	2	...	—	...	—
Tripe Dressing Establishments..	8	...	6	...	4	...	—
Soap Works	1	...	—	...	1	...	—

Brick-burning Nuisance.—In consequence of the continued depression in the building trade, no complaints have reached this department during 1885, of the nuisance which commonly attends the burning of bricks. As soon, however, as building operations are recommenced, the question of regulating the burning of bricks in confined situations, will inevitably force itself on the attention of the Committee.

Regulations re-
quire amend-
ment as to brick-
burning in Sal-
ford

*Record of Cases taken before the Magistrates during 1885, with the Result
of Proceedings.*

Particulars of Complaint.	No. of Cases.	How disposed of.	Amount of Fines.
Adulteration of Food.....	12	{ Seven fined in all £18 5s. od ; three dismissed, and two withdrawn	£ s. d. 18 5 0
Exposing diseased meat for sale.	6	{ Five fined in all £9 2s. od ; one withdrawn	9 2 0
Slaughtering sheep in an un- licensed slaughter-house ... }	1	Fined 10s.....	0 10 0
Offences against the Contagious Diseases (Animals) Act ... }	1	Fined £1 os. od.....	1 0 0
Using furnaces not constructed to consume their own smoke. }	2	Two fined in all £8 os. od.	8 0 0
Negligently using furnaces constructed to consume their own smoke	1	Fined 10s.	0 10 0
Offences against bakehouse regulations	3	{ Two fined in all £1 1s. od. ; one withdrawn	1 1 0
Letting houses in lodgings without being registered ... }	4	{ Two fined in all £0 3s. 6d. ; one withdrawn, one not served	0 3 6
Permitting rooms to be occu- pied by more persons than they are registered to accom- modate	7	Seven fined in all £1 8s. od. ...	1 8 0
Neglecting to keep lodging houses clean	5	Five fined in all £0 13s. od.....	0 13 0
Conveying manure along the streets during prohibited hours.....	8	{ Seven fined in all £5 17s. 6d. ; one dismissed.....	5 17 6
Ashpits, drains, &c., so as to be a nuisance	12	{ Eleven withdrawn on pay- ment of costs, and one order to abate made .....	.....
Permitting interior of house to be prejudicial to health... }	1	Not served .....	.....
Neglecting to keep privies clean	2	Two fined 6d. and costs each	0 1 0
	65		£ 46 11 0

PARTICULARS OF WORK DONE BY THE HEALTH DEPARTMENT
DURING THE YEAR 1885.

	Borough.	Regent Road.	Greengate.	Pendleton.	Broughton.	
No. of Complaints lodged at Health Office	1965	838	388	111	628	
Inspections made.	Of Dwelling-houses	12784	4937	2025	2768	3054
	„ Lodging-houses	2415*	1248	906	233	28
	„ Slaughter-houses	2548	1092	312	832	312
	„ Shippons	980	104	...	286	390
	„ Bakehouses	270	129	57	51	33
	By Smoke Inspector—Observations taken	540	146	212	151	31
	Under Adulteration Act—Samples collected for Analysis	478	196	98	91	93
	By Meat Inspector—Seizures made	207	145	53	5	4
	Miscellaneous Sanitary Inspections	1320	429	281	475	135
	Re-Inspections after Notice	9888	4700	1613	1694	1881
Total Inspections made by Staff ...	30960	12997	5500	6535	5928	
Orders issued for Abatement of Nuisances	2707	737	757	619	594	
Letters written for ditto	2038	548	561	466	463	
Nuisances abated pursuant to order.	Houses and Premises, cleansed repaired or Limewashed	2015	507	488	564	456
	Houses disinfected after infectious disease	1508†	480	397	375	256
	House Drains repaired, trapped, or disconnected	1311	780	250	146	135
	Ashpits and Privies repaired or reconstructed	1162	502	241	280	139
	Accumulations of Refuse removed	171	59	26	46	40
	Ashpits attended to after complaint	2174	537	395	432	810
	Improperly kept Animals removed	107	41	9	45	12
	Overcrowding of Dwellings abated	96	38	30	15	13
	Passages and Yards repaired, drained or flagged	1157	372	108	456	221
	Total number of Nuisances abated	9701	3316	1944	2359	2082
Registered.	Lodging-houses	421	238	155	28	...
	Slaughter-houses	49	21	6	16	6
	Dairies and Milkshops	528	235	83	95	115
	Shippons	30	4	...	11	15
	Bakehouses	90	43	19	17	11
	Marine and Second-hand Stores ...	183	89	51	28	15
Patients removed to Fever Hospitals ...	507	231	136	98	42	
Infected bedding and clothing disinfected	666	275	160	139	92	
Infected bedding destroyed	101	51	23	15	12	
Legal proceedings taken (see page 76)	...	...	...	...	...	

* Including 454 inspections after midnight.

† 2294 rooms in 754 of these houses were stripped, the rest were simply fumigated.

TEN YEARS 1876-85.—WORK OF THE HEALTH DEPARTMENT.

	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.
No. of Complaints lodged at the Health Office	2904	1222	908	1456	2150	2076	2508	3265	2130	1965
Inspections made.										
Of Dwelling-houses	4921	3525	10237	12655	15698	14735	19712	15691	12203	12874
„ Lodging-houses	500	594	554	582	722	659	1980	2100	2707	2415
„ Slaughter-houses	2912	2652	2548	2305	2236	2372	2236	2288	2444	2584
„ Shippons	...	...	...	1003	1508	728	1664	1820	910	980
By Smoke Inspector—Observations taken	922	869	547	620	487	494	453	598	583	540
Under Adulteration Act—Samples collected for Analysis	119	390	418	518	497	479	465	497	507	478
By Meat Inspector—Seizures made	228	250	301	369	315	233	208	144	204	207
Miscellaneous Sanitary Inspections	3599	5840	6562	1308	809	212	1078	872	871	1320
Re-Inspections after Notice	5309	5519	5736	6563	5689	6803	7158	7282	11160	9888
Total Inspections made by staff...	18510	19639	26903	25923	28136	28452	36505	32212	31589	30960
Orders issued for Abatement of Nuisances	3515	2833	3610	4712	3268	2868	3203	2379	2675	2707
Nuisances abated pursuant to order.										
Houses and Premises cleansed, repaired, or linewashed	1032	882	715	894	1126	1859	1731	1006	1105	2015
Houses disinfected after infectious disease	3247	1254	707	635	865	480	800	1225	1171	1508
House Drains repaired, trapped, or disconnected	3208	1272	1346	1435	1527	1354	1458	1119	1825	1311
Ashpits and Privies repaired or reconstructed	622	922	920	892	799	1079	955	582	1169	1162
Accumulations of Manure and Refuse removed	399	193	135	74	99	152	140	113	108	171
Ashpits attended to after complaint	1486	2051	1956	1971	1134	1557	2035	3061	1778	2174
Improperly kept Animals removed	96	61	40	438	93	14	83	87	37	107
Overcrowding of Dwellings abated	3	6	12	16	47	29	54	63	118	96
Passages and Yards repaired, drained, or flagged	192	184	321	353	610	732	1624	1026	1482	1157
Total number of Nuisances abated	10285	6825	6146	6708	6300	7256	8880	8282	8793	9701
Registered.										
Lodging-houses	23	41	184	73	72	64	45	334	68	421
Slaughter-houses	56	51	49	46	43	43	43	47	47	49
Dairies and Milkshops	...	...	...	677	874	797	604	589	521	528
Shippons	...	...	...	45	78	56	32	35	35	30
Marine and Second-hand Stores	...	...	...	132	185	178	204	201	176	183
Patients removed to Fever Hospital	101	174	233	307	449	171	216	342	713	507
Infected Bedding and Clothing disinfected	223	148	85	68	67	180	167	†	738	666
Infected Bedding destroyed	93	37	14	6	25	26	106	66	108	101

* Includes number of letters written.

† Disinfector out of order, bedding had to be disinfected at home.

YEAR 1885.

METEOROLOGY, BIRTHS, DEATHS, AND MORTALITY FROM CERTAIN PREVALENT DISEASES
IN EACH WEEK OF THE YEAR.

Week.		Temperature of the Air.			Air Pressure.	Horizontal Movement of Air in Miles p. hour.	Mean Humidity. Complete Saturation. —100	Rainfall in Inches.	Births.	Deaths at all Ages.				Deaths from								
Progressive Number.	Date of ending.	Highest during the Week.	Lowest during the Week.	Mean Temperature.	Extreme range of Barometric changes.					All Ages.	Under 1 year.	1 to 5 years.	Over 60	Smallpox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Fever.	Diarrhoea.	Respiratory Diseases.	Phthisis.
1885.																						
1	Jan. 10	48.5	27.8	40.4	1.171	1.8	84	1.043	161	87	18	10	18	...	...	2	...	2	2	1	19	1
2	17	43.8	30.0	37.3	1.342	2.6	81	...	145	87	19	18	16	...	...	3	2	2	1	3	22	6
3	24	41.8	27.0	36.0	0.271	1.2	78	...	155	101	24	17	15	...	...	1	...	4	...	2	32	9
4	31	54.4	32.6	46.2	1.236	4.2	85	.860	142	69	16	10	11	...	...	3	...	1	1	1	24	8
5	Feb. 7	51.9	34.0	43.0	0.626	4.0	85	1.017	164	65	16	9	16	...	...	1	...	4	1	...	16	5
6	14	53.7	38.0	46.2	0.501	3.6	84	.327	126	59	11	9	12	...	...	2	...	1	...	...	17	6
7	21	48.8	29.1	37.7	0.804	1.6	85	.612	135	79	15	14	18	...	1	2	1	8	...	1	23	12
8	28	58.8	32.2	47.8	0.356	2.2	83	.523	138	105	24	14	21	...	...	1	...	3	1	1	15	14
9	Mar. 7	52.6	31.7	39.9	0.886	1.3	77	.852	139	76	19	10	19	...	...	2	...	3	...	1	21	8
10	14	51.0	32.2	38.4	0.778	0.4	81	.050	163	75	17	12	12	...	...	1	2	1	2	26	9	
11	21	50.1	30.9	41.3	0.944	0.8	80	.242	125	85	25	9	11	...	1	...	2	4	1	1	20	13
12	28	52.3	31.0	41.3	0.500	1.4	74	.327	140	85	19	11	21	...	...	3	...	4	1	2	18	10
13	April. 4	53.5	31.0	41.5	0.658	1.2	77	.703	101	79	16	13	15	...	1	...	...	1	1	...	21	5
14	11	51.0	31.0	41.9	0.549	1.6	75	.308	139	90	19	17	13	...	2	1	...	2	3	1	22	15
15	18	64.0	35.7	44.1	0.365	0.2	71	...	162	81	16	15	17	...	1	4	...	2	2	2	19	9
16	25	65.7	39.0	51.9	1.185	2.4	70	.302	119	87	20	16	17	...	2	...	1	...	5	3	27	8
17	May 2	63.8	38.7	51.0	0.386	1.4	66	.294	126	73	15	8	13	...	2	1	1	1	2	...	22	11
18	9	56.0	35.8	44.5	0.436	2.3	69	.356	133	94	18	21	19	...	1	5	...	4	3	1	23	8
19	16	55.9	36.3	45.6	0.441	2.1	67	.104	117	91	25	10	11	...	4	2	1	...	4	1	16	17
20	23	60.0	39.0	47.6	0.688	2.7	71	.939	140	74	20	7	16	...	1	...	...	3	2	...	17	10
21	30	67.3	42.0	53.8	0.203	2.8	68	.032	67	70	19	21	12	...	6	2	...	5	...	3	17	7
22	June 6	84.0	44.2	59.9	0.550	1.8	58	.610	166	72	18	16	18	...	7	1	...	1	3	...	16	7
23	13	76.3	45.1	56.7	0.566	1.2	63	.570	131	81	21	17	10	...	2	1	...	5	2	...	14	7
24	20	75.1	50.8	57.5	0.741	2.4	67	.735	129	87	11	28	18	...	10	1	...	3	2	1	21	11
25	27	74.8	46.0	54.3	0.420	1.6	72	1.450	120	70	21	18	11	...	5	1	...	5	...	3	10	8
26	July 4	72.3	48.2	59.7	0.244	1.0	67	...	133	84	27	19	9	...	5	1	...	9	...	4	16	11
27	11	76.4	49.8	60.7	0.306	1.8	68	.210	147	82	16	21	8	...	13	...	...	1	...	3	7	14
28	18	67.4	46.0	56.9	0.401	1.5	66	.382	132	91	34	22	9	...	6	...	...	2	...	6	23	8
29	25	82.0	56.7	62.6	0.658	0.5	80	.792	112	73	26	14	12	...	6	...	...	2	...	8	17	7
30	Aug. 1	84.0	50.2	62.1	0.209	0.8	69	.010	124	88	37	18	11	...	10	1	...	1	1	16	15	6
31	8	68.6	47.9	56.6	0.366	0.9	77	.345	129	93	39	20	9	...	3	...	...	1	1	28	10	10
32	15	71.1	42.2	55.7	0.846	3.0	75	.759	133	107	54	12	11	...	2	...	...	1	1	29	16	14
33	22	73.0	47.0	57.8	0.345	1.1	73	.260	122	89	43	10	13	...	3	...	1	2	1	21	13	9
34	29	72.3	47.7	55.6	0.159	1.6	70	.015	129	96	45	16	8	...	4	...	1	3	...	23	10	13
35	Sep. 5	68.8	44.8	56.9	0.667	2.0	78	1.680	121	90	39	19	12	...	1	4	...	...	1	24	8	9
36	12	69.3	48.2	55.7	0.191	2.5	73	1.090	125	85	29	16	14	...	4	2	...	1	1	13	18	8
37	19	69.5	47.9	56.6	0.317	2.6	78	1.003	123	80	34	10	13	...	3	...	...	1	...	11	11	13
38	26	66.6	38.7	52.0	0.357	1.9	73	.230	145	68	22	14	8	...	3	1	...	...	...	7	22	6
39	Oct. 3	60.1	38.2	49.3	0.627	3.0	74	.506	133	74	18	21	12	...	5	3	...	4	2	5	12	6
40	10	56.0	40.7	47.7	0.665	2.9	78	1.022	150	79	33	8	14	...	4	...	2	...	2	1	18	13
41	17	55.8	32.0	45.7	0.480	2.5	78	.017	160	81	27	15	12	...	5	3	...	...	...	3	24	8
42	24	50.9	40.1	44.5	0.837	0.3	90	.815	145	75	27	10	13	...	6	1	...	...	1	2	23	8
43	31	56.7	35.0	43.7	1.017	2.6	81	1.677	155	83	26	13	8	...	4	3	...	3	...	2	17	9
44	Nov. 7	57.7	35.7	45.6	0.715	2.7	87	.906	144	71	20	15	6	...	3	...	...	1	1	1	17	7
45	14	50.8	39.0	44.8	0.657	1.5	82	.125	164	73	20	18	8	...	2	...	1	3	1	2	12	10
46	21	47.4	30.0	39.6	0.730	2.0	77	...	133	74	18	15	12	...	5	2	...	4	2	1	21	9
47	28	54.2	36.0	44.6	0.506	2.8	83	1.055	123	96	19	20	19	...	7	2	1	2	3	1	19	16
48	Dec. 5	55.1	37.5	44.1	0.710	3.3	84	.100	143	81	23	17	12	...	6	1	...	5	2	...	21	4
49	12	45.8	25.6	32.9	0.926	1.4	80	.150	110	82	18	20	17	...	8	...	...	1	...	...	16	13
50	19	51.8	36.0	44.5	0.362	2.1	85	...	151	87	16	15	16	...	4	...	...	2	2	3	23	6
51	26	49.0	31.1	42.0	0.554	0.8	88	.335	110	80	16	12	19	...	3	...	2	2	4	2	18	8
1886																						
52	Jan. 2	51.4	28.0	42.7	0.723	4.0	83	1.367	110	109	28	17	22	...	7	...	...	5	...	...	32	8

PRICES OF COAL, FLOUR, POTATOES, AND BUTCHER'S MEAT, AND THE
NUMBER OF PAUPERS RELIEVED IN SALFORD—1871 TO 1885.

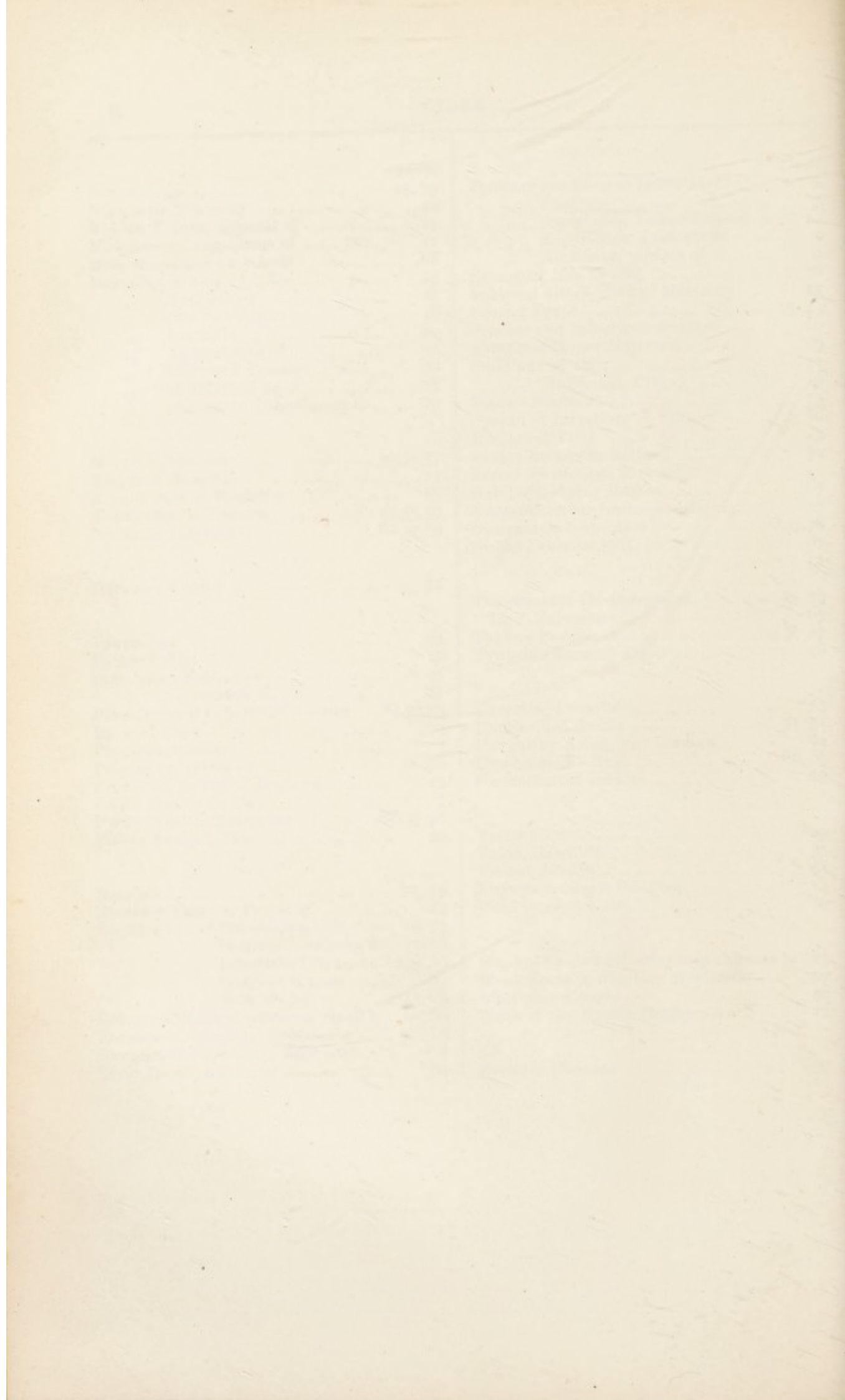
	AVERAGE PRICES OF FOOD AND FUEL.				PAUPERISM.		
	Coal, per ton.	Flour, per stone.	Potatoes, per load.	Butchr's Meat, per lb.	Weekly number of Paupers relieved.		
					Indoor.	Outdoor	Proportion to Population
	£ s. d.	£ s. d.	£ s. d.	d.			
1871	0 7 5½	0 2 0	0 8 8¼	6¾	791	2343	1 in 40
1872	0 10 0¼	0 2 1¼	0 4 6¾	6½	764	1839	1 in 50
1873	0 15 9¾	0 2 3	0 13 0¼	7¾	817	1711	1 in 53
1874	0 16 1¾	0 2 2	0 11 4	7½	853	1842	1 in 52
1875	0 12 4	0 1 7½	0 10 6¾	7½	872	1652	1 in 57
1876	0 11 6	0 1 9¼	0 10 7½	7½	944	1409	1 in 64
1877	0 10 5	0 2 1½	Various.	7¼	1037	1662	1 in 57
1878	0 9 10	0 1 7½	Various.	7¾	1146	2326	1 in 46
1879	0 7 5	0 1 11½	0 14 0	6¾	1442	4023	1 in 30
1880	0 7 11	0 2 5¾	0 10 0	7½	1559	3488	1 in 34
1881	0 7 8	0 1 8¾	0 10 0	7¼	1640	3039	1 in 38
1882	0 7 7	0 1 7¼	0 12 0	7½	1379	2300	1 in 56
1883	0 7 7½	0 1 6¾	0 7 0	6¾	1690	2237	1 in 49
1884	0 7 8½	0 1 4½	0 5 9	5½	1645	2250	1 in 51
1885	0 7 7	0 1 3¼	0 6 4½	4¼	1573	2297	1 in 50

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REMARKS
MEDICAL OFFICER OF THE
U. S. ARMY HOSPITAL PROVIDENT
DISEASE





BOROUGH OF SALFORD.

REMARKS

BY THE

MEDICAL OFFICER OF HEALTH

ON

EXISTING HOSPITAL PROVISION

FOR

INFECTIOUS DISEASE.

1885

SALFORD :

W. F. JACKSON, PRINTER, 29, NEW BAILEY STREET

Extract from the minutes of the proceedings of the General Health Committee, dated December 10th, 1885.

RESOLVED—

“That the Medical Officer of Health be requested to consider
“the question of Hospital Provision in Salford for cases of Infec-
“tious Disease, with special reference to the relations, which
“subsist between the Guardians of the Poor and this Committee,
“in respect of infectious cases sent to Wilton Hospital; and to
“report thereon to this Committee.”

RESOLVED—

“That, with a view to facilitate the further discussion of the
“question, a printed copy of the Medical Officer's proposed report
“be supplied to each member of this Committee.”

Truly extracted,

JOHN GRAVES,

Town Clerk.

HOSPITAL PROVISION FOR INFECTIOUS DISEASE.

In order that the members at present constituting the Health Committee, and especially those who have recently joined it, may advantageously consider their position, as a Sanitary Authority, with regard to existing accommodation for the isolation of infectious disease, it will be necessary to refer to a period commencing with the earlier years of the decennium last completed, and to review the action of successive Health Committees during the years that have elapsed since the preliminaries were inaugurated which have since resulted in the establishment of permanent hospital provision for the Borough. In a popularly constituted body like the Council, it is inevitable that the *personnel* of Committees should frequently change ; it is not surprising, therefore, that of the members at present forming the Health Committee, not more than one-fourth belonged to it at the somewhat remote period to which I now allude.

I am laying claim to no excessive credit, in fact I am only recording the performance of a simple duty on the part of the sanitary adviser of the Corporation, when I say that the urgent necessity of hospital provision in Salford for cases of infectious disease was first insisted upon by myself.

On reference to the report which at the end of my first year of office (1873) I had the honour of submitting to the Committee, I find that the subject is thus introduced :—

“I do not approach this subject without a due sense of the
“difficulty of isolating the sick in a densely-populated town like
“Salford. During the time of my residence in Manchester, my duties
“brought me into daily contact with disease as it occurs in the
“most densely-populated districts of the city, and my greatest
“difficulty, on the occurrence of fever or other infectious disease

“amongst the poor, was, how to obtain that isolation of the patients
 “which in their own homes was impossible. It is notorious that
 “very many poor persons have a strong prejudice against Union
 “hospitals ; they elect, as they have often told me, to die amongst
 “their friends, at home, rather than go to the Workhouse. The
 “consequence is, that when once disease has obtained a footing, it
 “spreads with frightful rapidity, finding, as it does, a congenial
 “atmosphere in the squalid and overcrowded abodes of our poorer
 “brethren.

“From no inconsiderable experience, amongst not only the
 “very poor, but also the class immediately above them, I am con-
 “vinced that they would in most cases gladly avail themselves of
 “local hospitals for infectious disease, did such exist. The objec-
 “tion, in the case of a far-off fever hospital, that the friends of
 “patients would not be able to visit them, and the feeling of many
 “against sending their children or friends to the Workhouse
 “hospital, would be inoperative here ; and I confidently hope that
 “before long the difficulties inseparable from such an undertaking
 “will be surmounted, and that we shall see a number of these
 “most valuable institutions established in our midst, sufficient
 “to provide for the isolation of infectious diseases as they occur,
 “and the consequent stamping out of epidemics at the outset.”

It deserves mention, that the above recommendation was penned, not under the influence of panic,—such as existed three years later, when the Committee, in response to a strong public feeling, and in the face of a terrible epidemic of Smallpox, hastily provided what afterwards became the nucleus of our present hospital ; but, on the contrary, it was written deliberately, during a time of comparative freedom from Smallpox—the only disease, by the way, which at that time seemed capable of arousing public spirit to an adequate sense of impending danger. In order to show how completely the Health Committee sympathised with the advice of their medical adviser, and how promptly they endeavoured to give effect thereto, I would refer to a simple statement of the Committee’s action, as recorded in my very next Annual Report, namely that for the year 1874 :—

"The Health Committee have, with praiseworthy zeal, in
 "accordance with a suggestion in my last report, addressed them-
 "selves to the task of obtaining a fever and infectious diseases
 "hospital for the reception and treatment of those, *other than paupers*,
 "who may be induced to avail themselves of such an institution.
 "In this attempt they were nearly successful, having almost com-
 "pleted their arrangements for the purchase of Mode Wheel, a
 "house admirably situated and adapted for the purpose. But at
 "the last moment the Court of Chancery refused to sanction the
 "sale of the house for the purpose, and we are consequently com-
 "pelled to make other arrangements. The result of this legal decision
 "is, that although I had hoped to be able to report to you, by this
 "time, the actual existence of a fever hospital, there seems now to
 "be no chance of our obtaining one available for the reception of
 "patients for another year at least. People have a very super-
 "stitious dread of fever hospitals near their homes, but that there
 "is no valid reason for fear may be fairly inferred from the circum-
 "stance that although the hospital in Aytoun Street, Manchester,
 "was used for years for the reception of fever cases, not a single
 "instance of conveyance of infection to people in the adjoining
 "houses was ever heard of, notwithstanding that the neighbourhood
 "was a crowded one. The hospital at Pendlebury, undoubtedly an
 "admirable institution for the treatment of infectious diseases of
 "children, falls short of our requirements in the following particu-
 "lars :—first, its great distance from the town, rendering it most
 "inconvenient, if not impossible, for relatives to visit the patients ;
 "and secondly, the fact that it does not provide for the treatment
 "of adults.

"Taking this view of the case, and considering that Salford
 "should possess a fever hospital of her own, the Committee have
 "used every endeavour to obtain such a hospital as would meet all
 "cases ; but fanatical opposition was strong enough to frustrate
 "their endeavours on the very eve of success. Failing Mode
 "Wheel, I almost despair of meeting with an isolated building
 "suitable for conversion into a hospital, and I must therefore urge

“upon the Committee the necessity of at once selecting a site and
 “constructing a hospital for the reception of infectious diseases,
 “according to the powers they possess under the Act of Parlia-
 “ment.”

Soon after the Committee had decided to provide an infectious hospital for Salford, and whilst in quest of a suitable site, they received from Mr. Benjamin Armitage, now of Sorrel Bank, Pendleton, an offer of a large house and grounds in the neighbourhood of Warburton, which it was proposed to convert into a hospital and convalescent establishment for infectious diseases. This munificent offer was not, however, accepted, mainly because of the great distance of the property (some eight miles) from the town ; the Committee being of opinion that in order to be really effective for the isolation of infected persons, especially children, a hospital should be within easy reach of the residence of their friends.

The Committee's next attempt—which, had it been successful, would have settled at once economically and permanently the hospital difficulty in Salford—was that of negotiating for the purchase of a field at Weaste, then in the possession of the Corporation, with a view of adapting it to the purposes of a fever hospital. The Committee even proceeded so far as to get out the foundations, &c, for the administrative block, which would have formed the basis of a pavilion hospital, capable, if need be, of almost unlimited extension. In consequence, however, of interested opposition, expressed by way of a local indignation meeting, the Council were induced to relinquish this undertaking at the last moment ; and thus, from the beginning to nearly the end of the year 1876, the borough was deprived of those necessary means of isolation which it would have acquired within a few weeks had this project of the Committee been adhered to.

The block of buildings now bearing the name of “Wilton Hospital,” was, after considerable trouble on the part of the Committee, converted into a hospital for about sixty beds ; and was so far completed during the month of October, 1876, as to be ready for the reception of patients. At this date the offices of the hospital were in a very rude and unprotected state, but the Committee lost no time in surrounding the

buildings with a wall, for purposes of isolation, and in supplying the necessary mortuary, wash-houses, and disinfecting apparatus, for the complete equipment of the hospital.

Towards the middle of last year, the Health Committee found it necessary to increase the accommodation then available, in consequence of the alarming spread of scarlet fever in Salford at that time. They therefore caused to be erected in rear of the Wilton Hospital, a wooden shed, together with the necessary offices, for use as a separate hospital; and this was ready for the reception of patients towards the end of 1884. The hospital accommodation at the Committee's disposal was thus raised to 100 beds; which, *under ordinary circumstances*, will probably be sufficient for the isolation of such infectious cases as for some years to come are likely to require removal, *with the one exception of Smallpox*: and this disease cannot safely be treated in close proximity to our present fever hospital. In order, however, to provide against the exceptional spread of the ordinary infectious fevers, such as scarlet, typhus, and typhoid, the Committee have wisely made arrangements with the authorities at Monsall to receive into their hospital, under stipulated conditions, such cases of infectious disease, including smallpox, as the Health Committee are unable to accommodate in Salford.

Having thus traced the history of the isolation movement in Salford, from its inception, down to the present time, we may now profitably inquire (1) as to the class of persons by whom the hospital has hitherto been mainly utilised, and (2) as to the terms on which patients are admitted to hospital.

(1) It has been stated above, that the Wilton Hospital was primarily established for the isolation of such patients, *other than paupers*, as could not be treated at home, without risk of infecting their neighbours. In the month of June 1877, however, *i.e.*, shortly after the opening of the hospital, an arrangement was entered into between the Guardians of the Poor and the Salford Corporation, that paupers should be admitted into the hospital on payment by the former authority of a guinea per week for the treatment and maintenance of each pauper patient admitted by order of the Relieving Officer. This arrangement was continued up to the middle of 1884, when the Health Committee had their attention drawn to the fact that although

the number of destitute poor* admitted to the hospital had recently increased year by year, yet the annual sum received from the Guardians for the treatment of paupers had steadily diminished, until at the time referred to, it amounted to but a trifling sum. An inquiry into the cause of this discrepancy was thereupon instituted by the Medical Officer of Health, when the following facts came to light:—Up to the end of the year 1882, inasmuch as the Corporation possessed no powers for compulsory notification by medical men, the Health Department was dependant for information as to infectious sickness, either on the reports of the Sanitary Inspectors, or on those of the Relieving Officers; as a matter of fact, in the majority of cases, the first information we received in those days came from the Relieving Officer, whose order for admission of a patient, carries with it an undertaking on behalf of the Guardians, to pay for his maintenance. After the passing of the Act of 1882, which required from medical practitioners the prompt notification of every case of certain specified infectious diseases,† the old order of things was entirely changed; for the Sanitary Inspectors now received information of infectious sickness as early as, if not earlier than the Relieving Officer,—and consequently the patients were, in many cases removed, and their houses disinfected, before application could be made to the poor law authority for relief. The foregoing statement will explain the fact mentioned below,‡ that whereas during the six years ending in 1882 the proportion of patients sent to hospital by the Guardians, averaged thirty-seven per cent. of the total admissions; in the two years 1883 and 1884 the ratio had fallen to 6·2%.

(2) On receipt of the Medical Officer's report, which was substantially to the above effect, the Health Committee appointed a deputation consisting of their Chairman, Deputy-Chairman and the Medical Officer of Health, to confer with the Guardians, and if possible obtain from them an equitable

* A statement of the proportion of destitute cases to total admissions will shortly be submitted to the Committee.

† The diseases requiring notification under the Act are the following:—Small-pox, Scarlet Fever, Typhus, Enteric and Puerperal Fevers, Diphtheria and Cholera.

	1876-1882.	1883-1884.
‡ Total number of admissions to hospital.....	1650	1023
Percentage of paupers to total admissions.....	37·2%	6·2%

contribution towards the maintenance of the hospital. The deputation accordingly waited upon the Guardians on the 13th June, 1884, and asked their consideration of the fact, that although the number of persons admitted to Wilton Hospital as paupers under the order of the Relieving Officer had recently become insignificant, still the proportion of sick persons admitted who were unable to pay even the smallest charge for maintenance, and who were virtually though not technically paupers, was nevertheless excessively large. On these grounds, therefore, the deputation appealed to the Guardians to grant an annual sum to the Health Committee in recognition of the services they were rendering, hitherto without payment, to the sick and indigent poor of Salford.

The result of this conference was, that the guardians agreed to pay the Health Committee a sum of £500 per annum, as their contribution towards the treatment and maintenance in hospital of poor persons suffering from infectious disease. This arrangement on the part of the Guardians was subsequently approved by the Local Government Board, and the money has ever since the date of that approval been regularly transmitted by the Guardians.

In approaching the question mooted at the last meeting of the Committee, as to the grounds upon which the Committee should appeal to the Guardians, for a further subsidy; the following considerations appear to deserve weight:—

The Guardians of the Poor, *quâ* guardians, have no preventive or sanitary functions whatever. Their duty would appear to consist exclusively in relieving persons who are destitute of the means of subsistence, and in providing medical attendance, &c., for sick paupers. The Committee will therefore see that in any application to the Guardians for additional contribution, they would be most likely to achieve their object by approaching them on similar lines to those which were successful last year.

As a basis, however, for future friendly negotiations, the fact is important, that the number of *practically** destitute persons who have been

* *i.e.*, Persons who must inevitably have become paupers in case of continued sickness, although they may not have been actually in receipt of relief at the date of our visit.

medically treated and maintained by the Sanitary authority, has largely increased since the beginning of 1883, in consequence of the more adequate attention which the Committee have been able to extend to the sick poor, under the provisions of the recent Notification Act.

The Committee may further justly claim to have assisted the Guardians in this respect : that by removing the infectious sick from their homes, and by prompt disinfection of houses, &c., they have frequently avoided the necessity of preventing the bread-winners of the afflicted families from following their usual avocations—a course which frequently becomes imperative for the protection of the public, in cases where infectious patients are retained in the crowded dwellings of the poor. It is easy to perceive, that in this way the action of the Sanitary Authority has materially lightened the expenditure of the Guardians in respect of out-door relief.

In bringing these remarks to a close, the Medical Officer of Health would express a hope that they will be found useful to the Committee, in their deliberations on a subject which cannot but be of serious importance, alike to the Guardians of the poor, and to themselves as the Sanitary Authority of the Borough.

JOHN TATHAM.