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# TOWN LIFE AMONG THE POOREST.

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# TOWN LIFE

## AMONG THE POOREST:

THE AIR THEY BREATHE AND THE

HOUSES THEY INHABIT

BY

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## TOWN LIFE

### AMONG THE POOREST.

Among the important questions which must ere long engage the deliberations of a new Parliament, none is beset by greater difficulties, but at the same time none is more intimately connected with the future prosperity of the great mass of the people, than the Housing of the Poor.

It is a question with which, for various reasons, we have never as yet fairly grappled; few, comparatively, have personally worked out its details. Acts of Parliament, intended doubtless to lessen the malady, abound rather with useful suggestions than authoritative enact-

ments; while, at the same time, it has been too much the custom to entrust the application of the remedy to the hands of those very persons whose interests would prompt them to perpetuate the evil.

It is to this subject that I desire earnestly to direct the attention of this meeting, and with a view of proving that strong remedial measures are needed, I shall endeavour to show that a large proportion of the poorest inhabitants of our great towns are dragging out their days in such unwholesome dwellings, and under conditions so trying to life, that fairly robust health, and with it strength to fulfil their daily tale of work, are wellnigh unattainable. That the life-span of these persons, consigned to their cheerless habitations, —families huddled together in single chambers, attics, and cellars,—is of short and precarious duration. That whole districts sicken and die on the very threshold of life, ere one-third of man's allotted days have been gathered. That these are the great forcing-beds of disease; here the plague originates, and from these

haunts it stalks abroad. Here lies the very canker at the root of our social system, whose evil influence is seen in the highest branches, while it pervades also the inmost core of the tree.

During the last fifty years a great change has been silently passing over the face of this country. Not only has our population increased at a very rapid rate, but men have congregated together in masses. They are now no longer distributed over the country as they once were, they have come together, and built themselves towns. This is essentially the age of great cities. At the commencement of this century, only five towns beyond the Metropolis contained a population of fifty thousand persons; at the present time upwards of thirty exceed that number. Various causes have doubtless contributed to this massing of the people in certain localities, none more than the discovery of the steam engine and the introduction of machinery in the place of hand labour. The subjection of steam power to human ingenuity enables us to explain that

quickening of the intelligence which characterizes in so marked a degree the town-reared artisan of the present day. In this way an edge has been given to his mental faculties, he has become acute and inventive. But with all its advantages, a higher sphere of labour is still attended by certain drawbacks, health suffers. A more delicate portion of the organism is appealed to, the strain is diverted. In days gone by the poor man's task told on his hand, it now wearies his head; then the muscular system sustained fatigue, now the nervous powers are called into play. More headwork, more expenditure of brain, is required on the part of the workman. The delicate sense of touch and of sight which the very nature of his work demands from the cotton operative and city mechanic was little needed by the sturdy countryman as he thrashed out the corn, or listlessly turned over the furrows with his plough. The more vigorously he bent himself to his work, the more sound and refreshing was his sleep, and, provided the call on his strength was not excessive, the greater was the

development of his well-strung muscles. In crowded workshops the case is different; the effects of toil are there more trying. Longer hours and harder work do not increase the capacity for labour,—the overstrained system failing to respond to the calls which are made upon it, while the day's work is too often succeeded by loss of appetite and broken sleep.

We thus see that the old order of things has passed away; a large proportion of our population are engaged in indoor and underground pursuits; factories, workshops, and mines supply a field for their labour,—in the language of the day, their employment has become industrial. Even the agricultural labourer, though loth to put aside the habits in which he was trained, is still forced to adapt himself to the age. Year by year he learns the wisdom of relying less on his own exertions, and leaning more on the assistance of the steam engine.

Such is the change which has wellnigh imperceptibly crept over the land. It is fraught with instruction to each one of us, especially

to those who hold the reins of government: and what are the lessons which it teaches? Not a return to the ways of our forefathers; no retracing of our steps over worn-out paths; but rather an adaptation to altered circumstances. Though less robust health is attainable, there is yet more to live for. Among intelligent beings, as in the material world, honest wear is preferable to rust; but there should be no waste, no useless expenditure of human life. We are bound to see that, as our toiling artisans are amassing for us vast stores of national wealth, as they are earning this wealth by labouring at manufactures and trades which, in not a few instances, prove sorely detrimental to their health, so we also must fulfil our duty towards them, and take care that when they are assembled in the towns, they shall obtain that amount of shelter and breathing room which is indispensable to human beings if they are to enjoy health themselves and not to endanger the safety of their neighbours.

I would here remark that, in speaking of

the excessive overcrowding observed in certain places, I refer especially to the oldest and most unwholesome quarters of our great cities, and these localities are sufficiently numerous; in fact, there is scarcely a town in the country in which the work of demolition and rebuilding is not needed, in which considerations for the public welfare do not demand that whole districts should be razed to the ground.

I will now proceed to give some particulars respecting the vast number of deaths, the great majority of them altogether preventible, which are liable to occur in such neighbourhoods as those to which I allude. To obtain this information we must not content ourselves with the reports of the Registrar-General. In these reports, valuable as they are, good and bad are massed together. The poorest and their more provident fellow-citizens fill the columns of the same register. The heavy death-toll levied on the one is not credited to him alone, but assigned also to his wealthier neighbour. Yet even these returns tell their tale. Take the death-rates as they stand;

from those rates strike an average, an average for ten, or even twenty years; what is the result? There are, it appears, certain localities, healthy country villages, in which the conditions of life are so favourable that not more than fifteen or sixteen persons out of every thousand living die annually. As a contrast to these places, turn to the most notorious of our towns,—to Liverpool or Manchester, rival reapers in the harvest of death, -and we discover that this rate must at least be doubled,-it is no longer expressed by fifteen or sixteen, but by upwards of thirty. No doubt the difference indicated by these figures is sufficiently striking, but the results would be still more gloomy if the true facts were undisguisedly laid bare. If we would learn how short may be life, and how near may be death, we must seek our returns from among those courts and cellars and attics which are inhabited by the poorest and most degraded portion of the population. The only returns, so far, at least, as I have been able to discover, which supply this information on a sufficiently

extended scale to render their results valuable for purposes of comparison are certain tables contained in the "Vital Statistics" of Salford,—a report issued by the corporation of that borough. These tables were compiled by the sanitary inspector, Mr. Pickering, and may be found in the report\* for the year 1867. They are interesting, inasmuch as they contain a list of the streets and courts in which the death rate was conspicuously heavy. The names of about sixty streets are entered in this list, the population amounting to upwards of 25,000. In the case of some streets the death returns extend over seven consecutive years, while in others they do not embrace more than two.

Taking, however, those rates which are specified, and from them striking an average, we find that in the sixty worst streets and groups of streets in the borough of Salford the deaths to every thousand living range from 36 to 91, the average for the whole being 51. From the reports of the Registrar-General it appears

<sup>\*</sup> See Appendix.

that the general death rate for the whole borough during these seven years was not more than 26.3 per 1000.

From these figures it will readily be seen how greatly the excessive mortality in certain localities raises the general average for the town. Nor must it be inferred that the sanitary condition of Salford is exceptionally bad; the town is by no means specially neglected; indeed, in many respects, the public health has received no small share of intelligent care, and the authorities have set an example which might be profitably followed by still wealthier and more populous places. In both Liverpool and Manchester the mortality of the more densely populated quarters would be certainly still heavier were such district returns available for inspection.

Indeed, in Dr. Trench's report on the health of Liverpool for the year 1865, it appears that in Vauxhall district the death rate for the previous year was 49 per 1000; and in St. Paul's and Exchange it was 48.

It is self-evident that even this high death-

rate would have been far exceeded had the worst-conditioned portions of these quarters of Liverpool been singled out for special inquiry. But the figures given in the Salford reports are sufficient for my purpose. They prove unmistakably that between the healthiest agricultural districts and the most unwholesome localities in our great cities the range is wider than between 15 and 30. To express the difference the scale must be raised to at least 50.

Consider for a moment the significance of these figures,—50 deaths yearly to every 1000 of a population! Allow to each individual a life expectancy of only twenty years. It is hard to realize the full import of these words. How contracted is the term of days to which they point! All have known, among their own immediate relatives and friends, some one member of the family circle on whom health never smiled, who drooped early, blighted from his very birth, an anxious charge, a puny sickly child, a prey to every passing epidemic, a sufferer from every atmospheric change;

but even such a one, ill-starred though he be, may yet attain his twenty years, the narrow life-span of our poorest poor.

I have thus shown that there are certain unwholesome quarters of our great cities, in which the death rate is startlingly high. Whence arises this mortality? What renders these streets so prejudicial to health? Why are the dwellings they contain so destructive to life? I have paid some attention to the consideration of this question. I have visited nearly all the unsavoury regions which are referred to in the tables, and I believe that an answer may be given in a very few words,—

Bad air, and too little of it, kills the people.

Human beings are framed by nature to endure much; men will adapt themselves to great vicissitudes of temperature; they will sustain life,—nay, more, they will grow robust and vigorous on very poor food, in very dirty cabins, and in very sorry attire, provided always they enjoy that best of nature's gifts, a pure and bracing atmosphere. No population with which I am acquainted attain so

high a state of physical vigour as the natives of the Hebrides and the western Highlands of Scotland; and yet their bothies are no model cottages in so far as cleanliness is concerned; their clothing is severely simple; and the fare on which they subsist is both coarse and plain,—such food, in fact, as the town-reared mechanic instinctively loathes; which even during the hard days of the cotton famine failed to support him.

Why should the same diet produce such different effects? This difference, in my opinion, is not so much due to the food itself as to the air in which the consumers of that food dwell. In the bracing properties of his climate the Highlander possesses the best aid to digestion. It is this that enables him to thrive on his coarse ground oatmeal and dry salt-hardened fish. Invigorated by such an atmosphere, his palate feels no craving for the "tasty food" of the Lancashire operative.

I have dwelt the more strongly on the subject of air because in so far as the (so-called) necessaries of life—food, water, and clothing—

are concerned, these people, in many of our large towns, where the death rate is highest, have few grounds of complaint.

I have visited the houses of the poorest people in the worst districts of Manchester and Salford at all hours of the day-very frequently at the time the inmates were partaking of their midday meal,—and I have almost invariably found the food abundant and good. In this opinion I am confirmed by the reports of some of the district nurses, -women sent out into the most neglected quarters of the town by an institution with which I am associated as Secretary, —women who, from their constant attendance on the neediest of the poor, have large opportunities of becoming acquainted with the circumstances and mode of life of those under their charge. Their reports tend to show that although, owing to attacks of illness, or other exceptional causes, articles of diet of a more nutritious character may at times be needed for the restoration of health, there is still, in the matter of food, but little actual want,-little in this direction to account for

the heavy death-rates. The remarks I have made on the subject of food among the poorest, apply equally to the water. In many of our large towns the water supply is both plentiful and pure; in this respect the very poorest man who has left his mountain rivulet to reside amongst us cannot complain that he has suffered by the change. In considering, then, the causes of the heavy mortality in such districts, I would direct special attention to bad air as an invisible agent more potent in its influence on health than either food or water, whose effects on life we are too prone to underrate. Thousands around us are annually dying, starving for want of a breathable air. The atmosphere in which these unfortunate persons are constrained to live, acts upon them as a subtle poison, -insidious in its consequences, it kills without warning. What if some irritant poison slew these countless hecatombs of the poor? The compassion of the nation would then be roused; public sympathy would hurry to the rescue. But this dread foe works differently; it exerts rather a mysterious,

soothing influence; the arrows fall fast and thick into the serried ranks, but the bow sends forth no twang.

Doubtless habit blunts the sensibilities; many for a time, at any rate, withstand the ordeal, but still more fall out by the way. The young suffer heavily; hence the excessive infantile mortality. For this reason the deathrate of children under five years of age in our large towns is, in all probability, the most sensitive test we possess of the comparative healthiness of different places. However noxious be the atmosphere of their parents' dwelling, day and night young children are forced to breathe it. The benefits resulting from change of air are denied to them.

That some districts are far more trying to early life than others is strikingly apparent from the Salford reports. In the course of seven consecutive years,—extending from 1860 to 1866,—49.9 per cent. of the deaths registered occurred among children under five years of age; the death-rate varied at the same time in a very marked degree with the

sanitary conditions of the three great divisions of the borough,—the deaths at this age in Salford proper being four times as numerous as in the adjoining district of Broughton.

Some eight years ago, while visiting the Isle of St. Kilda, I had a good opportunity of observing how frightful may be the mortality among young children where no attention is paid to the ventilation of dwellings. In this small island, the inhabitants of which are about 80 in number, I was credibly informed that 3 out of every 5 infants born alive are carried off a few days after their birth by a convulsive affection allied to tetanus. To explain this excessive mortality in the very opening of life seemed at first sight puzzling. In many respects the people live in much the same manner as their brethren along the north-west coast of Scotland, among whom the period of infancy is not attended by any unusual dangers. On examining the construction of the houses, however, I discovered an important point of distinction between the St. Kilda cabins and the bothies of the western Highlands. The

smoke-hole wellnigh invariably met with in a corner of the thatched roof is altogether dispensed with in St. Kilda, while at the same time the interior of the dwelling is rendered still more airtight by having the outer walls built double, an interval between them being closely filled with peat and sods. Scarcity of manure is the reason assigned for thus dispensing with the smoke-hole; smoke is too precious an article to be permitted to escape. For twelve long months the soot is deposited in pitchy layers upon the inner surface of the roof; with the return of spring so much of the thatch as is possessed of fertilizing properties is carefully removed, the roofing being restored to its original thickness by the addition of fresh straw on the outside. The process is yearly To this indoor manufacture of repeated. manure (a scarce commodity and one much prized by the people), the frightful sacrifice of infant life in this secluded island is, I believe, mainly to be ascribed.

But it is not necessary to make a voyage to St. Kilda in order to discover from our own sensations how exhausting are the effects of a vitiated atmosphere. No one who has spent a morning in visiting the dwellings of our town poor, in the most densely populated districts, can have failed to experience in his own person a feeling of prostration and fatigue altogether disproportioned to the time and labour he may have devoted to the work. This feeling has been specially insisted on by the late Dr. Southwood Smith. Mr. Simon, likewise, in alluding to the subject remarks, "the stranger visiting some of these courts feels his breathing constrained, as though he were in a divingbell." This sense of oppression and lassitude I have myself frequently experienced: indeed there are some dwellings (I refer more especially to the worst Manchester cellars) in which the very smell of the dank air recalls to the mind the stifling fumes of a long railway tunnel. In such places the lungs wellnigh instinctively shirk their work. They seem determined, that in so far as they are concerned, the allowance of air to the system generally shall be on the most contracted scale.

loathe the poison they are forced to inhale. How different are the deep-drawn respirations in which they revel when they throw open their cells to the invigorating breezes of the mountain or the sea!

But it is not within doors alone that the atmosphere is vitiated, the outer air also is charged with impurities. In a letter to the Registrar-General, Mr. Leigh, the Medical Officer of Health for Manchester, in referring to this subject, uses these words:—"No plant will live in Manchester without constant washing; the leaves become coated with soot, the stomata choked, and respiration ceases after a few hours." There are quarters of the town in which even washing will not avail.

In one of my peregrinations through these low districts I visited a cellar in the immediate neighbourhood of the Salford Gas Works. I found it occupied by a poor though intelligent man, who informed me that in days gone by, ere health failed, he had filled the situation of gentleman's gardener. In spite of altered circumstances, he still retained his love for

flowers, and had, as he stated, cultivated carefully those varieties which proved most hardy, not refusing to bloom under the most adverse circumstances. In parts of the town in which he had before resided, his care and skill preserved his stock, but around the gasometers the case was different; no tending would there avail,—in the course of a few weeks all his plants perished.

The noxious properties of such an atmosphere is further shown in a paper on the Smoke Nuisance read by Dr. Angus Smith, at a meeting of the National Association for the Promotion of Social Science held in Manchester in October, 1868. Dr. Smith states, on the authority of one of the foremost printers in Lancashire, that there are some colours which almost instantly fade when exposed to a Manchester air; they imbibe a poison which proves destructive to them. In order to compete successfully with foreign rivals, the fabrics containing these colours are no longer permitted to pass through the town.

Some idea of the unfavourable conditions

under which life is passed in some of the densely peopled quarters of our large towns may be gathered from a report drawn up by a committee of the Statistical Society of Manchester. The report to which I allude appeared in the year 1865, and embodies the results of a house-to-house inquiry into the circumstances, occupation, and acquirements of the working classes of Manchester, in one of the poorer parts of the town.

The quarter selected was a block of buildings in the township of Ancoats, chosen rather as representing an average sample of life among the poor than as being anything exceptionably bad.

This district contains 643 houses, inhabited by 3316 persons. In the language of the Report, "very many of the habitations are in such a condition, partly from the filthiness of the inhabitants, and partly from the smells of middens, drains, and animals, and the dampness of the walls, and in some cases the ruinous condition of the buildings, as to be almost intolerable and wholly unfit for human

dwellings. In some cases, too, the smell was so bad that it was almost impossible for the visitor to remain inside the house; he was forced to call the people out to get the desired information. . . . In one case, as many as twelve families have to make use of one midden, and that is closed against them at ten o'clock every evening by a person who keeps the key." Under this state of things, it is justly remarked, "no one can wonder that many of the inhabitants are described as apparently in a very delicate state of health." From what I have myself seen of other parts of the town, I feel justified in asserting that the foregoing description is in no respect overdrawn; indeed, there are other localities in which revelations respecting the home life of the people would be found still more startling. enough has been said. Those who are familiar with what has been written on this subject, with the reports of the various medical officers of health for our large towns, with such works as that of Mr. Hole on 'The Homes of the Working Classes,' and with numerous papers scattered through the Transactions of the National Association for the Promotion of Social Science, are well aware that there are places in almost every great city in the country in which life is surrounded by the same dangers as it is in this quarter of Manchester, where thousands are falling victims to a pestilential atmosphere, poisoned within doors by the emanations from their own persons, and poisoned out-of-doors by the decomposing gases of drains and middens.

What, then, is the extent of this evil? how wide are its ramifications? what may be the number of our poorer fellow-townsmen who are, at the present time, doomed to live in a class of dwellings which, by reason of their actual construction or surroundings, are altogether unfitted to serve as human habitations? In attempting to answer this question we shall at the same time supply some information respecting the amount of improved house accommodation which is needed in our towns. Unfortunately, the data for such an inquiry, if not altogether wanting, are still sufficiently

scanty. I have already shown that in Salford, with its population of 100,000 inhabitants, there are sixty streets and groups of streets, in which death is so frequent an intruder that the great majority of their tenements must either be razed to the ground or altogether remodelled if health and strength are once more to revisit the inmates. I have before remarked that the number of persons residing in these streets and courts cannot fall short of 25,000; and if it be assumed that the building reforms which I would desire to see carried out, be undertaken upon a sufficiently extended scale to provide accommodation for about 20,000 of these persons, we certainly shall not over-estimate the requirements of the town. Although, in the case of Manchester, no statistics bearing specially upon the rate of mortality in the more neglected districts have as yet been compiled, we still find among the buildings the same contempt for arrangement and order, and equally confused masses of courts and alleys; and inasmuch as the death-rate for the whole city is considerably higher than that for Salford, we are justified in inferring that the number of poorer citizens who need habitable houses would be proportionately greater, amounting, on a rough calculation, to about 80,000 persons.

These results are, to some extent, borne out by the figures given in two reports of the Manchester Statistical Society on poor and densely populated districts situated in Ancoats and Deansgate, in which it is stated that upwards of 23 per cent. of the whole of the families residing in these two quarters of Manchester were, at the time they were visited, huddled together in single chambers, which, in some instances, contained as many as six or seven persons, who were thus living under conditions destructive to health.

From what I have myself seen, both of Liverpool and Glasgow, no less than from their published reports, I feel persuaded that the number of uninhabitable houses they contain is fully equal to that of Manchester. According to Dr. Hunter's estimate, there are in Glasgow no fewer than 35,000 tenements of

which the average annual rental is only £3. 12s. 6d., less in fact than 1s. 6d. a week,—a sum wholly insufficient to supply family lodgings in a large town. In the Metropolis the housing of the poorest is not much better. It has been calculated, indeed, that not less than half a million of the inhabitants of London suffer enfeebled health from the irremediably bad state of their crowded, stifling dwellings. In others of our large cities, among which I may specify Bristol, Leeds, Newcastle, Greenock, and Plymouth, a town in which upwards of 11,000 out of a population of 37,000 are residing in single rooms, the proportion of families for whom better housing is required will be found to range from one-fourth to onesixth of the inhabitants they contain. Speaking generally, on a review of the evidence which has been collected on this subject, we are driven to the conclusion that, out of the twelve million persons by whom the towns of England and Scotland are at present peopled, there are at least two millions for whom improved accommodation is imperatively demanded.

I have the more urgently insisted on the importance of public attention being directed to this subject, because, in so far as I can discover, there are as yet no signs that the evil is remedying itself. The last 25 years have witnessed no general improvement. That such is the case the different writers who have treated of this subject are unanimous in maintaining. In the 8th Annual Report of the Medical Officer of the Privy Council, Dr. Hunter, in speaking of the housing of the poor in towns, uses these words :-- "There are about twenty large colonies in London, whose miserable condition exceeds almost anything I have seen elsewhere in England, and is almost entirely the result of their bad house accommodation;" and he further remarks "that the overcrowded and dilapidated condition of the houses in these colonies is much worse than it was twenty years ago." Dr. Hunter's opinion is borne out by Mr. Hole, who observes in his 'Homes of the Working Classes,' published in 1866, "Within the last ten years the number of inmates to houses in poor neighbourhoods has

risen in the rate of seven to four, and with this steady rise in overcrowding has come an equally steady rise in the Registrar's returns of fever cases." In another portion of his work, in describing the overcrowding of some of the lowest districts in Leeds, he observes that "cellars are occupied as dwellings that not long ago were considered too bad for dwelling in."

Nor is the evil confined to the towns alone, the rural districts also are in this respect worse off than they were. In Mr. Simon's 7th Report to the Privy Council, he adverts to the evidence compiled by Dr. Hunter from the last census, "that destruction of houses, notwithstanding increased local demands for them, has during the last ten years been in progress in 821 separate parishes or townships in England, so that, irrespectively of persons who had been forced to become non-resident, these parishes and townships were receiving in 1861, as compared with 1851, a population  $5\frac{1}{3}$  per cent. greater into houses 4½ per cent. less." In other words, in the year 1861, ten persons were crowded into small cottages which ten years before, in 1851, would not accommodate nine.

The question of sanitary progress during the last quarter of a century is discussed by Dr. A. P. Stewart in his valuable paper on the medical aspects of sanitary reform; the conclusions at which he arrives are based on the death-returns of a large number of populous registration districts in England and Wales. In eighteen of these districts he finds the mortality is decreasing, while in 49 it is either stationary—in most cases at needlessly high rates-or increasing. In many of our large towns there certainly are not as yet any signs of improvement. In a report on the health of Manchester and Salford during the last fifteen years, by Messrs. A. Ransome and W. Royston, will be found the following remarks bearing on this subject:-"In the first few years after the establishment of the Sanitary Association, the death-rate varied slightly from 37.2 to 35.7 per 1000. Then for a few years, from 1856 to 1860, the mortality seemed to

diminish (the average for this period being 31.6 per 1000), and there were grounds for hoping that the improvement would be permanent; but the five following years (from 1861 to 1865) disappointed these anticipations. In 1861 the death-rate was 33 per 1000, in 1863, 35.3 per 1000, and in 1865, 39 per 1000, -higher than it had ever been since the registration of deaths." Here, then, we see that, notwithstanding the fact that good water has been supplied to the town of late years, a luxury unknown to the inhabitants in former times,—and although large sums of money have been expended in paving the streets, the mortality-returns still continue as heavy as ever.

The same remarks apply to Liverpool. Eight years ago—during several successive seasons—the entries in the death registers were found less numerous. The signs of amendment were joyfully welcomed, the results achieved by sanitary science were loudly proclaimed, the worst was now over, and the tide had at last turned. But have those expectations

been realized? Is it not rather a painful but admitted fact that, in spite of the vigorous and able efforts of the medical officer of health, the deaths in Liverpool were never so numerous, disease never so powerfully in the ascendant, as during the last few years?

In the foregoing remarks I shall be thought by many to have overstated the case against the towns. It will be urged that in numerous instances the death-returns of the last six or eight years contrast favourably with those that preceded them; and this improvement in the registers will be appealed to as a conclusive proof that the sanitary conditions of the places to which they refer are in like manner more favourable than in days gone by. In the case of some of our towns this inference is, no doubt, a legitimate one; but it is by no means generally true; the bare figures of mortalityreturns must not be looked upon as an unerring index of the public health; they must be accepted only with a certain cautious reserve. The averages obtained from different years must extend over a sufficient period of time. Sickly seasons must be set against healthy ones. It must never be forgotten that wherever large numbers of persons are congregated together, there epidemic diseases must at times be looked for.

Typhus, measles, scarlet fever, and smallpox will all appear for a time and then pass on; and as these and other individual disorders are severally prone to occur, so there are times when disease generally is in the ascendant, and great tidal waves of death engulf our towns. In comparing the mortality returns of different places, we must constantly bear in mind that there is in disease this natural tendency to move onwards in waves. We can observe traces of this tendency even in healthy districts; but if we would study its phenomena under the most striking conditions we must turn to the towns,—to the poorest quarters of the largest towns. The strange fluctuations observable in the death-rates of different places are, no doubt, partly due to what has been here urged-namely to this wavelike tendency of disease; but those fluc-

tuations are, I believe, in a still greater degree to be ascribed to the operation of other causes. If we would know what those causes are, we must look for information to the people themselves,-we must turn to the men and women who frequent our hospitals and dispensaries and workhouses. So far as my own observation has gone, I may affirm unhesitatingly that the more I see of the class of patients who are the recipients of relief at these institutions, the more strongly do I feel that the lower we descend in the social scale, the nearer we approach the lowest stave of the ladder,—the more apparent are the signs of wide-spread physical deterioration; we reach, in fact, a point at which chronic ailments, rather than the enjoyment of health, seem the order of existence, where some form of constitutional disease is the rule rather than the exception. The apparent maladies for which relief may be sought are, in numerous instances, sufficiently trifling; where bodily vigour is unimpaired, dyspepsia, bronchitis, and sundry other ailments, stand for little; but where these disorders become chronic,

where they are constantly excited by the most trivial causes, and where, moreover, the subjects of them are, in too many instances, debilitated by habits of intemperance and excess, their import will, in all these cases, be very much more grave. They must then be looked upon as the local expression of an impaired inward state, and plainly testify to the existence of a vast amount of constitutional disease. They tell, in fact, of a large number of persons whose health is permanently impaired, of the wide-spread prevalence of syphilis, of scrofula, and of consumption. Amongst such a population there must needs be many whose thread of life is deplorably fine-spun; many to whom death must be always near, who seem to cower around the open mouth of the grave, -crouching on the banks of the river, like the shades in the 'Æneid,' they await the return of the ferry-boat. Let the seasons be favourable, with no rude alternations of temperature; springtime and harvest, summer and winter, gently following in each other's wake, the lives of these frail denizens of the city may then be

prolonged, and year after year may still find them in their accustomed place. But reverse the picture; let the day of trial approach, let the cold blast descend in its wintry might, or the sultry rays of the summer sun arouse into activity the fever-charged exhalations stored up in the drains,—what then will be their lot? When sickness assails them, they have no reserve strength on which to fall back, but readily succumb to the disorder of the hour.

In the preceding pages I have insisted that in the all-important question of overcrowding, the last twenty years have not witnessed any signs of improvement; indeed, viewing the towns as a whole, the evil is probably greater in the present day than at any previous time of our history. This is a result to which a variety of circumstances have more or less contributed. During the last quarter of a century, a vast number of the dwellings of the poorer classes have been razed to the ground, in order that railways, gasworks, manufactures, and other concerns of great public utility, might be allowed space for extending their

operations. The families by which those dwellings were occupied have been driven from their homes, and forced to put up with still more straitened accommodation. Householders have thus been converted into lodgers, lodgers into the occupants of a single room. In this manner the pressure on the constantly narrowing space has year by year grown more urgent; while at the same time the light has become more dim and the air more tainted with impurities.

A new class of buildings also has of late arisen in our towns. In former days the more densely peopled quarters were, as indeed they still are, mapped out into blocks; within these blocks, in courts and alleys and in dismal cellars, lived the poor. Houses of a better class, the abodes of merchants, professional men, and shopkeepers, looked out upon the main streets, and formed an outer facing. These were the men who, by their education and influence, were able to watch over the interests of their poorer neighbours. They have now forsaken their town houses and

ceased to regard them as dwelling places, having removed with their families to brighter neighbourhoods, while, at the same time, huge piles of warehouses and offices are massed around the humbler dwellings, proving effectual barriers to those much needed currents of air on which health and vigour so largely depend.

In considering the various changes by which the towns have been affected, and in insisting that the districts occupied by the lower orders are at the present day more trying as places of residence than they once were, we must remember that very many of the houses themselves are not now applied to those purposes for which they were originally constructed. They were built to accommodate a single family at a time when ventilation was but little attended to, while, owing to the enactments of an oppressive tax, windows were frequently either entirely dispensed with or reduced to the scanty dimensions of mere pigeon-holes.

Many of the back-to-back houses so common in the northern counties, now so over-peopled as to be wellnigh uninhabitable, were, in days gone by, sufficiently airy. But they were then, in the language of the tenants, single houses; a kitchen and scullery, two bedrooms, and cellars, constituted no mean suite of apartments for a working man. In process of time, however, as land became more valuable, each cottage was converted into two, the door which separated the front from the back part of the house being bricked up, and every room occupied by a separate family. But the pressure continued until at length the very cellars were let out as dwelling-rooms, while lodgers were admitted into the upper chambers. There is another way, likewise, in which the increase of population in towns tells prejudicially on the health of the inhabitants, namely, by extending the area covered by buildings. In former times the more central districts were within easy reach of the green fields of the surrounding country. Sundays and holidays could then be passed in purer air, under a brighter sky. The day's labour ended, a short walk brought with it a change of scene,-a change also of thought. The

mind's tension was thus relieved, while the lungs expanded to a fresher atmosphere. Such relaxation is now denied the toiling artisan,—the field for his exercise is the dreary pavement, while the court or the area is the playground for his children.

To so unfortunate a position have the poorest citizens in our towns been reduced. The attempts to apply any effectual remedy hitherto, at any rate, have not been very successful; in many places in which the local authorities have shown themselves most active, the form their activity has taken has been rather destructive than constructive in its tendency. We observe, for instance, that in Liverpool the Corporation has voted the magnificent sum of £250,000 for the demolition of dwellings unfit to serve as human habitations, and for breaking up the masses of crowded buildings, and driving thoroughfares through and across them. In Glasgow the Committee of the City Improvement Trustees have lately reported that they have expended £274,211 in the purchase of property, and that a considerable number of houses have been taken down in the old parts of the city with a view to the opening up of densely populated and unhealthy localities. It has been stated also on good authority that in Manchester, since the year 1852, more than 2000 cellars, inhabited by upwards of 8000 persons, have been permanently closed. Here, then, we see that, in each of these important towns, a large number of human habitations have been either razed to the ground or closed upon their occupants before any adequate provision has been made for the ejected inmates. From what I have myself seen of the overcrowding in many of our large towns, I feel strongly persuaded that, bad as the present tenements in too many instances confessedly are, we shall still act more wisely by permitting them to stand till a better class of dwellings can be erected to provide them with shelter. In more than one instance I have had an opportunity of tracing the after circumstances of those who were denied even the pitiable lodging of an underground cellar. So far from being benefited, however, they merely exchanged a tworoomed cellar for a single attic, and in this manner, while their own breathing space was more contracted, they added also to the over-crowding of their neighbours.

Such, then, is the condition of the poorest inhabitants of our large towns. Upwards of two millions of their population are living in houses, or rather, I should say, rooms and cellars, in which health, and with it capacity for labour, is well-nigh physically impossible. These are the people whom no efforts can induce to avail themselves of opportunities of instruction, even where that instruction is gratuitously provided for them. It is from among their ranks that the squalid army of one million paupers gains its recruits; prisons and reformatories look to these haunts for their largest supply, and it is among their dwellings that those diseases originate which, in the sickness and death they occasion, entail a heavy penalty on society at large,-kindling the flame from which the sparks fly upwards, but where those sparks may alight, and how extended may be the conflagration they will awaken, none can tell.

In a former paper I have directed public attention to the "Danger of deterioration of race from the too rapid increase of great cities." In the present pamphlet I have considered the extent of overcrowding in our towns, and the class of persons who are necessarily the chief sufferers therefrom; on a future and no distant occasion I propose to discuss the nature of those remedial measures which the well-being of our poorer citizens seems to require, and the direction which our sanitary legislation may most advantageously take.

Showing the high Death-Rate in Sixty Streets in Salford.

Name of Street.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	Total
A wlin of on street	46.39	39.44	38.85			45.02		40.67
Back Hampson-street	46.97	36.08		: :	66.04	61.32	46.22	51.33
Back Park-street	49.02	42.02		:		:	:	45.51
Barrow-street	34.09		:	:	43.08	58.46	65.75	47.84
Bedford-street		-		36.92	33.85	49.23	49.23	42.31
Birtle's-square and Courts		:	44.89	70.71	09.09	30.30	41.66	49.63
Boond-street		:	20.00			90.09		00.09
Booth-street		:	:	:	:	19.09	36.86	48.48
Bridgewater-street and Courts		:	:	98.99	50.17	40.13	42.04	47.33
Briercliffe's-buildings		:	:	:	99.99	81.19	22.29	60.74
Brooks-street		:	:	41.66	55.55	55.55	:	52.92
Broughton-street	:	:	40.00	48.02	67.88	:		51.97
Brown-street	:		:	:	42.49	99.99		49.29
	:	:	:	:		37.04	37.62	37.33
Canal-street	33.36	:	8:	36.00	72.00	44.00	40.00	45.07
Clayton-street	:	:	:	:	56.50	:	45.45	26.09
Clowes-street and Courts		:	:	5	35.59	:	50.91	44.25
Cook-street	43.90	62.80	41.47	46.59	99.19	48.26	49.91	49.22

Showing the high Death-Rate in Sixty Streets in Salford (continued).

866. Total	73.97 39.63 50.34 52.08 48.64 41.55 41.06 44.68 50.90 39.60 49.78 50.99 48.58
1866.	91.95 38.46  42.35 37.30 42.40 50.00 113.31 47.84 42.80 52.63 36.44 57.69
1865.	85.52 40.20 62.50 34.72 47.29 42.33 37.30  41.02  60.72 45.45
1864.	35.44 80.88 50.00 37.04 48.58  56.25 50.55 50.55
1863.	38·19 62·63 49·24 48·00 68·00 53·40 
1862.	65.79 44.44  45.90 45.16 55.90 38.81 46.95
1861.	52.63 45.11 41.94
1860.	47.62
Name of Street.	Collier-street and Courts Deal-street Douglas-green Factory-lane Franchise-street (Pendleton) Garden-street and Courts Gold-street (Pendleton) Greenbank Hall-street, Dyer-street, and Cotton-street Hall-street, Dyer-street Harding's-buildings Hodson-street James-street and Courts John-street (Salford) Muslinett-street (group) Nightingale-square Orchard-street (Pendleton)

57	63.49 55.39	78	38	74.02 71	49.52 46	53.78 54	37	6.0	48.67 91	41.70	04.70	51.09	34.72 36.46		2 50.34 49.68	_	54.45	7		44.07	:	3 35.24 56.07	43.32
_	37.73		02023	69.44		45.8	:	:	113.33	41.7	48.3	37.17	:		55.8		37.41	:		58.0	36.93		:
6.0	64.94	9.1	0.9	:	7.4	62.75	:	:		50.80	200	:	38.19	47.62	:	:	:	:	1.2	37.83	:	52.86	36.08
	: :	:	:	:	50.41	:		34.88		49.70	7 7 H	:	: :	39.68	50.46	00.06	49.05	:	:		51.81	88.11	41.24
:	: :	:	41.24	:	37.47	:	:	40.00				40.90		43.23	42.11	46.87	:	:	:	:	:	:	52.63
68.75	:		:		:	:	38.46	:						78.97	:	:	56.85	34.93	45.28		64.51	2.5	:
:	:		:		:	:	37.21						: :	57.44		:							:
Pimlott-street do.	Primrose-hill (group) Pendleton	Prescott-street	Prospect-grove	Quay-street	Queen-street and Courts	Ravald-street	Rigby-street	Rylands-street	Salford-street, Willow-street, and Williamson- )	Street Soddon_street and Counts	Shomwell-street (Pendleton)	Shuttleworth-street do	Sovereign-street do.	Springfield-lane	Thompson-street and Back	Tontine-street	Union-street	West Union-street	Wheathill-street and Courts	William-street (group) Salford	William-street (Pendleton)	Wood-street	Yorkshire-street

SPOTTISWOODE AND CO., NEW-STREET SQUARE
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