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THE HABITATIONS

OF

THE INDUSTRIAL CLASSES:

Their Influence on the Abysical

AND ON THE

SOCIAL AND MORAL CONDITION OF THESE CLASSES:

SHOWING THE

NECESSITY FOR LEGISLATIVE ENACTMENTS:

BEING

An Address,

DELIVERED AT CROSBY HALL, NOVEMBER 27TH, 1850.

BY

HECTOR GAVIN, M.D., F.R.C.S.E.

LECTURER ON FORENSIC MEDICINE AND PUBLIC HEALTH AT CHARING CROSS HOSPITAL, ETC. HONORARY SECRETARY TO THE METROPOLITAN SANITARY ASSOCIATION.

PUBLISHED BY REQUEST, AND SOLD FOR THE BENEFIT OF THE SOCIETY FOR IMPROVING THE CONDITION OF THE LABOURING CLASSES, AT No. 21, EXETER HALL, STRAND, LONDON; ALSO BY SEELEYS, FLEET STREET, AND HANOVER STREET; NISBET AND CO., BERNERS STREET; J. W. PARKER AND SON, WEST STRAND; AND HATCHARD, PICCADILLY.

TO HIS ROYAL HIGHNESS

THE PRINCE ALBERT, K.G.

PRESIDENT,

TO HIS GRACE

THE ARCHBISHOP OF CANTERBURY,

AND TO THE OTHER VICE-PRESIDENTS,

TO THE LORD ASHLEY, M.P.

CHAIRMAN,

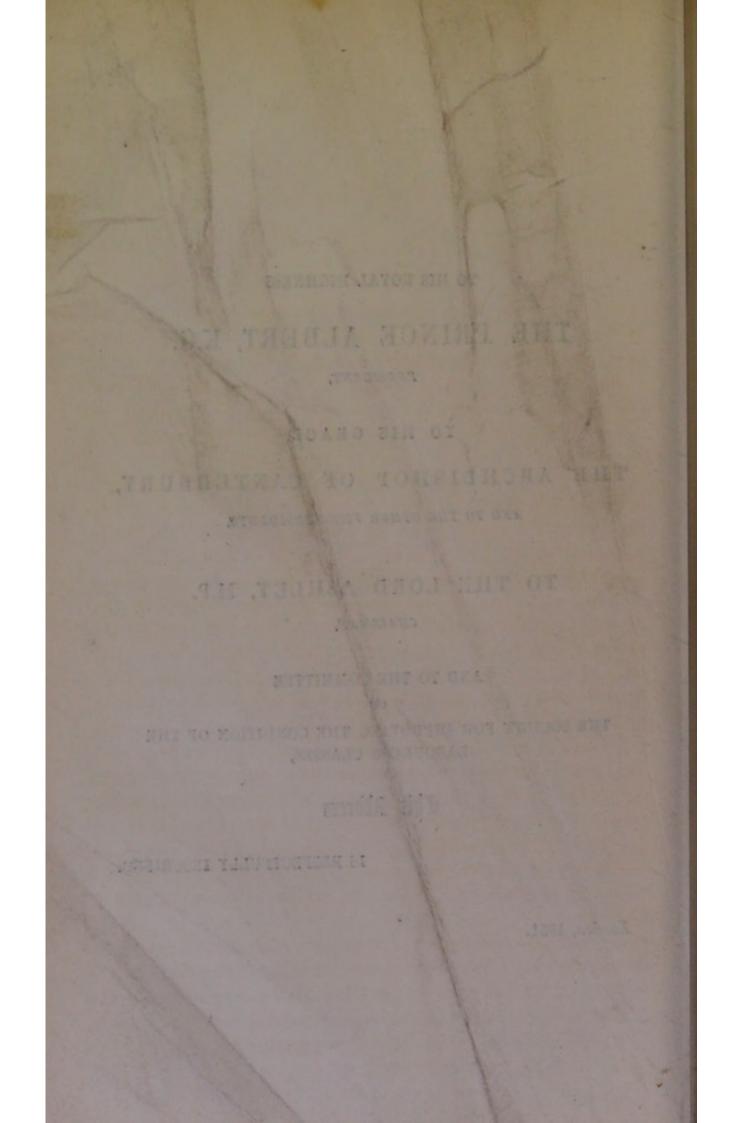
AND TO THE COMMITTEE

THE SOCIETY FOR IMPROVING THE CONDITION OF THE LABOURING CLASSES,

This Address

IS RESPECTFULLY INSCRIBED.

London, 1851.



PREFACE.

THE substance of the following observations was delivered at Crosby Hall, in November, 1850, as a LECTURE, on which occasion the Right Hon. Lord Ashley, M.P., presided.

The very intent of an address of this nature, and the propriety of occupying but a limited time, rendered necessary the omission of the numerous quotations and authorities which are here inserted.

The object in view was to direct public attention to the absolute necessity of obtaining, by a legislative enactment, a provision that the dwellings of the industrious classes should be male habitations fitting for the occupation of human beings.

The COMMITTEE of the Society FOR IMPROVING THE CONDI-TION OF THE LABOURING CLASSES, believing that a further exposition of the universal prevalence of the evils arising from, or aggravated by, the condition of the dwellings of the classes referred to might prove useful, resolved upon the publication of the following pages, the imperfections of which will, it is hoped, be in some measure overlooked, as the writer was, during their progress through the press, suddenly called on to proceed to the West Indies, where he was unable to do more than revise part of the proof slips, in the absence of all documents; and he cannot but deeply regret his inability to insert the plans and drawings, in reference to the condition of the dwellings of the labouring classes, which are contained in the valuable Reports of the Superintending Inspectors of the General Board of Health.

It would prove a source of extreme satisfaction to the writer, should the facts which have been gathered together, or the scheme which has been propounded, lead in any degree to the accomplishment of the object he has so much at heart—namely, the possession by the industrial population of—"the modest comforts of an English home."

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THE HABITATIONS

OF

THE INDUSTRIAL CLASSES.

WITHIN the last few years public attention has been prominently directed to the actual condition of the dwellings of the poor and of the labouring population, and to the influence which that condition exerts upon the general welfare of society. The public press has not been indifferent to the importance of the subject. Earnest appeals and praiseworthy attempts have been made for the improvement of the dwellings of these classes of society; new and experimental structures reared on sounder principles have sprung up under the influence of enlightened philanthropy and practical humanity. The scientific architect has sought the co-operation of the physician, the propounder of the laws of life, and of the diseases which spring from their violation, (alas! too often the unsuccessful alleviator of such maladies,) and by such co-operation the requisite combination of knowledge and skill has been applied to the increased happiness of many thousands of our fellow-creatures. From the Prince near the throne, and the Prime Minister of this empire, to the humble landlord of a few cottages the cause of the industrial population has been advocated, and two large and powerful associations have addressed themselves to remedying evils universally acknowledged.

These associations are "The Society for Improving the Condition of the Labouring Classes," with her Majesty the Queen as patron, the Prince Consort as president, and Lord Ashley as chairman of the committee; and "The Metropolitan Association for Improving the Dwellings of the Industrious Classes," with Sir Ralph Howard, Bart., as chairman of the committee.

It might, therefore, seem unnecessary to interfere in a movement already begun, and wiser to direct public attention to some other less notorious evil—less likely to receive general attention, and for which the remedy seems more distant. But the experience derived from many years of sanitary investigations into the actual condition of the industrious classes of this metropolis, and the causes which have chiefly operated in bringing about that condition, leads to the belief that no subject is more misunderstood, or, in comparison with its importance, receives less attention.

Hitherto the efforts which have been made to improve the condition of the dwellings of the industrious classes have been entirely voluntary—the result of the wisdom of the few—seconded by the philanthropy and charity of many noble and good men, but entirely abortive, except as examples, for any great amount of immediate practical benefit conferred on the masses of the population.

Following the course developed by those pioneers of progress,—not, however, attempting to demonstrate the principles which they have so successfully shown may be applied,—I would endeavour to prove that society is now in a condition to reap the fruits of their labours, and has a right to demand the immediate and effective application of their principles to the overwhelming necessities of many millions of human beings congregated in the towns and cities of this kingdom.

At first it might appear superfluous to describe the actual condition of the dwellings of the industrious classes, inasmuch as the prevalence of great evils connected with that condition is very generally known and recognised, but the acquaintance of the public with the evils has not hitherto produced the result which usually follows the general knowledge and appreciation of an evil in England-namely, its abolition ; it is consequently fairly presumed that the mass of the lawmakers and richer classes do not come in sufficient contact with the poor and industrious classes to appreciate the important bearings which the condition of their dwellings exerts upon the classes themselves, and upon society generally. It seems necessary therefore to bring together the most recent and authoritative evidence that we have on this subject, and to endeavour to obtain the attention and consideration of those more elevated persons in society on whom, in a great measure, depends the application of the acquired knowledge of the present day to the wants and necessities of the people.

It can scarcely be believed, notwithstanding the enormous gulf which separates the rich from the poor—notwithstanding the indifference, if not the hardness of heart engendered by riches, that when the wretched condition of the poor and industrial population is fairly brought into view, some attempt will not be made to relieve them from those calamities at least which are clearly proved to be preventible, and not only to have no necessary connexion with their lot, but to arise from the forgetfulness and ignorance by the rich of their duties to the poor and the labouring population. It must, however, be confessed that a mere exposition of the evils which afflict society in consequence of the state of the dwellings of the poor and the industrious classes, will not by any means suffice for their removal. Some years ago I stated, in reference to Bethnal-green—

"I have but to lay bare the real truth, as to the state of one part of this vast city; and I believe that the hearts of many will be warmed and their spirits aroused to assist those who have undertaken the great work of sanitary improvement and social amelioration."

And I added-

"I am strengthened in the conviction by the opinions of men who have dedicated abilities of no common order to the elucidation of the bearings of the sanitary question on the poor and on the rich. 'I have universally observed,' says Dr. Reid, 'that a thorough and distinct exposition of the realities of that amount of discomfort, disease, and death, that are justly attributable to causes that may be easily reduced in virulence, will lead numbers to assist in the amelioration of the condition of the poor, as they become more sensibly alive to the great benefits that arise from a little timely assistance or interference, and to the magnitude of those evils that oppress so many of our fellow-creatures, and to which millions are habitually exposed, without that consciousness of their existence which is essential for the development and prosecution of active measures of relief."

I am now satisfied that the conviction then entertained was too sanguine, and more founded on a consciousness of the necessities of the case than on experience. I am even ready to assert that I see no prospect of any speedy and effectual change for the better in the condition of the metropolis if its improvement is to be dependent upon the appreciation of the importance of the subject by the government, and only aided by the efforts of the numerous philanthropists engaged in the sanitary cause.

We have but to refer to the works of philosophers and philanthropists published half a century ago, and we find them, with a confidence similar to my own, propounding the same convictions I entertained. Thus I quote the following paragraph from a pamphlet published in 1801, by "The Society for Bettering the Condition of the Poor:"—

^k In the interior arrangement of these habitations, circumstances frequently subsist which, it must be obvious, are wholly incompatible with cleanliness and with comfort. Such evils are undoubtedly the consequence of increasing population, but they are not the necessary and inseparable effect. On the contrary, experience* has shown that in many respects they admit of alleviation and remedy, and there is every reason to expect that the more accurately the real state of the poor shall be ascertained, the more distinctly will the means of ameliorating it be understood, and the more effectually will the energy of the benevolent and enlightened be called forth to correct and improve it."

We find in these and similar works many of the most flagrant calamities of the present day as accurately traced to their source, and the remedies as clearly indicated, as if they had been written after the large experience which has been acquired during the last few years.

* See Reports of the Society for Bettering the Condition of the Poor, passim.

Thus Dr. Willan, in his "Reports on Diseases in London," for March, 1800, says, "The mortality from fever was one in every four affected," which he attributes chiefly to the "miserable accommodations of the poor, and a total neglect of ventilation in their narrow, confined dwellings." He adds, "The room occupied is either a dark cellar, almost inaccessible to the light, and admitting of no changing air; or a garret, with a low roof and small windows, the passage to which is close, kept dark in order to lessen the window tax, and filled not only with bad air, but with putrid, excremental, or other abominable effluvia from a vault at the bottom of the staircase."

Mr. Lee, the Superintending Inspector to the General Board of Health, in his report, states, "So far back as 1647, the plague broke out and spread in the lower parts of Burslem, about the Hole-house and Hot-lane. It is recorded that the village was nearly ruined by the fatal calamity. These places are still (1850) among the most unhealthy in the town of Burslem, although the inhabitants have had the experience of two centuries, proving before their eyes the deadly effects of localized filth."

I am now free to confess that the question of improved dwellings is one which too remotely concerns the upper classes of society for us to expect that any great measure of improvement will be carried out unless the labouring population and the middle class make known their wants to the legislature, and energetically and perseveringly demand a right, only denied to them at the present time because they have not yet duly appreciated its importance, or shown their anxiety to possess it.

The labouring forms a very large proportion of the whole population, and may be divided into two great classes, those engaged in agricultural pursuits, who live in cottages and small villages, and those who are engaged in arts and manufactures, and who either dwell in towns or in villages in the immediate vicinity of their respective works,—although it is to be observed that a large portion even of agricultural labourers live in small towns at a considerable distance from the field of their operations, owing to the rigidness with which restrictions on the erection of small cottage property are now in many localities enforced.

As the observations subsequently to be made will chiefly refer to the dwellings in towns, and as the plan for remedying the evils must necessarily be applied to them, and proved to be successful, before it be extended to the country, more especial note will be taken of such dwellings, but the condition and influences of the dwellings of the agriculturists will not be overlooked.

The rapid strides made by this country in arts and manufactures

have brought a very large proportion of the whole population to reside in towns, and thus given rise to great changes in the actual condition of the labouring population.

A great increase has taken place in the population of the towns, while, notwithstanding the impulse thus given to building, and the large numbers of new houses erected, the influx and increase of the population have exceeded the house accommodation provided, and actually required, for its wants; and not only so, but the extension of the area of towns has not increased, *pari passu*, with the increase of population: the population is therefore more dense, and, as a necessary consequence, increasingly unhealthy.

This is shortly proved by the most recent, and it must at the same time be remarked, the most favourable return of the Registrar-General. He states—" The rate of mortality in chiefly small towns and country parishes was, 1.693 per cent. per annum in the quarter ending Sept. last, 1850—the average (1840-1850) being 1.832. The rate of mortality in 117 districts, comprising the large towns, was 2.206 per cent. per annum—the average rate being 2.517 per cent."

When we reflect that there are no less than seven millions of persons residing in the metropolis, and in the cities and great centres of industry, some estimate can be formed of the sacrifice of life in towns as compared with country districts. But in order to simplify the result, it may be stated that for every ten natural deaths we have four superadded, which may, with the strictest truth, be termed violent and unnatural deaths—deaths arising from conditions of things which it is alike our duty and our interest to amend.

In the metropolis, on the 1st July, 1850, there was a population, corrected for increase, of 2,240,289, and there are supposed to be 320,000 houses, of which about 12,000 or 15,000 are probably unin-habited*—the average number of individuals in each house is about 7.6.

But as the distribution of the population in districts is very variable and liable to mutations, in consequence of the establishment or decay of public or private works, it is difficult to estimate the number of inhabitants in particular localities. Enough, however, is known to arrive at general truths which cannot be controverted. The districts of London which, in comparison with the houses, are the highest and lowest in the scale of crowding, are—

St. Giles, which has a population	Hackney 5.9	
to each house of J	11.0 Rotherhithe 5.8	
St. James, Westminster	10.4 Camberwell 5.8	
St. Martin	10.3 Lewisham 5.8	
Strand	10.1	

* In 1841, there were in London 262,737 inhabited, and 11,324 uninhabited houses —in all 274,061; 280,000 is the estimate of the General Board of Health; but as there are about 5000 houses added every year, 320,000 is probably nearer the truth. The average rated rental of the houses inhabited by the labouring classes is under 8*l*., but this necessarily varies even with the same classes of society, because in some towns and districts houses are chiefly built in the French fashion, and a family only occupies one of many rooms; while, in other towns and districts, the houses are chiefly built in what may be termed the English fashion, that is, small houses, with two, three, or four rooms. This, also, in some measure explains how the districts vary in their rates of population to houses.

The remarkably similar condition of the dwellings of the industrious classes in the metropolis leads to the inference that some powerful cause must be in operation to produce so exact a similitude in the hundreds and thousands of streets and dwellings, or else that builders, conscious of the wants of the population, have proceeded on a fixed plan for supplying these wants. The explanation of this curious phenomenon, of street upon street being built exactly in the same fashion and style, is to be found in the operation of the Building Acts, which require houses constructed upon more than a given space to be classed as first, second, or third rate houses, and to be built in certain fixed and determinate manners, as to thickness of walls, &c. Houses deviating in any degree from the rules laid down in that Act become liable to additional expenses in their construction, and to increased rates. It has therefore become the interest of the builder to restrain the accommodation to be given within certain determinate limits.

The window-tax, also, has confined builders to a class of houses which shall not exceed the limits of exemption permitted by that tax.

The exemption of small tenements from local rates has likewise led to the erection of a greater number of such tenements than would have resulted from a more just and equitable distribution of local burdens. Thus the late Mr. Smith, of Deanston, observes, in his "Official Report on Hull," that "a great many houses are built so as to be under 8*l*. rental: even houses fronting streets are built of this description, in order that they may be exempted from rates."

The origin of houses in the metropolis is somewhat singular. There is no defined plan, neither is there any limit to the number of houses to be constructed on a given space of ground. Each person who finds himself in possession of a plot of ground considers how he can best crowd upon it walls, roofs, windows, and doors. These he terms, and lets as, a house : he has no consideration of the relation of a dwelling to a paved roadway, a drained soil, an efficient water supply, or those common conveniences which, by being common conveniences, so materially influence the welfare and happiness of the poor and middle classes. It is true that in the metropolis, the Commissioners of Sewers MAY require plans of drainage before sanctioning the construction of drains in connexion with new houses, but their powers are permissive, unused, and even though exercised, are completely inadequate for the general carrying out of sanitary improvements. Is it true the Building Act requires a certain thickness in structural arrangements to prevent the extension of fire, and to preserve the public from any injury likely to arise from decay of the fabric. But with these two exceptions, there is an unlimited right to erect or convert any kind of shed into a human habitation.

In Bethnal-green, for instance, a class of houses have arisen which are termed gardens. Formerly, in happier days for Bethnal-green, the citizens and inhabitants had a space of ground divided into numerous small plots, each of which plots was termed "a garden," and in these gardens a few boards were generally loosely put together, in the form of a shed, to preserve the garden utensils, and for the cultivators to rest in the summer evenings. On the decline of this locality, these sheds became, sometimes with, sometimes without, further adaptation, places of habitation: the holes and crevices were stopped up; the roof was rendered a little more secure; a hole was dug in one corner of the plot of ground, and a well was thus made, for in some parts of Bethnalgreen, on digging eighteen inches below the level, water is come upon; in another corner a hole was scooped out to receive slops and refuse; and, close by, a few boards or pieces of wood were put together, so as to form a convenience; the refuse from which was got rid of by digging it into the ground. It very rarely happens that there is any brickwork in these houses at their origin, but in the course of time the huts become somewhat improved, and more or less brickwork is subsequently added, until sometimes the sheds become "two-roomed houses."

In some localities we find whole rows of new houses built without any provision for either house or street drainage. So that in a short time the gay appearance of newness is taken off, and damp, unhealthy dwellings, greatly depreciated in value, alone remain.

Again, large old houses and mansions become, in the course of time, abandoned by the class of persons who lived in them, and are converted by speculators into numerous separate apartments, each occupied by a distinct family. In other instances, so valuable is space, that houses are erected without either front or back yards, and all the conveniences of a house, properly external to it, are thus necessarily internal. This is especially the case in the City of London. Sometimes sheds, stables, ware-rooms, &c., are converted into dwellings, in all cases without proper consideration of a primary necessity—"the adaptability of the place for healthy human habitation." For example, —a stable by being disconnected from the adjoining property became unfit to occupy as a stable. The lease was sold, when the property was immediately converted into a three-roomed house. Thus, common prudence and the necessity of attending to personal interests, led the owner to regard the safety of his horse, but the purchaser, the new landlord, indifferent to all but a return for his capital, converted the unfit stable into a "fitting dwelling" for human beings.

In Leicester,-

"The worst houses are to be found in the older quarters of the town; they are the habitations of the *working-classes* and the poor, and are faulty both in arrangement and structure. For instance, there are eleven houses of one room each, at first used as pigsties, but the speculation failing, they were converted into dwellings, each 14 ft. by 10, by 6 ft. 6 inches high, with an average of five persons in each room."*

In some instances, parts of houses, never intended for human habitation, are let and occupied by families. Cellar abodes are not uncommon, in reality, in this metropolis, though they do not fall under the term cellars, in the strict sense of the word. Before the passing of the Liverpool Health Act, 9000 of the population were hid away in these dens of darkness and impurity.

In other instances, property intended for one purpose becomes gradually appropriated to another. The lofts or upper parts of stables are frequently used as the *dwellings* of the unfortunate coachmen and grooms.

The following are a few general descriptions of some of the abodes of the industrious poor. They might be extended, so as to tire the ear and sicken the heart. In Merthyr Tydvil,[†] where the cottages have chiefly been built for labourers, "some of the worst description of dwellings are those called the cellars." "These are small tworoomed houses, situated in a dip or hollow between a line of road and a vast cinder heap. In these miserable tenements, which are closely packed together, and with nothing in front and between them but stagnant pools of liquid and house refuse, it is said that nearly 1500 living beings are congregated.

In Clitheroe[‡] "the houses have been built with cellars below them, which were used as separate dwellings." "In order to induce the people to live in them, the landlords made an agreement with the tenants, by which, whenever the cellars were flooded, no rent was to be paid for the month in which it occurred."

"The entrances to these cellars are down stone steps leading into narrow areas about two feet six inches wide, and each separate cellar or dwelling consists of a front room with a window looking into the area, but incapable of opening, with the exception of a single pane of

* See Mr. Rayner's Report on Leicester.
+ See Mr. Rammell's Report to the General Board of Health.
‡ See Report on Clitheroe, by Mr. Babbage.

glass moving on hinges, and a back room with an iron grating above the level of the ground, to supply such small amount of air and light as the circumstances would admit of." "In these haunts of wretchedness, I found," says Mr. Babbage, "everybody toned down to the same dull round of dirt, foul air, and damp, and all the better feelings, long extinguished, unable to exist in such an atmosphere."

In Darlington, we are told,* "the truly deplorable state of numerous courts, yards, and other places, has long been the subject of serious complaint." "The defective structural arrangements have" " placed the inhabitants in a truly helpless position."

"The condition of a large number of tenements occupied by the working class was truly deplorable; many of them unfit, not merely in position, but in arrangement, for human beings to inhabit."

In Whitehaven, + "very many of the cellar tenements are not fit places of habitation. The greatest amount of destitution prevails in them. Typhus fever generally prevails." Mr. Rawlinson says, "A casual examination . . . of the town will give no indication of its true state and condition: the back streets must be noticed, the courts and passages in confined places examined, the room and cellar tenements visited, the public lodging-houses inspected, and then such an amount of human wretchedness and misery will be revealed, as few persons in better circumstances would believe existed. Words, written or spoken, cannot convey to the mind the whole state of things; there must be sight and smell to aid and inform the imagination. The pen of the novelist never yet depicted such a depth of utter wretchedness."

Mr. Rawlinson gives examples of the condition of things which prevails, and subsequently says, "It was quite impossible for the sun to shine into many of these places, and as the upper ends are blocked up, there can be no proper ventilation-about 6000 persons inhabit these courts and passages. Cellar kitchens are evidently on the increase in Gateshead."

These underground dwellings are dark, damp, and ill-ventilated, and contain inmates presenting in general a sickly appearance, who are more liable to diseases, and from which they more slowly recover, than those who occupy the stories above. ‡

Of Bryn-Mawr, in Brecon, we are told: "It is scarcely within the power of pen or pencil to convey to the apprehension an adequate idea of the condition of the cottage tenements which constitute the town as they presented themselves to my examination."§

Of Cardiff, it is observed: "Nothing can be worse than the house

- * See Report by Mr. Ranger.
- † See Report on Whitehaven, by Mr. Rawlinson.
- † See Report on Gateshead, by Mr. Rawlinson. § See Report on Brecon, by Mr. Clark.

accommodation provided for the labouring classes and the poor of this town; and the overcrowding is fearful beyond anything of the kind I have ever known of."*

Of Welshpool, Mr. Clark says, "It is difficult, without incurring the risk of being suspected of exaggeration, to express in words the general condition of the cottage tenements." "They are, for the most part, built on low and damp sites, without drainage, crowded together, without back premises, and very frequently without back windows, with a very scanty water supply, and with no provision for the removal of ashes or house refuse. These houses, nevertheless, let at rents from 31. to 51., or even 61. per annum, sums which, probably, return from 10 to 20, and in some instances 30 per cent. annually upon the value of the property."⁺ "The close and ill-arranged cottages are rendered materially worse by the windows, with which they are fitted, not being made to open, and from the want of windows at all in the back of many of them."

I.—ACTUAL CONDITION OF THE DWELLINGS OF THE POOR AND INDUSTRIAL POPULATION.

It is undesirable to attempt to enter into the vast and comprehensive subject of the causes which render town populations unhealthy, and necessary to confine attention to the actual condition of the dwellings and their influence on the physical, social, and moral condition of the industrial classes.

The first point of importance to determine is, what are the circumstances connected with the dwellings which render them unhealthy? These may, for the present purpose, be classed under the head of

- 1. Location.
- 2. Structural arrangements.
- 3. Materials.
- 4. Internal arrangements.
- 5. Personal over-crowding.
- 6. Internal ventilation .- Light.
- 7. Conveniences.

The first is-

- 8. Internal and external cleanliness.
- 9. Neglect of owners, and unfitness of property for human habitation.
- 10. Water-supply.
- 11. Rent-charge.
- 12. Lodging-houses.

I.-LOCATION.

A house, however perfect in itself, may, from its very *location*, be unfit for human habitation. If it be planted on a damp undrained soil, it will cost infinitely more to render that house habitable, than if it be built on a dry, gravelly, or drained soil; and until the surrounding land be drained, it is impossible the dwelling can be wholesome. If it be built on a permeable soil, on a level below, yet

> * See Report on Cardiff, by Mr. Rammel. + See Report on Welshpool, by Mr. Clark.

adjacent to water, it is impossible such a house can be safely inhabited. If it be built on the side of a hill, more especially if the strata be uprising in a direction contrary to the declivity, and if the surface drainage be not most carefully attended to, such a house must necessarily be unhealthy. If the house be situated near much wood, with stagnant water, it must necessarily be unhealthy; yet such a site was selected within a few years, upon which to erect a building to rear orphan infants and young children. The very site would be sufficient to explain, in some measure, the excessive mortality which has characterized this establishment.

The erection of houses in close proximity with filthy nuisances, offensive open sewers, foul ponds, graveyards, over the mud and garbage deposited on the banks of rivers, and left bare on the ebb of the tide, or of water-courses or streams subject to occasional emptying, cannot be considered but as an ignorant or a criminal violation of the laws of life, yet such erections are matters of every-day occurrence.

As instances of the influence of location, I may point to the plan of property in Gateshead,* thus described by Mr. Rawlinson:---

"Neither plan nor written description can adequately convey to the mind the true state and condition of the room-tenements and of the inhabitants occupying them. The subsoil on the sloping side of the hill is damp, and most foul, the brickwork of the buildings is ruinous, the timber rotten; and an appearance of general decay pervades the whole district. The buildings originally erected as residences of a superior description, have single rooms let off as tenements, which are crowded with men, women, and children; the walls are discoloured with age, damp, and rot; the windows are broken, old rags, straw, and boards occupy the place of glass, so that means of light and ventilation are alike absent. There are no sewers or drains, neither is there any proper (privy) accommodation; solid filth encumbers the surface, liquid refuse saturates the subsoil, and is drawn by capillary attraction through the porous bricks up into the walls; personal cleanliness, or a healthy atmosphere, is impossible. For much of this property, as it now stands, there is little chance of amendment-the remedy must consist in its removal. In connexion with dwelling-houses erected on the side of a hill, and having no proper means of drainage, it is noticed that all such houses are afflicted with fever generally, and with cholera in excess, whenever that disease prevails, thus proving that a damp and vitiated subsoil is one main cause of excessive disease."

The damp and unwholesome condition of such property, and its rapid decay, are further evidenced by the plan of property in Alnwick.[†] In Berwick, we have another instance of the effects arising from improper location. On a site comparatively high, and with a wide and open, though unpaved street, the houses are, nevertheless, all damp and ill-ventilated, in consequence of their proximity to the ramparts.

As other instances of improper location of habitations, we may refer

^{*} See Report on Gateshead, by Mr. Rawlinson.

[†] See Report on Alnwick, by Mr. Rawlinson.

to the cottages erected along the banks of the River Thames, on a soil below its level, and for the drainage of which no adequate provision has yet been made, and to the dwellings situate on the sides of the tidal ditches at Bermondsey, or actually upreared on wooden piles over the stagnant, putrid filth, just in the same way as are the houses at George Town, Demerara, where yellow-fever occasionally prevails in so frightful and devastating a form. We may further refer to the undrained banks of the Regent's Canal; along the whole course of which, where inhabited, and where refuse is drained into it, disease prevails; and, as a last observation, we may state the fact which the registrar-general has shown, that cholera prevailed, in some measure, just in proportion to the height of the locality above high-water mark; in Hampstead only nine persons died of that disease.

The propriety, therefore, of abandoning (as much as possible) the vicinage of localities below, or only slightly elevated above, highwater mark for dwellings, and of reserving them (when necessary) for warehouses, &c., is manifest. Jackson diminished the mortality of the troops in Jamaica from 120 to 20 per thousand per annum, by removing the men from the plains to the hills.

Dr. Sutherland has prepared a diagram^{*} showing the manner in which uprising strata and a porous subsoil act in rendering houses damp and unhealthy. The same phenomenon is exhibited in, and the same kind of observations applies to, places in and surrounding London, either with natural or artificial declivities. Thus High Hill Ferry, on the river Lea, where cholera prevailed, affords a natural instance of such an evil condition of things. The cellar abodes, hereafter to be spoken of, present an artificial instance.

Dr. Nankivell thus describes the wretched streets in the poorer district of Torquay, and points out the importance,

"In considering the sanitary condition of the dwellings of the poorer classes, and any means for their improvement, of bearing in mind the peculiar geographical position in which the dwellings are situate. This," he states, " is at the back of a street, in a steep valley or gully, running almost directly north and south, with high hills to the east and south-east, excluding them from the morning sun, and a high hill to the southwest, shading them from the afternoon sun. The consequence of this peculiar position is, that these houses, for several months in the year, do not receive the direct rays and the full light and warmth of the sun for more than two or three hours in the day, while the hills by which they are surrounded, and the higher houses in front of these back streets, exclude them from the most prevailing winds, and their ventilating and purifying influence.

"The whole of these dwellings must therefore be naturally colder, damper, and darker than houses situated on a hill or plain, and require in consequence more especial attention to all artificial measures calculated to render them healthy. Instead of having

* See Report of the General Board of Health, on Cholera, p. 53.

received this attention, the construction of a great number of these houses is of the worst possible description, and such as to render them quite unfit for dwellings. Frequently the streets which seemed comparatively sweet and pure during the day become most offensive when their daily exhalations have been condensed by the colder night air.

"In another locality," he states "the whole of the houses are of the most unhealthy character, and utterly incapable of being rendered fit for human habitations. Built against a rock, and quite insusceptible of ventilation, most of them admit only a small portion of light and air from windows in the front, while some have the addition of a dark and wretched bed-room, open only to the mephitic gases of a damp, disgusting interval between the room and the rock, serving as a receptacle for the ordure and offal of the house. The walls of those houses which are built close against the rock are damp, and some of them mildewed and quite green from moisture exuding through them from the rock and hill above them; and, in some instances where the houses are built in terraces one above another, the drainage from the higher percolates the walls of the lower dwellings. In many of these houses the people are unable to see in the winter, without a candle, before nine o'clock in the morning, and after three in the afternoon. The whole street is damp, washed clothes never drying here in the winter."

If we refer to the districts surrounding London, now rapidly becoming covered with ill-constructed cottage property, we find that Sir James Clark has observed, "When the public are better informed on the subject (meaning unhealthy residences), many of those places now inhabited round London will be abandoned to what they are alone suited for—namely, the cultivation of fruit and vegetables, and higher and drier situations will be selected for human habitations."

"The abandoning of these houses as habitations, and preventing the crowding of this part of the town with any kind of dwelling-houses, is, in my opinion, absolutely necessary to its healthy condition."

In close connexion with location, is the space of ground attached to the dwelling in front of, or behind it.

The custom of allotting small plots of ground to dwellings is very different in different towns, and even in the various localities of the same town. Some houses have smaller or larger plots of ground before, others behind, and some both.

My own conviction is, that in towns the plots of ground usually allotted in the front of the dwellings of the industrial classes, render them very unhealthy, and that such plots should be entirely superseded by an asphalte or paved frontage. On these plots of ground vain attempts are usually made to rear a few flowers in the dry summer months; but the undefended soil, readily receiving and retaining moisture, renders the walls and flooring damp. The ground now soddened, now covered with dust and soot, soon becomes neglected, and as unsightly as offensive. Moreover, the soil causes the stone frontage to the door to become foul, and thereby imposes an additional labour on the active and cleanly inhabitants, who most industriously and praiseworthily employ themselves in attempting to keep the stones white and clean. Generally, after a time, the inhabitants cover the ground with gravel, and thus, to a certain extent, conceal the foul appearance of the ground, without remedying the real evils.

For the reason assigned, the back yards of such dwellings, when they are small, should be entirely defended, and when larger, should be defended for six or eight feet from the wall of the house.

The importance of providing for the defence of the soil for some distance around the dwellings can scarcely be over-estimated. In numerous instances, it is now a practice to build third-rate houses with the windows to the ground, and to leave the soil undefended; and in second-rate houses, to have rooms, generally used as breakfastparlour rooms or nurseries, half underground, with the soil undefended, and in contact with the wall, except in front of the halfburied window. Such a practice inevitably tends to the injury of the health of the occupiers, and is especially hurtful to infants and young children.

When the houses have neither front nor back yards, a necessity arises for having within the house, besides the dust-bin, the other conveniences. Without adequate precaution in all such instances, the most deplorable results necessarily follow. The houses are very pest-dens at night, and, in complete opposition to another law, they are the more unhealthy the higher the flat.

It is unnecessary to say that the laying-out of roads should precede the erection of houses; by the levelling and making of roadways after the erection of houses, many houses are rendered, in some measure, uninhabitable—the ground-floors being converted into cellars, and rendered dark, damp, and unwholesome.

II.-STRUCTURAL ARRANGEMENTS.

Next in importance to location is the STRUCTURE of a house. It is essential that a house intended to be a building in which human beings are to live and perform all the offices of life, should permit the performance of these offices, and preserve the individual from external and injurious influences. It is the casket which should contain the precious jewel, and should be fashioned accordingly.

In reference to the external arrangements of houses we find much to deplore. We have narrow lanes, courts, and alleys, forming *culs-desac*—sometimes lofty, down which the sun cannot shine, and impeding ventilation, dark and unwholesome—often entered by archways,—

> "I turned into an alley 'neath the wall— And stepped from earth to hell.—The light of Heaven, The common air was narrow, gross, and dun— The tiles did drop from the eaves; the unhinged doors

Tottered o'er inky pools, where reeked and curdled The offal of a life; the gaunt-haunched swine Growled at their christened playmates o'er the scraps. Shrill mothers cursed; wan children wailed; sharp coughs Rang through the crazy chambers; hungry eyes Glared dumb reproach, and old perplexity, Too stale for words."

The Saint's Tragedy,-KINGSLEY.

We have back-to-back houses, or rather, houses divided into two by a central wall,—many with no exit behind, and no entrance but into a narrow court before. We have high wooden tenements and piles of buildings subdivided into single-room dwellings, and we have lofty erections or high dead walls bounding lowly dwellings.

The late Mr. Smith, of Deanston, gives the following instance of the defective external arrangements referred to-

"I herewith give a plan of some newly erected property, as a sample of what is now being principally built for the accommodation of the working-classes in Hull, which shows the very small vacancy allowed for ventilation. In some of these buildings, the common convenience is in a small yard *under the roof*, and the only ventilation and light to the back part of the premises by a large chimney carried up to the roof. It is very common to find a long court of houses, three stories high, and the court itself only ten feet wide; the walls of this class of property seldom exceed $4\frac{1}{2}$ inches in thickness-Building societies, by assisting parties to get up this class of property, which is always crowded together as much as possible, increase the number of such unwholesome habitations. Such houses are given off by lot, and in course of time they become the property of the individuals who are members."*

In fact, the houses of the poorer classes are crammed into the smallest possible space. Every available piece of ground, in the course of time, is seized upon to build a house for the industrial labourer, and unfortunately, the very aggregation of buildings in a locality leads to a greater and continual over-crowding.

The great evil of the over-crowding of houses is rendered apparent by the fact, that just in proportion to the density of a population, *cæteris paribus* is the mortality.

Dr. Forbes has drawn up a table which exhibits this in a very clear and interesting manner.

Towns.	Ratio of Deaths of Population	Deaths in the whole population annually.		
LOWNS.		From Consump-	From Fever.	
Birmingham	40	1 in 207	1 in 917	
Leeds Borough	87	1 in 209	1 in 849	
Metropolis	50	1 in 246	1 in 690	
Manchester	100	1 in 172	1 in 498	
Liverpool	138	1 in 166	1 in 407	

* See Report on Hull, by Mr. Smith.

And Dr. Duncan, the health-officer of Liverpool, has further shown the application of this law to the residences of the labouring population. The following extracts will suffice.

3 Be Brint's Trajedy Kanesa XV.	Square Yards to each inhabitant.	Proportion of Fever to inhab. annually.
Lace-street Oriel-street Crosbie-street Addison-street. Primrose-hill	4 6 7 81 143	1 in 8 1 in 9½ 1 in 12 1 in 16½ 1 in 26½
SLEDOO Newton Cumming Barker Fleming	1 9 24 41 6	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$

Many of the classes of houses referred to are irreparably bad. They are declared in places without number, on the most competent authority, to be unfit for human habitation. As recent illustrations of these facts, Mr. Rammell may be quoted, who says:—

"The filthy state of the alleys in which the poorer classes dwell, and the bad ventilation consequent upon the manner in which they are crowded together, is no doubt, in a great measure the cause of the high rate of mortality, and the general bad sanitary condition which so strikingly marks the social history of Tewkesbury."

Mr. Richmond says,-

"We must not overlook the impediments to public health produced by the present state of cottage building in long rows, where the object attained seems to be how to place the greatest quantity of buildings upon the smallest possible space, without any regard to the comforts of those who may inhabit them.

"Such houses are generally planned with two rooms on the ground-floor, or one with a sort of wash-house or scullery at the back, with corresponding apartments above used as bed-rooms. The former sort are too frequently sub-let, (the door communicating with the ground-floor apartments being closed up, another family occupies the room behind.) The backs of the houses are frequently only divided by a narrow passage of from three to four feet wide."

This disregard of space is noticed by Mr. Cresy, who says, in reference to the houses built for the refugees in Braintree-

"Around the great workshop houses were erected to receive every additional family who, accustomed to the privations and miseries attendant on persecution, cared for little else but the means of procuring their daily bread in peace, and a shelter from the inclemency of the weather.

"The cottages," he states, " are in a wretched condition, they are built closely together, and many without ventilation, having no openings at the back; all the refuse being carried out and deposited in the street over the first grating that offers." ‡

* See Report on Tewkesbury. + See Report on Chorlton on Medlock. ‡ See Report on Braintree.

If we compare this description with Spitalfields and the adjacent districts in Bethnal-green, the abodes chiefly of the weavers, descended of the French emigrants, we shall find the observations as applicable to them as to Braintree.

In Kendal, we are told-

"The courts in Kirkland are narrow, crowded, and filthy." "They are in many instances a labyrinth of alleys, filthy hovels, privies, pigsties, and cesspools."*

We have it on record, that in Gateshead-

"The structure and arrangements of many of the houses more recently erected are faulty, being built back to back." " The ventilation is very imperfect, the air in many houses being strongly contaminated by the effluvia arising in the immediate vicinity; and it is by no means unfrequent to find part of the building situated immediately over the ash-pits, and particularly in the houses recently erected. Besides these evils . . . we may mention two others,-the free admission of light, which is so conducive to the physical well-being of the inmates, is prevented; and, secondly, the rooms are rendered damp and offensive from the fluid parts of the contents of the ash-pits penetrating the walls."

Dr. Hall says,-

"Most of the thickly populated parts of the parish of East Retford are huddled together in narrow passages to which the rays of the sun are strangers, or erected in confined rows, to which ventilation and cleanliness are unknown."

It is stated-

"That many of the buildings in Hartlepool were so vicious in their construction as to render it quite impossible to put the town upon a sound sanitary basis; the rooms in numerous instances being literally nothing more than closets : the houses arranged without either yards or conveniences; cellars without light or ventilation converted into dwellings. Numbers of houses are situated in blind alleys with covered entrances : the streets narrow, and in several cases mere culs-de-sac." 1

In Northouram and Southouram it is stated to be-

" Difficult to conceive tenements constructed on a worse principle than those erected, and in building in the townships, or for the builders to have adopted places whereby the rooms could be rendered worse or more insalubrious. The consequence is, the occupants are doomed to breathe vitiated air during more than a third of their lives."s

Dr. Alexander says,-

"The cottage tenements are often constructed without regard to aspect or size." "Cellar dwellings are not uncommon, and in some instances fetid smells have exuded through the damp floors."

Mr. Rawlinson says,-

"I could add proof upon proof, from personal inspection, of the misery endured by the outcast poor who reside in cellars, fetid, damp, and dark at noonday; or who crowd together in room tenements, ruinous and totally unprovided with any means of ventila-

* See Report by Mr. Clark.

+ See Report on the sanitary condition of the inhabitants, by the medical men, quoted in Report on Gateshead, by Mr. Rawlinson.

‡ See evidence of Mr. Green in Mr. Ranger's Report.

§ See Report, by Mr. Ranger.

tion. Room tenements of this character are common in all the northern towns I have officially visited. Such exist in Morpeth, Alnwick, Berwick-upon-Tweed, Carlisle, Penrith, Ormskirk, Newcastle-upon-Tyne, Gateshead, Sunderland, and Whitehaven." . . " There are blocks of houses and tenements, as also cellars, which no remedial measures ever can make healthy dwellings, because the construction prevents free ventilation, and the sun can never shine within the crowded area, or even the light of day break the continuous night in which many of the poor at present exist."*

Mr. Lee states,-

" There is no restriction as to the character of the buildings, consequently each person builds as he thinks proper. The houses so erected are not constructed on any principle of ventilation either of individual houses or blocks, or with any reference to health."+

In Hertford, of 294 court-yards or alleys, close and confined, with an entry leading into the main street, and culs-de-sac, only thirty-two have any outlets at the back made for ventilation.

Mr. Rawlinson remarks-

"The working classes live almost entirely in 'lanes' or 'passages." 'Most of these lanes are entered by a covered passage, and some are closed at one end, forming a culde-sac. They are in general only a few yards in width,' 'others have houses on one side alone, a high dead wall forming the backs of the houses in the next lane, rising on the opposite side,' light and ventilation being obstructed by such arrangements." §

"In the towns formerly occupied by an agricultural population, and afterwards adapted to receive an increase of artisans and manufactories, it is universally the custom to convert old and decayed manor-houses or other buildings of any extent into a number of dwellings; but the requisite attention to sewage, ventilation, and other accommodation demanded by the increased number of inmates seems quite forgotten, and they are left to make the best arrangement they can for themselves, when in fact the most careful supervision should be exercised by the proprietors. The large cesspool of the mansion soon becomes a pestilential accumulation, and when made to serve the wants of perhaps a hundred families, the atmosphere of every tenement is infected."

It has been well remarked by Mr. Cresy-

"Immediately that a respectable dwelling . . . from dilapidation, or other causes, has been abandoned . . . it has been adapted (?) to receive several families, the outbuildings converted into cottages, and an alley of small tenements constructed through the entire extent of the land at the back; and generally these changes have been made without the slightest consideration . . . commensurate with the increased number of persons thus brought together."

III.-MATERIALS.

Next in importance to the geographical position of a house and the general structural arrangements of streets, courts, &c., are the materials of which the house is to be erected. If these be badly selected and improperly applied, no subsequent care or expense can compensate for an ineradicable evil. Yet the materials of which the dwellings of the industrious classes are constructed are often of the worst possible kind

+ See Report on Loughborough. * See Report upon Alnwick. § See Report on Carlisle. 1 See Report on Hertford.

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|| See Report on Hastings.

and of the most unfitting character; in consequence of which, the buildings, within a few years fall into decay—a condition in which they are permitted to continue as long as it is possible to extract rents from the tenants. The walls are frequently porous and absorbent, and consequently damp; the wood-work of bad timber, disposed to rot.

I have constantly observed, even in recently erected second-class houses, letting at 70 and 80 guineas per annum, the floors and walls of the lower rooms extremely damp, and after twelve months I have inserted a pen-knife through the panels of the door with the greatest facility, while mosses and fungi have sprung up with incredible rapidity.

Mr. Cresy, in reporting on New Windsor, and the dampness of the soil, and avidity with which the chalk walls and foundations absorb moisture, says,—

"The walls have as much vegetation to support as is often observed upon a decaying thatch. No habitation can be considered healthy when there is a constant alternation between dryness and moisture; and several of the foundations of the houses exhibit the growth of mosses and lichens upon the exterior surface, and over the entire plastering which coats the internal portions of the ground-floor."* "The foundations of the smaller houses are seldom properly considered, and in Windsor the subject has been thoroughly neglected."

At Gainsborough-

"Some of the houses are old and dilapidated, out of the perpendicular, and with badly constructed roofs. In many instances they are not tied within six or seven feet of the chamber floor; this has been done to get attics in the roof; it has also lessened the breathing space in the lodging rooms. In many of the older cottages the rooms are very low, and built of very inferior brick, which causes them to be damp." "There are many cottages which, if the health of the poor were considered, ought to be pulled down."

"Instead of being built of solid materials, some tenements in the Uxbridge Union are complete shells of mud on a spot of waste land, the most swampy in the parish."

At Norham, the vicar, the Rev. Dr. Gilly, says-

"The dwellings are built of rubble or unhewn stone, loosely cemented." "The walls look as if they would scarcely hold together. The wind rushes through gaping chinks." "The rafters are evidently rotten and displaced; and the thatch, utterly unfit for its original purpose of giving protection from the weather, looks more like the top of a dunghill than a cottage."

At Ottery St. Mary, Devon-

"The houses of the poorer classes are mostly—two out of three—built of 'cob,' a compound of earth and straw (which when well mixed and prepared makes an excellent material for the purpose), the others of brick, and they are usually thatched with reed-The rooms are usually without ceilings, and the ground-floors are in very many instances formed of earth, which is often worn into deep holes, retaining the moisture.

^{*} It is probable that this condition somewhat resembles, and has consequently been mistaken for, the house-leprosy, spoken of in Leviticus, and subsequently to be referred to.

and emitting most unwholesome exhalations. Many of these houses are never touched with whitewash, and the thatch of the upper rooms is often loaded with cobwebs and filth of every kind."*

"The cottages which have been run up in Worthing for the poor are in general constructed of the worst materials. Bricks of a soft and porous nature, and badly burned lime with which the mortar is formed; often the footings of the walls rest on the surface of the soil, and where trenches have been dug for their reception no preparation whatever has been made to drain off the water which invariably finds its way into them." +

"In Great Bowden there are forty-two cottages composed of mud and thatch, they are nearly all quite unfit for human habitation; have no drainage or proper water supply; are surrounded by manure heaps and stagnant refuse, and constitute most appalling aggregations of filth, misery, and demoralization."[†]

"In Mileham some of the older dwellings do not deserve the name of houses, being dilapidated fabrics of mud and thatch, unfit for human habitation."

Mr. Warren, of Knighton, says-

" Many of the houses are made of lath, plaster, and thatch."

"It is stated that in Southampton 760 tenements, with a population of 4378 persons, may be considered of the class which we have been referring to."§

In Dover, we find-

"A most complicated contrivance of hovel over hovel, placed on rising ground: the walls are made up of all sorts of rude and patchwork contrivances; posts, apparently parts of old vessels, are boarded over with half rotten boards; there are also external walls half-brick thick; flat timber roofs, covered with boards and brown paper smeared with pitch, and broken stairs of wood, half worn-out and ruinous, are approached by dark passages, not more than two feet four inches wide; and just at the end of one of these passages there is an open well, the water dirty and foul."

"The houses composing (the old town of Exmonth) are mostly of a very inferior class; a large proportion of them being built with earthen, or as they are here called, cob walls," "covered with roofs of thatch." "In the construction and disposition of these dwellings, provision for the free passage of light and air seems to have been altogether overlooked."

IV .--- INTERNAL ARRANGEMENTS.

Next to the employment of proper materials in the structure or adaptation of the house itself, is the number, size, and height of the rooms. On this most important subject the greatest stress must be laid. In all houses, the probability of their being occupied by a family must be contemplated. Where houses are only let to a particular class of occupants, as lodging-houses for single men or single women, this prospect need not be anticipated, but in all other cases it forms the entire groundwork upon which much of the moral and social improvement of the population must be based. In every case where practicable, there should be not less than two sleeping apart-

* See Report on Ottery St. Mary, by Mr. Rammell.

+ See Report on Worthing, by Mr. Cresy.

See Mr. Lee's Report on Market Harborough, Great Bowden, and Little Bowden. See Report by Mr. Ranger. || See Report by Mr. Rammell. ments, and though one of these apartments may, and of necessity must, frequently be used as a living room also, a separate room should if possible be provided. When such houses are not occupied by families, the number of apartments will greatly facilitate the separation of lodgers from the family, and especially at night.

In London, an immense majority of the poor and labouring population live either in houses of one room only, or in one room of a two, three, or four-roomed house. Of 1465 families of the labouring classes in St. George's, Hanover-square, 929, or 63 per cent., had but one room; 408, or 27 per cent., had two rooms. Thus 90 per centhad two rooms only. This proportion would be greatly increased in the districts of Bethnal-green, Whitechapel, &c. It might be supposed that the practice of building one-roomed houses had been discontinued, but experience proves the great prevalence in the metropolis of such vicious erections.*

Newton's Rents constitutes a court with six houses on either side. They are held of the Manor of Stepney, and are let at 1s. a week. The cost of their construction was £100. The houses consist of one room, nine feet square by eight feet high. On the right side they have no back opening; on the left they have about twelve feet in total space of back yard. (The conveniences are horrible. There is no water laid on. Ten houses are inhabited, five of them have four and one five occupants; in one, two married men and two married women lived.)

These houses were built only five years ago.

Next in importance to the number, is the dimensions of the rooms inhabited. In general they are fearfully small, and low in the roof. This is partly produced by the avarice of the ground-landlords, partly by the faulty provisions of the Building Act. The height of the rooms in the more modern houses seldom exceeds seven, rarely seven and a half feet high, sometimes only six and a half feet; while the dense crowding of houses and persons in a city pre-eminently requires loftiness in the roof, to make up for the scanty length and breadth. In cities the rooms should never be less than eight or nine feet in height.

It very frequently happens that in the best-constructed modern houses, for the upper classes of artizans, clerks, &c., there is a room situate above the washhouse, not exceeding six or six and a half feet in height, and not containing more than 300 cubic feet of contents. Into these rooms, which very rarely have fire-places, and therefore no means of ventilation, the ignorant parents generally consign their children for nine or ten hours during the night.

^{*} E. Akroyd, Esq., J. P., observes, — "Houses are erected by small capitalists upon speculation, without due regard to the comforts or health, and the evil becomes aggra-vated every year."

Mr. Ranger* thus describes one of the evils arising from the practice of building one and two-roomed houses. Other evils will be adverted to under their appropriate heads:-

"In numerous instances large families have but a single room, and this, though never free from inmates, is without any outlets on more than one side. In this room the family, from dire necessity, perform the weekly wash, and suspend the wet clothes from the ceiling. Thus, during a considerable portion of every week, from this operation alone, irrespective of many others, the room is rendered unfit for human habitation. This evil, so justly complained of by the medical men, is not confined to the class of tenements comprising a single room, but extends to the sleeping rooms, though in a different form, and ascribable to other causes."

In country districts, the faulty construction of cottages and sleepingrooms is carried to a great extent. Thus Mr. Lee says-

"There is a great number of cottages of bad construction; many that are much dilapidated, and some that are unfit for human habitation. The walls of many are built of lath and plaster, but the greater portion are of brick, and the height of the older cottages, from the ground to the eaves, varies from six to ten feet; above these are dormer windows, with sleeping-rooms in the thatch roof. The rooms are necessarily low and unhealthy. In many the sleeping room is reached by a loose ladder."

V .- PERSONAL OVERCROWDING.

It follows, as a corollary from what has preceded, that a system of overcrowding must prevail, utterly destructive to health.

It will be unnecessary to refer to more than a few instances. Mr. Rangert reports the following, among others:-

"A man, wife, and five children occupied a room," which left them but "fifty-six cubic feet of air to each person." " In another place, a man with two daughters, nineteen and fourteen years of age, slept in one room, and three sons in a closet, six feet long by three feet ten inches wide. In a room, fourteen by twelve, a man, wife, and nine children slept in three beds; two girls were aged twenty and fourteen, and a boy eighteen. In another room eleven persons, a man, wife, and nine children, laid on the floor."

Mr. Ranger, in reporting on Doncaster, says-

"In five cases there are no sleeping rooms; in 277 each family have but one sleeping-room; in 478 they have two; in fifty-one they have three; in twenty-six, four and upwards."

The following are additional instances of overcrowding:-

" A room fifteen feet eight inches by thirteen feet seven inches, and seven feet three inches high, having a chimney and open stairs leading into it, contained four beds, occupied by a widow woman, her son, about thirty years of age, four daughters, two grown up, and an adult male lodger. 2. Another room, eighteen feet by twenty, and seven feet high, containing four beds, occupied by a man, his wife and child, one old man the father, and four female lodgers; a sort of curtain across the room. 3. Another, thirteen feet three inches by fifteen feet ten inches, and seven feet three inches high,

having stairs out of it, was used as a vagrant lodging-room, and frequently occupied by as many as ten or fifteen persons of both sexes, in addition to the man, his wife, and five children; there are two bedsteads in the room, and they occasionally make shift, when it is crowded with lodgers, by placing the children and young persons underneath the beds to sleep. The lodgers in these small houses are mostly young women. They are severe sufferers by the prevalent low fever which 'nearly always prevails in some or other of these habitations.'"

Mr. Hayman further states-

"A large number of these young females were laid up with fever this last summer and autumn in the town. There has been a severe outbreak of fever three times within the last eight years; there is always fever more or less. At such times these females suffer great distress; at times they are driven into the union house, but at other times their rent and shop bills are going in arrear."

The following is an instance of the overcrowding in the lanes and alleys of Tewkesbury:---

"There is a house containing three rooms, inhabited by a man, his wife, one of his sons, who lives with a girl upstairs, and six children. The sons are all grown up. The eldest daughter is about ten years old. A donkey lives in the kitchen. There is no back door to the house. Fifteen people died in this lane from cholera."

Here is another instance:-

"There are eighteen houses in the lane. No house has a convenience. I keep a lodging-house, but we are a heavy family ourselves—nine in all. We have got four rooms, the kitchen and three above. Sometimes I have six or seven lodgers, at others more. I have only two beds, and have two regular lodgers who work in the town. My eldest boy is eighteen, my eldest daughter sixteen, the next fourteen. All the little ones sleep together in one room, and the eldest girl along with me in our bed. We have sometimes four in the bed."

Dr. Nankivell, of Torquay, says-

"A very great evil as regards the dwellings of the poor has arisen from the increase of the labouring population beyond the extent of house-accommodation for them: consequently, their houses, small and ill-constructed as they are, have become excessively overcrowded. During last winter I found one room, about twelve feet by nine, occupied by three beds, in which slept two men, four women, and two children; one of the adults labouring under inflammation of the lungs, and another in the last stage of consumption. One of the first cases of threatening cholera in this town occurred at the end of August last, in a room about eight feet by ten or eleven, a few feet only from a high rock, opening by a small window into a yard which contained an open privy, and all the animal and vegetable refuse of the inmates. In this room slept five or six persons, most of them lodgers. On entering it the air was so oppressive and offensive as to oblige me to request the patient, who was sitting on the side of the bed, to go into the room adjoining."

Mr. Lowe, a surgeon in Gainsborough, says,-

"Numbers of the cottages have insufficient breathing space within the rooms, and the buildings are frequently very much crowded together; from six to ten persons occupy during the night barely sufficient space for one."

The Rev. Charles Hensley says,-

"I think one of the permanent evils of the place is the crowded state the dwellings of -the insufficiency of sleeping-apartments. Very few of the houses have more than one sleeping room; and in those with two, the second room is frequently without chimney, or window, or any ventilation."

Mr. Rammell says of Torquay,-

"Bad as the natural locality of the poorer district is, however, the construction of the tenements which have been erected there, and the overcrowding of them consequent upon a rapid influx of population for whom no adequate house-room has been provided, have tended to aggravate a natural evil already and always existing, and to produce, as results, a daily increased amount of disease and death."

VI.-INTERNAL VENTILATION.

In immediate connexion with the cubic contents of the apartment is the means by which a constant and regular renewal of the air contained in it may be procured.

The importance of this branch of the subject is second to none.

In this country, from the nature of the climate, and the extent to which home manufactures and in-door occupations are carried on, a great part of our population live within their houses. Unless, therefore, pure air—the primary element of life—be afforded to this class of the population, they must perish prematurely of some form of disease or other. Man may be likened to, and is, in truth, *a fire*; food and his structure are the fuel; for the combustion, a constant supply of air is required. Without this supply of air the combustion—that is, the life—cannot go on, but must smoulder and decay until it be extinguished.

Wherever there are chimneys, and a fire, a current of air is secured; but in the rooms of the industrious classes a fire cannot, on account of the expense, be always burning, and thus ventilation may be imperfect; but the evil is chiefly perceivable in those rooms where there are no fire-places or chimneys, and these are chiefly sleeping rooms, especially such sleeping rooms as are built over wash-houses.

Moreover, on account of the faulty construction of fire-places and chimneys, and the free admission which they afford to blasts of the external cold air into the small rooms which constitute the dwellingplaces of the industrial classes, the fire-places and chimneys are very frequently blocked up, and the rooms are thus nearly hermetically closed (as they were at Drouet's pauper establishment at Tooting at the period when cholera broke out) against the admission of that lifesustaining principle, without which we languish and die.

Sir James Clark, in referring to the influence of pure air on health in connexion with dwelling-houses, observes-

"Nothing contributes more effectually to strengthen the constitution and render it capable of bearing the vicissitudes of climate than the constant respiration of pure air. On the other hand, nothing tends more certainly to weaken and relax the system, and render it susceptible of the impression of a cold or humid atmosphere, than breathing impure air.

"In the construction of a house the dimensions of the bed-rooms and the means of ventilating them ought to be one of the first considerations, whereas they are comparatively little thought of. Nothing, indeed, can be constructed on a worse principle than bed-rooms generally are. Their small size and their lowness render them very insalubrious; the consequence is, that we are breathing vitiated air during the greater part of the night—that is, during more than a third part of our lives. The extreme is to be found in the abodes of the working and poorer classes; and thus the period of repose which is necessary for the renovation of our mental and bodily vigour becomes a source of disease.

"When it is known that the blood undergoes most important changes in its circulation through the lungs by means of the air which we breathe, and that these vital changes can only be effected by the respiration of *pure* air, it will be easily understood how the healthy functions of the lungs must be impeded by inhaling, for many successive hours, the vitiated air of our bed-rooms, and how the health may be as effectually destroyed by respiring impure air as by living on unwholesome or innutritious food."

It is true that when medical men are called on to treat disease in the dwellings of the poor, they experience great difficulty in inducing them to open, and still more to keep open their windows, or otherwise admit supplies of fresh air. The objection they urge is, that "it lets in the cold." This objection increases in the ratio of the deficiency of external means of ventilation, as when houses are built back to back. Upon due consideration, it must be admitted that the tenants of single and confined rooms have just ground for their remark. It is likewise true, that wherever the greatest destitution is prevalent, there likewise ventilation is most defective. An insufficient supply of food renders the system less capable of bearing those changes of temperature, and currents of air, which would otherwise be agreeable. Protection from cold is therefore rendered an especial and primary object with the poor. They economize their fuel in their management and application of it, so that the air shall impinge gently upon their persons; and this management becomes the more marked, as the means of the inmates are reduced. This practical management of fuel extends to those rich persons whose bodies, enfeebled by disease, inertion, or a foul atmosphere, are placed in the same position as if they had suffered from a scanty supply of food.

Mr. Martin remarks:-

"Persons, and invalids especially, confined to rooms whose temperature much exceeds that of the external air, particularly in very cold weather, are apt to complain of feeling chilly, and the more the heat of the apartment is increased, the more susceptible are they of this feeling."

And further_

"More injury occurs to sick persons from inhabiting over-heated rooms than by using them at a much lower temperature. The air in the former instance becomes rarified, and the pressure of the external atmosphere acts in consequence more forcibly, and every little crevice which, under ordinary circumstances, hardly gives evidence of its existence, now admits a jet of air which operates on the excited skins of those within its influence."

The internal atmosphere may, however, be highly pernicious from other causes than those arising from excess of temperature—particularly in that class of houses tenanted by the industrial and poorer classes. And these causes may, equally with a high temperature, induce the poor to keep their windows closed, and to prevent ventilation.

In every single-roomed tenement, it may be assumed as a fact, that washing is going on for one or two days at least in every week, and wet clothes are suspended by lines or cords during a third. The rooms are never free from inmates, and generally have outlets on one side only. During those days when the air is moist, as it necessarily is on nearly three days a-week, evaporation from the surface of the skin is impeded, the perspiration is rendered sensible, and the skin and lungs readily absorb from the surrounding medium whatever noxious matters may be in solution, or with which it may be impregnated.

A stagnant moist atmosphere may thus become poisonous. If under such circumstances a window be opened, and a current of air established, the evaporation from the surface of the body, loaded with sensible perspiration, would produce a sensation of cold and chill which few could bear without injury—none without much discomfort.

It has been well remarked-

"That the close sympathy which exists between the skin and the vital functions is well known, but the mere knowledge of the conditions is of itself of little use so long as it is not made available, particularly for the benefit of those who are most in need of its application."

To accomplish ventilation it is necessary that the air from without should be pure. Effective drainage, cleansing, and prevention of nuisances must *precede* all attempts to secure perfect ventilation. Examples abound where the inmates prefer the stench from within, to the stench from without; and it is a question, whether the free admission of air, loaded with emanations from drains and cesspools, and decomposing refuse, is not much more dangerous than the continued and repeated respiration of the same air. Numerous individual cases of disease and instances of appalling general mortality in prisons and workhouses, &c., attest the impropriety of ventilating rooms by apertures which admit air loaded with impurities.

The following evidence bears upon this branch of the subject. In Mr. Kirkman's Sanitary Report, it is stated that—

"In some instances the erectors of buildings appear to have been determined to keep out the pure air of heaven, by actually making cellars leading from passages."

And that-

"In many streets the houses are badly built, and, as regards health and comfort, worse constructed: it appears as if architects had designedly kept out both the light and air."

Numerous habitations, moreover, are composed of one room, with one window only, so that a thorough draught is scarcely possible.

Mr. Rawlinson says-

"One great cause of sickness in the abodes of the lower class is the total disregard (generally speaking) to the ventilating of the dwellings, their crowded state, and the want of cleanliness; so that, when the occupants retire at night fatigued, instead of obtaining refreshing sleep, they congregate *en masse*, in filthy beds, in the rooms in which they eat their food; these are badly ventilated, scarcely ever whitewashed, and generally kept in an extremely dirty state, with odours arising from an accumulation of rubbish of every description, such as can scarcely be credited, except from personal observation."

It is an important fact that many persons, who live in comparatively well appointed houses, and in comparatively good streets, render themselves liable to disease by keeping their front room as a kind of show, or state room, and by constantly residing in a back room, or kitchen.

The back premises are generally confined, and the atmosphere less pure than in the front of the house. The atmosphere of a kitchen is usually contaminated with the nausea from the slop stone drain which, often untrapped, terminates in a stagnant cesspool, or a foul drain.

In Edmonton-

"The arrangements for ventilating and cleansing the dwellings of the poorer class are on the lowest scale."

In Aylesbury-

"The habitations (of the poor and labouring population) are in general so defective in construction, and so vicious in arrangements, as to prevent altogether, or materially obstruct, the requisite ventilation.""

In New and Old Accrington-

"The evil effects of the state of the ground around the dwellings of the pooter classes, saturated, in too many instances, by the liquid contents of the ash-pits near them, will be seen to be much worse when the bad state of the ventilation of the houses themselves is considered; since when the soil about the foundations of the houses is saturated with decomposing matter, the foul gases slowly evolved from them mingle with the atmosphere within, and there stagnating, produce that intense feeling of closeness which is to be found in such houses."+

Mr. Ranger, in reporting on the general condition of the dwellings of the working-classes in Barnard Castle, says-

"In the course of my domiciliary inspection, I was conducted into rooms where families consisting of six and more persons resided day and night, with about 168 cubic

^{*} See Report by Mr. Ranger, + See Report by Mr. Babbage,

feet of space to each person, the windows shut, and in numerous cases not even made to open, and no outlets at back of any kind. In no instance was the least attention to ventilation observable. The aspect of the occupants and the condition of their wretched abodes, were, at the time of inspection, truly deplorable."

Mr. Ranger even remarks-

"The one great cause of unhealthiness is atmospheric vitiation, similar to that found to prevail in the dwellings of the working-class."

Dr. Keelyside states, that in Stockton-on-Tees-

"The structural arrangement of the smaller class of houses (particularly) in the newer streets of the town is most defective and highly objectionable. In the sleepingroom no provision is made for ventilation."

In reference to Darlington, Mr. Piper says, in speaking of the dwellings of the poorer classes-

"The rooms are filthy and small; fifteen persons in two small rooms were ill at th^e same time of typhus fever, lying on the floor on straw, and I had to step over from one to another to attend them. There was no ventilation."

Mr. J. H. Jackson says-

"The internal ventilation is very bad. In many of the houses occupied by the working and poorer classes there are no fire-places, or any means of ventilating the sleeping-rooms."

Mr. Ranger well observes-

"This subject (the provision for efficient ventilation of the dwellings, more especially the sleeping-rooms of the poorer classes) is as equally worthy of consideration as the supply of water and drainage, when its object is to secure to a people adequate means for raising the standard of health. Practically there can be no difficulty, nor any sufficient reason given for depriving the occupants of tenements of the full benefit of the entire area of all the rooms on each floor, of the entire house, too, at a cost quite within the means of landlords and tenants."*

LIGHT.—In immediate relation to this branch of the subject, is the supply of light. To set up artificial barriers to the supply of light, which is bounteously given by the provident Creator, is so clearly a violation of this law, that it would have been supposed man would be careful not to put in perpetual shade that which He had so manifestly intimated should enjoy alternations of light and darkness.

Light, however, is practically denied to the dwellings of many thousands of our industrial population; first, by our manner of building; secondly, by the operation of the window-tax. In close proximity to piles of buildings other piles are reared up: down the narrow gulf which separates them, light can scarcely struggle. This is an error chiefly of our forefathers, and a result of the then condition of society, which the present laws are slowly grappling with, but which can only be remedied by the lapse of time, and future improvements.

The window duties, themselves a pure, unmixed evil, and paramount

* See Report on Hartlepool.

to all the economical demands of the day, though now repealed, have left an impress on the physical, social, and moral condition of the people which it will take the lifetime of more than one generation to efface.

In connexion with the subject of light, and as bearing on the moral improvement of mankind, it is impossible to pass over the following observations of the Rev. John Davis, the Ordinary of Newgate:

" I could not have believed, had I not witnessed its results, how very important an effect is produced in prison discipline by the mere introduction of light. As a matter, not of luxury to the prisoners, but of supervising influence, its effects are most striking. I have referred to the improved habits and manners of convicts, by merely keeping them at light and easy work ; but this effect is less apparent than the alteration now visible in the sleeping wards of transports, remembering what it used to be when they slept in darkness, and what may now be seen under the beneficial influence of sufficient light. The government has wisely and kindly had the sleeping wards on board all the transport hulks lighted up by night, by the introduction of portable gas and other suitable means. The blessing to the poor wretched men who were sent to those places of confinement as a matter of punishment for offences, after they were sentenced to be transported, must have been immense. If one fiftieth part of what has been told me by convicts sentenced to imprisonment in the hulks has occurred, and I admit and allow for the doubtful nature of such testimony, the transport wards of Newgate were, at their worst condition, palaces of light compared with the dark designs and deeds of those dissolute and lost men, when they were shut up in darkness of mind and body from four o'clock in the afternoon in winter, till about daylight in the next morning. While blue book upon blue book was hurling its successive thunders upon Newgate, the cries of the men at the hulks, under the same inspection as Newgate, were unknown and unheeded. I cannot but rejoice most fervently, that though so late, still at last, light and nightly supervision have been introduced into both."*

VII.-CONVENIENCES.

In all dwellings, the internal arrangements materially conduce either to the comfort and happiness, or to the discomfort and wretchedness of the inhabitants. Upon the supply and proper adaptation of these internal arrangements and conveniences, then, must the condition of the labouring classes greatly depend; and when it is considered how many of these classes have but one room to live in, it will readily be comprehended that the same ignorance, or neglect, of their wants, which made builders erect one-roomed houses, would lead to the want of all adequate conveniences for supplying or storing their ordinary household wants.

Shelves, cupboards, and closets, dust-bins, proper conveniences, outhouses or sheds, and the necessary domestic conveniences and appurtenances, are essentially requisite; yet we find the dwellings of the labouring classes either entirely deficient in such conveniences, or else

• See Report on the Gaol of Newgate, presented to the Court of Aldermen. October; 1850. that they are constructed and arranged, with reference to the house itself, on the worst possible principles.

It is impossible to enter more than very briefly into details concerning the important arrangements now referred to. It is enough to indicate that the removal of all solid and fluid refuse should be regularly effected by the community, and that wherever the community neglects that duty, frightful miseries are unavoidably heaped on the poor and the middle classes. It is owing to the neglect by the community of its duties in relation to the poor, that the necessity of storing refuse till a convenient season entirely depends; and it is the very storing of this refuse which is the chief cause of the external, internal, and personal uncleanliness of the poor.

But besides the improper location, formation, and adaptation of doors, windows, fire places, and chimneys, the general absence of small sheds or outhouses for washing, &c., the want of sinks, and common drains, for conducting off the fluid refuse, there are other arrangements which, though no less important, receive far less attention. I refer to the removal of solid refuse. The question of drainage and sewerage has already received an amount of attention, which must prevent its importance in any future arrangement for the improvement of the condition of the poor from being overlooked; and it is quite unnecessary here to do more than merely advert to the necessity, in all cases, of efficient drainage.

Mr. Ranger says, "In the domestic economy of every human habitation, there results an amount of refuse not removable by means of sewers."

"Very few places inhabited by the working classes receive cleansing, and very few of the houses are even provided with dust-bins, consequently all solid refuse, animal and vegetable, lies scattered on the surface, or, at most, thrown into a corner of the yard or court, where it is suffered to decompose, emitting its poisonous effluvium, a result of structural deficiency, and want of adequate provision to cleanse by the removal of all the refuse from the vicinage of dwellings of every class."

He further says, "I refrain from setting out in detail the deplorable condition of thousands of the inhabitants resident in the courts, yards, &c., particularly in many of the 115 places visited by me." "The state of the dwellings of the poorer classes, for want of ventilation and proper conveniences, is bad enough; but in many parts is rendered worse from their being in close proximity with pigsties, the latter standing against the walls, close to windows and doors, and, in some instances, only separated from the living and sleeping rooms by boarding."*

* See Report on Southampton.

We find that "the windows and chimneys of the smaller dwellings are not proportionate to their uses, that little regard is paid to their formation or position, that in several instances the chimney is so situate as to draw towards it, and towards that portion of the room where the inmates usually most assemble, all the noxious gases elsewhere arising."*

"The landlord," says Mr. Clark, "often without capital, or holding by a brief tenure, and even if willing and able, almost always ignorant how to carry out the needful accommodations, works according to no rule. Houses are built in improper places, with undrained cellars, with dwelling-room floors below the street level, either without any or with very narrow back yards, without dust-bins or proper paving, and with pigsties, hogwash-tubs, and other nuisances, and with large water-butts, which take up much space, and harbour dirt."

We are told that in country districts, when the hind comes to take possession of his cottage he finds it no better than a shed. The wet, if it happens to rain, is making a puddle on the earth floor. It is not only cold and wet, but contains the aggregate filth of years. The refuse and droppings of meals, decayed animal and vegetable matter of all kinds, which has been cast upon it from the mouth and stomach. Window frame there is none. The windows do not open. There is neither oven, nor copper, nor grate, nor shelf, nor fixture of any kind; and in the metropolis as in country districts, in Bethnal Green as at Tiverton, many of the cottages are built on the ground without flooring; some have neither windows nor doors sufficient to keep out the weather, or to let in the rays of the sun, or supply the means of ventilation.

It follows, as a necessary result of the neglect of provision to remove refuse from all parts of a town regularly, that the house refuse must be deposited somewhere in the vicinity of the dwellings; two places are usually selected—cellars, or a back room, or the adjoining yard. It is not unusual to devote a portion of the cellar, or underground room, as a receptacle for the dust, refuse, vegetable and animal matter, which accumulate daily. Often in the summer there are vast accumulations, which, from not being removed, pollute an entire neighbourhood.

This observation was corroborated by the numerous visitors employed under my own supervision, and by the other medical inspectors, when temporarily engaged under the General Board of Health. In fact, the amount of refuse, dust, cinders, and decayed matters rejected as food, contained in the houses, hid away in corners, under beds, in cellars, back closets, under stairs, &c., was so enormous as to be incredible to all but the actual observers. In numerous instances many (even nine) cart-loads of offensive household-refuse were

* Report on Hastings, by Mr. Cresy.

removed from houses where cholera raged; and it is well-known to the visitors, medical officers, and inspectors, that where such collections of refuse existed, cholera, during its prevalence, raged with unmitigated virulence and inordinate power. Houses crammed with such collections of refuse—and few of the houses of the London poor have not such collections—are, in fact, placed in the same circumstances as those houses where common open cess-pits are situate in the cellars, and such houses are poison-dens.

It is curious to observe that while the people of London, in the middle of the nineteenth century, are habituating themselves to conditions and habits of filth of the most repulsive character, and which the beasts of the field are by instinct taught to repudiate, Moses (see Deuteronomy, ch. 23, v. 12, 13, 14,) four thousand years ago legislated for the observance of those very decencies now so much disregarded.

Mr. Vale, surgeon, Stoke-upon-Trent, says-

"One of the greatest nuisances we have is the construction of many of the smaller dwelling-houses, being built without any back-door, and almost destitute of any other kind of accommodation."

Speaking of the discomfort connected with the houses of the poor, the Rev. S. Smith, of Ely, says-

"Many of the cottages have their little muck-heaps, and no drainage at all; defective wooden conveniences, with cess-pools containing night-soil, giving off offensive effluvia in the immediate vicinity of these houses."

Of Exmouth, we are told-

"A stranger, and it is to be presumed the greater number of the inhabitants, would hardly believe that in close proximity to their dwellings are quarters in the condition to be described, c. g. in South-street there are 168 inhabitants living in 41 houses mostly two-roomed. Of these individuals, 144 are without proper accommodation, and 162 are without water, except what they fetch from the public pump, from 40 to 120 yards distant."*

Mr. Richardson tell us that-

"The conveniences in numerous instances are close to the sleeping apartment, and separated only by a half-brick wall."+

"In many instances there is only one convenience to a whole lane, and this is ruinous and filthy. In some lanes privies and middens are crowded amongst the houses, and not unfrequently under the same roof. They are *in contact* with a dwelling-house on each side, and have living and sleeping rooms above and over them. The infiltration from the middens and liquid refuse in contact with the wall in some instances passes through. From 9 to 10,000 persons reside in the lanes, courts, and alleys, so situated."[†]

Mr. Rammell, another inspector, says of Sandgate-

"One-fifth of the houses of Sandgate have no other domestic accommodation than tubs, pails, or boxes."

* See Report on Exmouth, by Mr. Rammell.

- † See Report on Stockton-upon-Tees.
- ‡ See Report on Carlisle, by Mr. Rawlinson.

The conveniences, &c., connected with the dwellings of the labouring classes in Worcester are, we are informed—

"Neither better nor worse than the ordinary arrangements about the poorer dwellings in the city, but neither plan nor description can adequately represent the filth and effluvium arising from these nuisances, and the state of disrepair and neglect in which they are suffered to remain."*

And in Bacup-

"The details on this subject," we are informed, "are revolting to humanity, and nothing but a sense of imperative duty could induce the superintending inspector to recal the sickening sights presented in nearly every part of the town."+

Mr. Clark says-

"The dwellings of the poor are utterly neglected by the landlords, very ill supplied with conveniences, the courts ill paved, the houses undrained, often damp, and subject to offensive and unhealthy smells."

The condition of the industrious poor in regard to the arrangements connected with house accommodation, thus described, may be stated to be general; common alike to the agricultural and to the manufacturing districts—to London as to all large towns, as well as country villages, Mr. Worsley well says—

"During the present century, we have been building dwellings for the poor as if we were running up sties for pigs."

VIII,-INTERNAL AND EXTERNAL CLEANLINESS.

It is a common observation, that the poor would not if they could be clean. Let the few following observations, testifying to the perennial foulness that too often infests the neighbourhood and immediate locality of the poor man's home, show the difficulties he has to contend with, and modify an assertion in a great measure absolutely untrue.

External causes of uncleanliness may be due either—1st, to agencies or nuisances foreign to the dwellings; and 2ndly, nuisances or agencies peculiar to the dwellings. With reference to the former, this is not the place to advert to them. They are of a general character, peculiar to localities, and dependent on defective administrative arrangements. The necessity of brevity prevents the entering into the details of the unsurpassable difficulties in all attempts at cleansing which beset the poor when surrounded by uncleanliness due to such causes as these.

The causes of uncleanliness peculiar to the dwelling are, location below the surrounding or adjacent level, so that surface drainage and percolation necessarily take place towards the dwelling, want of paving, drainage, water supply, removal of solid refuse, proper conveniences, light—whether natural or artificial. Besides the two causes referred

^{*} See Report on Worcester, by Mr. Clark. + See Report on Bacup, by Mr. Lee. ‡ See Report on Totness.

to, there are, 3rdly, those secondary causes which arise from the occupations of the poor and from the keeping of various kinds of animals; and, 4thly, the habits of the poor themselves—their training to, and general practice of, uncleanliness.

It is enough to adduce the following recent statements of facts to ensure charity in judging of the poor.

Mr. Rawlinson tells us—" The houses of Alnwick are crowded upon each other; . . . almost every corner, not actually covered with buildings, is walled round to confine and retain the refuse of twelve months. The natural drainage of the whole area passes the liquid filth over the surface, or under ground by infiltration, towards, under, and through the houses—poisoning the atmosphere above and the soil beneath." Mr. Rawlinson further gives plans and drawings of property in Alnwick, showing the operation of many of the causes in the second class. These plans and drawings are very instructive.*

Mr. Ranger, in reference to Uxbridge, states-

"In the course of my inspection I was forcibly struck with the number of tenements in the town that have been erected without any apparent regard to the observance of common decency, or even cleanliness. The proprietors appear to have been satisfied with merely securing the advantages of shelter from the weather for their tenants, but indifferent to the means of disposing of refuse and offal of any kind, and the tenants are subject to the combined mischievous influence of inadequate supply of water, want of sewerage, open drains, and ditches, containing a great quantity of animal and vegetable matter in a state of putrefaction." The houses in course of erection are no better provided than the old buildings, which appear to have been taken as a type for the new."

In Mr. Clark's report on Carmarthen, we find it stated-

"To convey an adequate idea of their (the houses,) disgusting and poisonous condition, any description must be a vain attempt." And he affords numerous and melancholy illustrations and details of the filth and discomfort which the poor are made to endure.

The present poor-law officer of Dartford says-

"Immediately fresh people take possession of these wretched tenements, they are attacked with fever."

Of another place, Mr. Ranger reports-

"The general character of this place is such, that human beings ought not to be allowed to occupy it. The major part of the smaller class dwellings in this place have been erected regardless of common decency, not to say cleanliness."

Again, the present surgeon says-

"Most of the alleys and courts are deficient in proper ventilation, the very air of these being impregnated with exhalations of the worst possible kind; stagnant pools of animal and vegetable matter, in various stages of decomposition, lie contiguous to the doors and windows of the numerous dwellings occupied by the poorer class. There is not merely an absence of proper thoroughfares in the places they reside in, but

* See Report on Alnwick, by Mr Rawlinson.

the houses are in the midst of filth, and without any outlets at the back of their premises; whilst the floors and walls are damp and unwholesome."

Mr. Lee says of some parts of Ashby-de-la-Zouch-

"There are many long courts in the most deplorable condition, the whole of the soil and the subsoil being saturated with decomposing animal and vegetable matter."*

Mr. Ranger says of Cambridge-

"The sanitary condition of numerous courts and places is so wretched as to be a disgrace to humanity, and still more so to civilization;" and Mr. Ranger believes it "next to an impossibility for their inhabitants to be healthy, cleanly, or even moral."+

The same gentleman says of Chatham-

"It is not possible to describe the truly wretched and filthy condition in which I found very many of the dwellings occupied by the poorer class."

In Durham-

"It is evident from the prevalence of these nuisances, and from the defective state or entire absence of all structural arrangements for their prevention, that no attention has ever been paid to the comfort or convenience of the inhabitants of these dismal tenements."§

Of a part of Penzance we are told-

"It is impossible to convey an adequate idea of the filth of this quarter. Its position is naturally, in all probability, one of the healthiest. It would be difficult to find a spot so foul in which life is so seriously affected, or which it would cost so little to make pure."

In Sheerness-

"In numerous instances the soil permeates the walls of adjoining houses, and the effluvia are most offensive, in many cases the only receptacles for filth and manure are the passages. There are also instances of people living over cellars partly filled with stagnant water, and percolations from cess-pits, the whole forming a kind of large cesspool."

In St. Thomas the Apostle, Mr. Clark says-

"The lower and densely-peopled section of the village is in a miserable condition indeed. It would be difficult to find anywhere, even in a crowded city, a block of houses so utterly discreditable to those who built, or those who receive rent from them."**

Of Fareham, Mr. Rawlinson says-

"There are constantly complaints from the poor tenants on the state of their houses, and the dirt about them."

Mr. Ranger further says-

"In the dungsteads, blood, offal, and excrement are thrown, and allowed to remain in a state of decomposition, saturating the walls of rooms occupied by some of the working-class. The pigsties, dungsteads, and open cess-pits are in many places under the windows, and in others close to the entrance doors of living-rooms, and from all which impure exhalations are carried into the dwellings;" it is further stated, "in

^{*} See Report on Ashby-de-la-Zouch, by Mr. Lee.

⁺ See Report on Cambridge, by Mr. Ranger. See Report on Chatham.

[§] See Report on Durham, by Mr. Clark. || See Report on Penzance, by Mr. Clark. ¶ See Report on Sheerness, by Mr. Ranger. ** See Report, by Mr. Clark.

many cases the people are destitute of the means for observing the ordinary rules of decency."

With reference to Carlisle, the Sanitary Association of that place reports-

"The lanes and courts are in a most objectionable state, containing almost invariably pigsties, open conveniences, dunghills, stagnant pools, the receptacles of every kind of filth; all of which nuisances remain unheeded for weeks and months together. Most intolerable nuisances exist—damp miserable cellars, and dwellings above and on each side of most fearfully dirty conveniences. Everything in this range of buildings, containing more than 200 people, betokens the greatest filth and physical degradation."

We are told the same tale of Sherborne, which has been in vain attempted to be rung in the ears of the authorities of the metropolis and the government, that—

"The poorer classes almost everywhere throughout the town are forced to live in a state of filth and discomfort, the effect of which is almost equally injurious to their moral and physical condition."*

Mr. Rawlinson writes-

"This state of things surrounds the poor inhabitants with a surface of visible filth, and also keeps them in an atmosphere of foul gases, where the seeds of disease most readily ripen."+

Mr. Ranger says-

"Upon examining these deadly sites, for I can call them by no other name, I found the stench emanating from the parent 'filth,' hermetically closed in. I also found the streets, courts, and yards, completely charged with foul putrefying matter, and, in many parts, literally quagmires of filth."[‡]

Mr. Clark, in speaking of a part of Bangor, says-

"It is difficult to convey in words any correct idea of the dreadful condition of this quarter of the town. It is far worse than anything I have seen in crowded cities."

And referring to the cottages built on the headland of Garth, he says-

"I found them in a filthy condition, and affording a proof how little is the advantage of a healthy position and a good fall, where those who build houses will not supply the means of cleanliness."

It is unnecessary to multiply further evidence of the almost unsurpassable obstacles to cleanliness on the part of the poor. Evidently unjust it is to charge on the poor the vice of uncleanness, while the state of society, *the rights* of property, and *the law* overwhelm them with difficulties in nearly every attempt at improvement, and discourage every exertion, even to the ultimate production of apathy.

IX .- NEGLECT OF OWNERS, AND UNFITNESS FOR HUMAN HABITATION.

It at first sight appears incomprehensible that the owners of property should permit their houses to fall into decay, and to become so unwhole-

> * See Report on Sherborne, by Mr. Clark. + See Report on Morpeth. ‡ See Report on Hartlepool.

some as to be unfit for human habitation. Yet the fact is so apparent, and confirmed by such universal and trustworthy evidence, that we shall here content ourselves by adducing a few facts, demonstrating the necessity for some adequate means to preserve property, while let for human habitation, in a condition compatible with healthy existence.

The late Mr. Smith, of Deanston, in reporting on Kingston-upon-Hull, says-

"There has been a great neglect of provision for comfort in those (houses) for the accommodation of the working classes, the chief object seeming to have been the occupation of the least space, and the erection of the lightest and cheapest structure which would afford the *semblance* of a dwelling." "This description of property is generally held by a class of persons whose chief object seems to be the acquirement of the highest return for their money, by giving the least accommodation to their tenants that will be at all accepted of; *this is natural, and hence the propriety of control.*"

Mr. Clark states—

"The utter neglect of their duties by the class of cottage landlords is strongly exemplified in the condition of this district;" of some places he says, "These places are quite unfit for the occupation of human beings."*

The same gentleman further remarks-

"The state of things in Scholes district shows plainly how little the owners of that description of house property, if left to themselves, will do for their poorer tenants." "The courts and alleys, and those parts of the premises that can only be kept in order by the landlord, are in a condition in which no decent farmer would allow a pigsty to remain."+

So rarely is there a sincere desire on the part of owners to improve such property, that Mr. Rammell praises some owners of property because they have shown a desire "to remedy existing evils, by rendering the houses fit habitations for *human beings*."

Mr. Thomas, Surgeon to the York Poor Law Union, says, in reference to York-

"There are many houses which are totally unfit for human habitation; they are not fit even for pigsties."[‡]

Mr. Richmond adverts to places in Chorlton-upon-Medlock termed "cellars," which are unfit for the habitation of any living thing higher in the scale of creation than toads and vermin.

It is stated of some places in Newport, that-

"The whole ought to be swept away as unfit for the abodes of human beings, and as involving, by the production of sickness and pauperism, a heavy addition to the local taxes."§

With reference to Welshpool, we are told by Mr. E. Harrison that-

"He was horrified to find a human being in a place then occupied by one; he stated

- * See Report on Bristol. ‡ See Report on Witham.
- + See Report on Wigan.
 - § See Report, by Mr. Clark.

his decided opinion that the place was not fit for any human being to be in; it is in no way whatever adapted for any one to dwell in by day or by night."

He further states—

"Unless further accommodation be afforded, these houses are not fit for any persons to dwell in."

Mr. Clark, after giving further evidence, says-

"It will be evident that the opinions of both learned and unlearned, the medical men who visit, and the unfortunate people who inhabit these cottage tenements, completely agree as to the dreadful state of things now existing."*

The Medical Officer of Burslem says-

" Many of the cottages in the town are scarcely fit for human habitations."

Mr. Lee says-

"There are many very dilapidated cottages in the older parts of the town quite unfit for human habitations."+

Mr. Cooper, the medical officer of Southampton, says-

"I have seen and visited paupers in their illness, who have lain in hovels not fit for pigs, and where pigs would infallibly have died for want of air."[‡]

X .--- WATER SUPPLY.

As a general rule, the arrangements for the supply of water are of the most defective kind: in thousands of instances the poor and the industrial population have to procure it, as they best can, from their neighbours, who, more fortunate than themselves, caught it (when laid on), or who have larger jugs or tubs to retain it in. In the metropolis or on the banks of the river, "The nearest pump or the Thames," is not an uncommon reply to the inquiry—" Where do you get your water from?"

The evils connected with the prevailing system of water supply, or rather want of supply, are so numerous, and bear so hardly on the poor and labouring population, that he who would raise their condition finds at every movement his schemes brought to nought, and his efforts thwarted.

Without water, the great purifier from all uncleanliness—pure, cheap, constantly-supplied, and abundant—it is utterly impossible to effect a great or permanent improvement in the condition of the population. On its supply does the whole question of efficient housedrainage, and external and internal purification depend. Without it, the present drains are foul—horrible and disgusting nuisances are unavoidable—and external, internal, and personal uncleanliness supply the place of cleanliness and decency.

This branch of the subject has been so fully and ably laid before

^{*} See Report on Welshpool. + See Report on Burslem. ‡ See Report on Southampton, by Mr. Ranger.

the public by the General Board of Health, in their Report and Evidence on Water Supply, that it is unnecessary to do more than thus briefly refer to it.

XI .- RENT CHARGE.

Experience shows that the relation between the rent-charge of the dwellings, and the means of the industrious classes, has not hitherto received the attention it demands. Persons who are in the weekly receipt of small sums are generally compelled to take such houses as are vacant, or to occupy such tenements as are in the vicinity of their places of employment. They must, therefore, submit to such a rentcharge as may be demanded by the landlord; which, while it possibly may be in accordance with his outlay, may be ruinously opposed to the interests of the poor artisan, and often can only be paid by trenching greatly upon his means of acquiring the common necessaries of life, and that, after he has made every effort to reduce his expenditure by inhabiting the least possible number of rooms, and perhaps even by crowding himself, wife, and five or six children into a single sleepingroom.

The impression is, in fact, very general, that the poor pay in rent a very large portion of their earnings, and that the sum they thus pay is grossly disproportioned to the accommodation provided for them.

Small landlords, on the other hand, are found, who protest that cottages and small house property are by no means that remunerative investment which many suppose them to be; that by the defalcations in payment of rent, and the frequent repairs rendered necessary by the condition of the property and dilapidations, the profits are much lessened; and that nothing more than a fair return is realized.

This statement is possibly not very far from the truth, in some instances, but leaves quite untouched the great facts—1. That the tenants do pay, compared with their earnings, much higher rents than the middling and upper classes.

2. That the accommodation provided is of a very inferior, often of the very worst character.

3. That more healthy houses can be provided for the industrious classes than the miserable dwellings they now inhabit, at the same rent, and there is every right to expect in many instances even at lower rents, than they now pay.

4. That the chief reason why landlords of such unhealthy and unfit houses are deprived of much of their apparent gains, consists in the facts—1. That the tenants are pauperized by the condition of the dwellings, and by the diseases engendered through the fearful overcrowding, to which a rent-charge disproportioned to the means of the poor inevitably leads. 2. That the state of the dwellings draws to them classes of society who only consent to inhabit them because they have lost much of that sense of virtue and integrity, which can only be cultivated in a pure atmosphere.

It is necessary to establish the fact, that the poor, as a general rule, do pay most exorbitant rents for most unwholesome dwellings.

We have the following description by Viscount Ebrington, Secretary to the Poor Law Board, in his lucid and eloquent lecture. This nobleman is well qualified to speak on this question, from the great personal interest he has taken in it.

"Some of these rooms his lordship refers to in the neighbourhood of Golden Square, were over-crowded low houses, some close to slaughter-houses, some over cesspools —the walls were filthy, the smells either abominable, or exchanged for a closeness still more oppressive, the passages dark and tortuous. And yet here were living the most respectable of the labouring classes, who, though earning high wages, are pauperized by the expenses of the sickness brought on them by these dwellings—dwellings for which they pay in rent as much as Mr. Ashworth, of Egerton, receives from his prosperous workpeople for cottages, containing five and six and seven rooms each, with every convenience."

Mr. Rammell states-

"The rents of the poorer tenements are inordinately high, whilst the accommodation afforded is extremely bad; and a system of overcrowding is carried on, (probably unequalled in any other town in the kingdom,) with the most fearful results upon the health and morals of the classes referred to."*

Mr. Ranger says-

"The proportion of the rent paid by the labourer to that of his total expenditure is about one-seventh."[†]

Mr. Rawlinson says-

"The overcrowding of houses in a town is most injurious to all parties, and to none more than to the owners of the property; for a degraded and wretched tenantry are the consequence, from whom the rent is with difficulty obtained; the property soon becomes ruinous, and sinks with the occupiers into the fearful state detailed. The nominally low rental of 6d., 9d., 1s., and 1s. 6d. per week is in reality extravagantly dear to the unfortunate occupiers, as every feeling of self-respect is deadened, the constitution weakened, and disease engendered, which ends in loss of work, from inability, and ultimate pauperism."[‡]

Mr. Morton, speaking of the wretched cottages in Holbeach, says-

"The rents of these miserable dwellings are very high; more than double what such cottages would let for in Scotland. At Holbeach bank they are generally below the level of the road, with ditches behind; the walls are low, the sleeping-rooms are in the thatch, many of the floors are of clay, and yet the rent is from 3*l*. to 5*l*.; many of them are quite unfit for human habitations."

Mr. Smith, of Deanston, says-

" New cottages generally yield from 10 to 15 per cent, on the outlay."

^{*} See Report on Cardiff. + See Report on Chatham. ‡ See Report on Whitehaven.

Many of the houses in Learnington are in the most deplorable condition; they nevertheless let at rents of from 5l. to 12l. per annum; sums which probably return from 6l. to 12l. per cent. annually on the value of the property.*

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Several owners of some wretched cottage property at Merthyr Tydvil, built at a cost of from 50*l*. to 70*l*., estimate that the net profits, after paying repairs and allowing for losses by tenants, derived from them does not exceed $6\frac{1}{2}$ per cent.; others admit it may be more. One witness says, "The profits may be from 6 to 9 per cent., in some cases a great deal more.†

We are informed that in Portsmouth cottage rents vary from 1s. 6d. to 2s. 6d. per week, and that by far the greater portion pay no rates, parochial or otherwise, there being about 5000 such tenements *excused* from paying poor-rates. With respect to the per-centage sought by landlords from this class of property, it is stated—

"There are no bounds to the expectations of such landlords as to interest from this class of property. The average per-centage at first obtained may be about 9 per cent.; it ranges from 7 to 12 per cent."[‡]

The Vicar of St. Laurence says-

"I have heard of a house in a court in my parish where there is a cesspool partly under the house, and the value was so depreciated that the rent was obliged to be lowered. A poor family was tempted in that way to make it their abode."

In Torquay, we have it in evidence that-

"Rents have kept pace with the demand for houses by the poorer classes—61. and 71. a-year have been commonly paid for the worst description of houses, consisting of two, or, at most, of three small and miserable rooms, and without any accommodation, drainage, or supply of water."

Another witness states that-

"The common rate of ground-rent for houses of the lower class is from 1s. 6d. to 2s. per foot frontage; and that builders endeavour to make up for the high groundrent by crowding the habitations in a small space, in some cases back to back."

And it is remarked that-

"The tenants of these houses endeavour to make up part of their rent by taking lodgers."

Mr. Clark, speaking of Witham, says-

"I believe cottage property to have been, on the whole, property of a most valuable description to its owners, and at this time I found the poor paying rents of 3*l.*, 5*l.*, and 7*l.* per annum for tenements which no surveyor would have ventured to value, unless they had been required for a railway, at 30*l.*, 50*l.*, or 70*l.* value, including ground, and for which the owners are excused paying poor-rates."

+ See Report on Merthyr Tydfil, by Mr. Rammell.

‡ See Evidence of Mr. Sheppard in the Report on Portsmouth, by Mr. Rawlinson.

^{*} See Report on Leamington, by Mr. Clark.

He further says-

"At this time the proprietors of small cottages profit at the expense of the rest of the ratepayers. As a body they, no doubt in most cases unconsciously, promote sickness, pauperism, drunkenness, and crime, because they possess and let out a description of tenement which is certain, in a greater or less degree, to bring these evils upon its inhabitants."

Mr. Thomas, Surgeon, York Poor Law Union, says, referring to the influx of Irish-

"Every place where it is possible they can get a shelter in is at present occupied by them. They are so anxious to get a little shelter anywhere to keep them from the weather, that in some places the rate of charge is most enormous—I refer more particularly to Smith's buildings. The original rent of twenty houses was fixed at the rate of 1s. 6d., and in no case did it exceed 1s. 9d. per week. But on the influx of Irish the houses were let to them, and charged at an extra rent, 2s. and 2s. 6d. Nine of the houses have been taken off the hands of the landlord, and instead of charging 1s. 6d. as he did originally, he is now, with eleven houses, charging 4s. a-week, whereby he receives as much rent from these as he did formerly from the twenty houses. Twice that amount of rent could be extracted from the property."

In Cardiff-

"The rents of the cottage property throughout the town is very high. The very lowest class of cottages, which have only two rooms each, and the building of which would not have cost more than 40*l*., let for 6*l*. 10*s*. a-year; very inferior cottages let as high as 10*l*. a-year. This high rent, occasioned by the want of houses, is one of the main causes of the fearful overcrowding."

With reference to Whippingham, Mr. Ranger writes-

"It appears that 78.1 per cent, of the houses are under 10% per annum, and therefore tenanted by the labouring classes and artizans, and upon this portion of the community the chief burden occasioned by the want of efficient sanitary arrangements will fall, which it is evident they are least able to bear."

"So long as rents can be collected from the wretched tenants of these miserable abodes, no matter what may be the sufferings or privations of their inmates, so long will landlords leave them to be occupied, without a wish or an effort to effect any amelioration in their condition."

XII.-LODGING HOUSES.

If the sanitary evils connected with the dwellings of the poor and the industrious classes be such as have been described, how much more fearfully must they prevail in those unregulated lodging-houses where the wretched and suffering poor, as well as a large portion of the outcast, the criminal, and the migratory population, are unavoidably compelled to reside.

Although the condition of the dwellings of the poor, and the resulting evils, should have been overlooked, it is a marvel that the condition of the lodging-houses should have been so long, repeatedly, and prominently brought before the public, and have hitherto received so little attention from the legislature. The only places where lodging-houses are now licensed and regulated are Liverpool (under a local Act), and those towns where the Public Health Act is being brought into operation.

The metropolis, where stringent measures of license and regulation are most needed, is altogether without any means of grappling with one of the chief evils of the country. This is the more a matter of surprise when it is considered—

First. That Dr. Ferriar, in 1795, prominently brought before the public the evils, more especially the physical evils, connected with the state of the lodging-houses, and suggested efficient remedies.*

Secondly. That the condition of the metropolitan lodging-houses has been prominently brought before the public by many philanthropists and sanitary reformers, and by the public press.

Thirdly. That the efforts of Lord Ashley, Lord Kinnaird, Sir Ralph Howard, and the other noblemen and gentlemen connected with the various societies and associations now in existence for improving the condition of the poorer classes, and affording better house accommodation, have proved not only sufficiently successful as monetary speculations, but in demonstrating that better arrangements, more healthful, economical, and conducive tomorality, may be substituted without injury, even to those who speculate in a traffic which, as at present conducted, is scarcely better than the worst form of the slave-trade.

It is impossible that the licensing and regulation of lodging-houses in the metropolis can too soon be brought before the legislature. The evils are now enormous, and must necessarily become aggravated, not only by the increase and the influx of population, but by the increase in numbers of those who will resort to them through the strictness of the regulations of the lodging houses in those towns which are coming under the operation of the Public Health Act.

The following is the most recent evidence,-

Mr. Worsley, author of the prize essay on Juvenile Depravity, classes the arrangement of cottages and lodging-houses under one head, as a cause of rural juvenile crime:—

"Because the moral influence of both is much of the same nature, the lodging-house being a more malignant form of the overcrowded labourer's cottage. The moral effect of both is the destruction of all modesty in either sex; and the almost universal absence of chastity and purity among the labouring class in our country villages at the present day, is notorious to every one at all acquainted with them."[†]

Mr. H. J. Paine, says, in reference to the lodging-houses-

"It is the common practice for these rooms to be occupied by relays of sleepers some of them being engaged on work during the night, and some during the day. I once found a bed-room, 12 feet by 10 feet, in a small house, which contained four beds. In the day time there were six men asleep in three of the beds, and I was informed

* See Appendix.

+ See Prize Essay on Juvenile Depravity,

that two others had just quitted the remaining and empty bed. During the night, these beds would be occupied by another set of men. From this custom, the atmosphere of the room is constantly vitiated, the window being never opened for ventilation. From such causes as this Stanley-street is never without fever.

"In one house I visited in Stanley-street, I found an adult man and woman, brother and sister, occupying the same bed, labouring under fever. In another house in the same street, I found a similar case. In another house, where I had occasion to attend an inmate, I found a lad of 17 or 18 years of age sleeping in the same bed with his father and mother. It is a constant custom for four or five families to sleep in one bedroom."*

Mr. E. John further says-

"I have myself reckoned 25, and in some instances 30 persons in houses that had been certified during the prevalence of cholera to be capable of containing only eight."[†]

Mr. Roberts found-

"In a house in the neighbourhood of the Model Lodging-house, George-street, a room 22 ft. by 16, the ceiling of which could be easily touched with the hand, without any ventilation, excepting through some half-patched broken panes of glass; here were constantly residing from forty to sixty human beings, men, women, and children, besides cats and dogs."[‡]

"In a small room on the second floor of a house in Holloway-court, Whitechapel, $10\frac{1}{2}$ feet by 13 feet, with a sloping roof varying from $5\frac{1}{2}$ to $7\frac{1}{2}$ feet in height, and having only one window, were crowded together 37 human beings, men, women, and children, the majority of whom were nearly naked, and very filthy. The smell was truly intolerable. On the stairs there was a tub, nearly full of all manner of abominations, and on passing it, the smell was suffocating." § It is almost impossible to conceive how the small space which was allotted to each person in that room could enable the party to exist during an entire night.

Each occupant had but 21 cubic feet of space, supposing there to be no furniture in the room; but if we reduce the cubical aerial contents of the room by the space occupied by the bodies of the individuals, &c., probably not more than 16 or 17 cubic feet remained."

A Superintendent of Police reports thus of one of the numerous lodging-houses in Cardiff:—

"I went into a lodging-house kept by M. H. (No. 17), paying a weekly rent of 4s. The living-room is 15 ft. 10 in. long, 17 ft. 2 in. deep, $8\frac{1}{2}$ ft. high; other room, 10 ft. 7 in. long by 17 ft. 2 in. deep, $8\frac{1}{2}$ ft. high; two rooms over, the same size as living-rooms; court and shed at back, partly covered; convenience in one corner, not enclosed. Fifty-four persons, men, women, and children, were then living in the house; they live, eat, and sleep, all in one room. The woman admitted that 60 persons were in the habit of sleeping in it. The smell arising from the overcrowded room was most overpowering. In another house close adjoining there were two persons ill of fever, both in one room, and there were two others in the same house just recovering. In one house I found a woman recently confined; this was in a room of 10 ft. square. In the same room were three other beds; three persons slept in each bed every night. The stench arising from these houses was like that from a fetid cesspool. In one other house I found another woman recently confined, in a room in the same crowded

* See Report on Cardiff, by Mr. Rammell. † Ibid. ‡ See Essay on the Dwellings of the Industrious Classes, by Mr. Roberts. § Report on Whitechapel, 1850. state as the above. In most of the other houses I found about 14 persons, living and sleeping that is, in each house, and there are often more. The least number I have met with in one of these small houses has been eight persons, living, eating, and sleeping in rooms without ventilation, these houses having neither back windows nor doors."

He further reports-

"On visiting to-day M. H.'s lodging-house I found 45 inmates, but many more came in to sleep at nights, and paid per night, adults 3d. each, children half-price, and some 4d. and 6d., according to the accommodation. There are no bedsteads, but all the lodgers lie on the ground or floor. The children were sleeping in old orangeboxes, and on shavings; that is, the younger ones, or they would be liable to be crushed in the night by persons rolling over them. Each party had with them all their stock, consisting of heaps of rags, bones, salt fish, rotten potatoes, and other things. The stench arising from this crowded house was hardly endurable. There were only two stump bedsteads in the house. The yard at the back was unpaved; there was stagnant water in the yard, and the privy was running over, and was covered with filth of the most disgusting description, and the stench was everywhere sickening."

"Again visited M. H.'s house; a woman was confined in a crowded room two days before. She was then in the same room, with about 20 persons, and was on the floor."

And he again reports-

"J. B. (No. 15) takes in nightly lodgers. I counted 36 persons, men, women, and children, in the house. Some of the women were dressing in the presence of a number of men. Not the slightest regard is paid to decency, the women being nearly naked in the presence of the men and children. The privy was full and filthily dirty; the ashpit was also full. There are 15 stump bedsteads in this house, all placed close together; in addition to this, all the floor and under the bedsteads are occupied by lodgers at night, who go away in the morning. The stench arising from this place is beyond anything that can be conceived, as the house is without ventilation. There are no tables, chairs, forms, or furniture of any description whatever in the house, which was in a filthy dirty state. The inmates of the above houses eat and sleep in the same rooms."

Another Superintendent of Police says-

"There are six low lodging-houses in the town; I have an arrangement for lodging all the paupers sent to me with a ticket. The room made use of for these pauperlodgers is the attic. It is 15 feet long, 12 feet wide, and 6 high; but it slopes from about 4 feet high on each side. There are three bedsteads in the room. I have sent as many as 30 people of a night. I have seen three or four in a bed at a time, and others on the floor, and as many as 18 in the room at a time; men and women indiscriminately:" thus giving 50 cubic feet for each.

As to lodging-houses, Mr. Rawlinson says-

"They are all the same throughout the length and breadth of the land; they are all alike disgracefully bad; they are a libel on the charity and civilization of the time. No people, at any period, in any country or place, ever did, or ever could, live in a more degraded and beastly state. Men, women, and children, the young and the old, families, acquaintances, and strangers, lie down in common nakedness together. There is no form or show of propriety, decency, or morality; but, at times, a vitiating and disgnsting bestiality unknown to savages."*

* See Report on Stoke-upon-Trent.

Mr. Lee says-

"It is perhaps well for the kinder feelings implanted within us that few are called upon by imperative duty to visit these abodes of infamy in an evening, or during a night. They are, with few exceptions, literally dens of iniquity, and the hotbeds of disease."*

He says, however, in speaking of Gainsborough-

"I make it a matter of duty, though exceedingly shocking, not only to the senses, but to all feeling of delicacy, to visit these places after the inmates have retired to rest. I am thus able to see their true condition, and to judge of the influence they exert upon the general health of the community. I have no hesitation in saying that the lodginghouses are the scenes of the grossest vice and immorality, and that the houses are the hotbeds of disease."[†]

Mr. Cooper says, in reference to the lodging-houses-

"The temptation of 3d. per night for lodging, as offered, is to some of the poor irresistible. They find in them an imaginary cheerfulness, but it is the very acmé of extravagance, as they find to their cost, after living in some of them for a short time. Illness soon comes on after breathing the impure atmosphere they afford, the windows being bricked up in some of them to save the window-tax;—and the only means of ventilation there being the removal of a solitary brick, to serve the double purposes of light and air,—renders them barely habitable."[‡]

Mr. Lee says, in reference to a lodging-house-

"In one sleeping-room there were five beds, occupied by nine males and four females, with only sixty cubic feet of breathing space for each person. When it is considered that these wretched people generally sleep in a state of nudity, and that their filthy clothing is thrown over them for warmth, while every crevice that would admit the external air is carefully stopped up, it will be easily conceived that the effluvium must be most disgusting and injurious."§

The following graphic description of the lodging-houses in Morpeth was furnished by the town clerk, and it applies with equal force to those over the whole country. Mr. Rawlinson states he can bear testimony to the accuracy of the description:—

"No idea can be given of the actual state of the rooms, or the scenes they exhibit. Those that offer beds have these articles of luxury filled with as many as can possibly lie upon them. Others find berths below the beds, and then the vacant spaces on the floor are occupied. Among these is a tub filled with vomit and natural evacuations. Other houses have no beds, but their occupiers are packed upon the floor in rows, the head of one being close to the feet of another; each body is placed so close to its neighbour as not to leave sufficient space upon which to set a foot. The occupants are entirely naked, except rugs drawn up as far as the waist, and when to this is added, that the doors and windows are carefully closed, and that there is not the least distinction of sex, but men, women, and children lie indiscriminately side by side, some faint idea may be formed of the state of these places and their effect upon health, morals, and decency. But nothing but an actual visit can convey anything like a just impression of the state of the atmosphere; those whose senses are not very nice cannot breathe it with impunity, even for a few seconds; with others, two or three inhalations are certain to produce sickness. What then must it be to those who sleep there for hours? Those who are upon the floor certainly breathe the freshest air, but all experience the bad effects, and suffer more or less from the poison they create; fevers prevail, and the sick ward of the workhouse is filled with typhus in its worst form from these places."

In reference to the necessity and economy of regulating such establishments, the following observations may be adduced. Mr. Rawlinson remarks-

"The regulation of lodgings and tenements will require constant and active attention; but it is a subject of such weighty import, connects itself so intimately with the health and morality of the people, that to perform other sanitary works and neglect this would be of little avail."*

In reference to the common lodging-houses in Carlisle, he remarks-

"Common lodging-houses are the same in character and effect throughout the length and breadth of the county; they constitute one huge forcing-bed for the generation of vice in all its forms, and it will ever be in vain to erect workhouses, gaols, and hospitals, or to establish penal colonies for the punishment or reformation, or for the suppression of vice, if these places, which constitute the fountain-head of all that is depraved, are left unregulated. It is like assenting to a sowing of the seed, but objecting afterwards to the crop, and at vast danger, trouble, expense, and indignation, striving to uproot it."[†]

Mr. Cresy says-

"A properly constructed establishment, provided with clean beds, a room for the assembling of the tramps, and washing-houses for their accommodation, with the means of cooking the food, would pay the proprietor a handsome interest, and give him also, in return, the satisfaction that he had at once struck at the root of an evil, which, if suffered to continue, will destroy the health and security of a whole district. It is a common observation, that two or three nights' residence in the ordinary tramp lodginghouse destroys morally and physically all who avail themselves of it; the scenes which usually present themselves are truly horrifying, and the depressed state and condition of all who are found within the walls is at once conclusive that the strength has fled, and that to restore the powers sunk, the beer or the gin-shop is sought in preference to a pure air and industrious employment. The young of both sexes here have vices of all kinds practised before their eyes, and no scenes of depravity can surpass those found in the lodging-houses of tramps."

II.—INFLUENCE OF UNHEALTHY DWELLINGS ON THE PHYSICAL CONDITION OF THE INHABITANTS.

Having thus, imperfectly it is true, described the actual condition of the dwellings of the industrious classes, it is necessary next to refer to their influence on the physical, and on the social and moral condition of the people.

It is fitting, however, here to state my earnest desire, that my readers should not be misled by the idea that improved houses for the industrious classes would prove a panacea for the fearful evils that afflict the labouring population.

* See Report on Ormskirk.

† See Report on Carlisle.

It must be distinctly understood, that attention is only claimed to the present state of the dwellings of the poor and labouring population, as exerting an influence, a powerful—nay, it may be asserted, a paramount, influence for evil, but one only among other influences on the condition of the people.

In endeavouring to estimate the physical condition of the inhabitants of, and more especially the labouring population in, towns, it is necessary to have a standard of comparison. That standard must be selected in a country population, not because a country population is free from the evils which we have to deplore, as might have been painfully made manifest by a description of the cottages of the agricultural labourers, but because it offers the nearest approach to such a condition as we may reasonably hope to see realized in towns.

The comparison, then, of townsmen and countrymen will be, *first*, in the general mortality, that is, the mortality at all ages; secondly, in the mortality at particular ages; thirdly, in the average age at death, or comparative longevity; fourthly, in the mortality from particular diseases (generally classed among the diseases called by sanitary reformers preventable diseases); fifthly, in the physical powers and endurance of men at early manhood and the prime of life.

When practicable, the metropolis will be selected for comparison, forming, as it does, by no means the most unhealthy of the large towns in this country; and as many tabular statements have already been published, proving the first three of these five methods of comparison to be greatly in favour of a country population, nothing more than a few select tabular statements and examples will be required in reference to them.

I.-MORTALITY AT ALL AGES.

According to a statement of the Registrar-General, it appears one in every fifty-two persons died in the counties of Cornwall, Devon, Dorset, Somerset, and Wiltshire; and one in every forty-eight in the counties of Gloucester (excluding Bristol and Clifton), Essex, Hereford, Norfolk (excluding Norwich), Suffolk, Sussex, and Westmoreland. While in the towns of Ashton, Bristol, Bath, and Birmingham, one in every thirty-eight persons died, and in the metropolis one in every thirty-six persons, all England had a mortality of one in forty-five persons; Anglesea, one in sixty-two; the Isle of Wight, one in fiftyeight; Manchester (union) one in thirty; and Liverpool (parish) one in twenty-nine.

In the seven years terminating 1844, there died, of 1000 living at all ages—of females in London, 23; males, 27; in the neighbouring counties—females, 18 to 20, males, 19 to 21; in Lewisham females, 16; males, 18. Out of an equal number of males living, there were three deaths in London for every two in the healthy counties.

From the Registrar-General's report, we learn that, in the seven years ending 1844, there died at Godstone, Reigate, and Dorking, one person in every 63.5; while in London, in the same period, there died one in every 39.7.

II .--- MORTALITY AT PARTICULAR AGES.

The following table will probably exhibit, in the best and most simple form, the greatly higher mortality of London over the adjoining rural districts. It is compiled from the Registrar-General's eighth Annual Report, and exhibits the mortality per cent. of the population at different ages. Attention is earnestly solicited to this most important table, which is thus read: of 100 males, or females, living at a given age, as marked in the first column, a stated number will die annually in the undermentioned districts:—

Age.	LONDON.		SURREY WITHOUT LONDON.		GODSTONE, REIGATE, DORKING.		WHITECHAPEL.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females
0	23.349	17.902	14.729	10.791	13.702	9.296	25.879	21.272
1	10.664	9.865	4.386	3.657	3.177	2.517	14.207	12.911
2	5.315	5.164	2.284	2.328	9.597	1.665	7.206	7.281
3	3.901	3.737	1.716	1.889	1.507	1.531	4.647	4.640
4	2.709	2.685	1.437	1.515	2.912	1.178	3.920	3.339
0	9.280	8.026	4.772	4.066	4.123	3.332	11.437	10.116
5	1.234	1.144	.875	.830	.669	.655	1.385	1.290
10	.481	.466	.443	.520	.318	.363	.432	.319
15	.761	.619	.690	.754	.621	.799	.849	.757
25	1.074	.917	.816	.843	.633	.756	1.260	1.142
35	1.789	1.377	1.135	1.051	1.006	.949	2.118	1.631
45	2.720	2.001	1.459	1.357	1.174	1.215	3.259	2.657
55	4.799	3.805	2.829	2.683	2.283	3.087	5.786	4.466
65	9.159	7.827	6.389	5.460	6.359	5.655	10.907	8.954
75	18.420	16.165	14.398	13.119	15.342	13.103	21.358	17.923
85	31.873	30.327	32.238	27.862	42.843	25.338	37.068	34.678
95 and upwards	37.386	40.076		39.029	-	42.825		
all ages	2.736	2.308	1.856	1.756	1.536	1.616	3.069	2.705
Giving to 1 Death.	36.5	43.3	53,9	56.9	65.1	61.9	33.0	36.1

Of 1000 boys under 5 years of age, there die at Godstone, Reigate, and Dorking, 41; in Surrey, 47; in Sussex, 50; in London, 92; in Whitechapel, 114; consequently, the mortality of children under five years of age is twice as great in London as in the adjacent counties, including several towns.

III.-THE AVERAGE AGE AT DEATH, OR MEAN AGE AT DEATH AND COMPARATIVE LONGEVITY.

This is by no means so correct a method of determining the standard of health as the previous mode; still it is useful, and the result may be thus stated. The average age at death of the inhabitants of towns is 32 years; of the country, 45 years.

Mr. Neison, on the experience of Benefit Societies, states, of every 100,000 persons in rural districts, half the number will die from 68 to 69; in towns, 64 to 65; in cities, 61 to 62. The inhabitants of rural districts, therefore, live seven years longer than those of cities.

" The average age at death of the artizans in St. Giles' and St. George's is 17; in St. George's in the East, Bermondsey, and Bethnal Green, 18.

IV .--- MORTALITY FROM PREVENTABLE DISEASES.

To exhibit the bearings of the facts relative to this mode of comparison, the following tables suffice:—

In 10,000 inhabitants.	Epidemics.	Consumption.	Infantile Diseases.	Old Age.
In Town	1 in 166	1 in 217	1 in 285.	1 in 416
In Country	1 in 294	1 in 263	1 in 454.	1 in 263

CAUSES OF DEATH IN 10,000 INHABITANTS.

Of One Million living, there are, in round numbers, deaths from	In the Country.	In the Towns.
Small-pox	500	1000
Measles	350	900
Scarlet Fever	500	1000
Typhus	1000	1250
Epidemic and Contagious Diseases	3400	6000
Diseases of Infants, &c	1300	3500
Scrofulous Diseases and Con- }	3800	4600

In order to exhibit how heavily the preventable mortality falls on the industrious classes, reference may be made to the following tables of the mortality from epidemic diseases in some of the districts of the metropolis in 1839. In the first of these tables, the mortality from epidemic diseases fell entirely on the classes of tradesmen and artisans.

DISTRICTS.	In the Class of Tradesmen.	In the Class of Artisans.
St. Olave's	23.8	13.1
Whitechapel	15.4 25.5	18.9 22.1
East London St. George-in-the-East	21.0	19.9
Bermondsey	12.8	25.0

In the following districts, the proportionate mortality from epidemic diseases is likewise very great, though the class of gentry participated to a small extent in the same kind of mortality.

IN THE DISTRICT OF	In the Class of Gentry.	In the Class of Tradesmen.	In the Class of Artisans.
St. Martin-in-the-Fields	7.4	20.6	27.2
Stepney	4.1	17.2	21.3
St. Mary, Newington	6.5	16.6	21.8
St. Pancras	7.5	17.0	22.2
Holborn	6.7	24.3	25.5
Bethnal Green	8.0	22.8	27.5

The foregoing tabular statement is quite sufficient to prove the greatly increased mortality in this metropolis, the cause of which is thus described by Mr. Farr, in his Letter to he Registrar-General, Fifth Report, p. 418:—

"Every population throws off insensibly an atmosphere of organic matter, excessively rare in country and town, but less rare in dense than in open districts; this atmosphere hangs over cities like a light cloud, slowly spreading, driven about, falling, dispersed by the winds, washed down by showers. It is not vitalis halitus, except by origin, but matter which has lived, is dead, has left the body, and is undergoing oxidation, decomposition into simpler than organic elements. The exhalation from sewers, church-yards, vaults, slaughter-houses, cesspools, commingle in the atmosphere, as polluted waters enter the Thames; and, notwithstanding the wonderful provisions of nature for the speedy oxidation of organic matter in water and air, accumulate, and the density of the poison (for in the transition of decay it is poison) is sufficient to impress its destructive action on the living, to receive and impart the processes of zymotic principles, to connect by a subtle, sickly, deadly medium the people agglomerated in narrow streets and courts, down which no wind blows, and upon which the sun seldom shines."

One example, taken from the experience derived during the recent epidemic, is very important. It is this: the mortality among the upper class in Shoreditch, from cholera, was, in proportion to the total mortality among all classes from that disease, 2.3 per cent. Among tradesmen who live in-doors, and are constantly exposed to the unhealthy influences which prevail, 66.6 per cent. Among labourers, whose wives and children are constantly exposed to similar unhealthy influences, but who themselves work *from* home, 30.9 per cent. In the whole metropolis the deaths from cholera were in the following proportion to the total mortality :—Among the gentry, 2.6; tradesmen, 15.7; mechanics, 81.7. Fevers, scrofula, and consumption, are the three scourges of our towns. How they prevail, we have seen from the foregoing tables. Experience the largest, the soundest, the most unbiassed ever acquired has proved, during the late epidemic cholera, the relation between filth and over-crowding, and mortality from cholera and typhus, to be cause and effect. The intimate connexion between scrofula and consumption and defective structural arrangements, has been made no less apparent, and is confirmed by the observations of the soundest physicians.

Baudelocque says:-

"Personal experience, reading, reflection on a great number of facts, and the analysis of many observations, have impressed me with a deep conviction that there exists one principle of scrofulous disease, a cause which predominates over all others, and without which perhaps the disease would never, or at least very rarely, develop itself. The causes consist in particular conditions of the atmosphere in which the individual resides. However ill-chosen or unsubstantial his food may be, however much cleanliness may be neglected, whatever be the nature of his clothing and its adaptation to the temperature, whatever the climate in which he lives, the exercise he takes, or the duration of his sleeping or waking, if the house in which he dwells be placed in a situation to which the fresh air and the sun's rays have free and direct access, and the house itself be sufficiently airy, light, and well-proportioned to the number of its inmates, scrofulous disease will never make its appearance."

It has been found that while the chief cause of orphanage among the poor and labouring population is typhus, the chief cause of orphanage among the class of tradesmen who are condemned to an in-door life, and to the constant respiration of a vitiated atmosphere, is consumption.

There can be no question, that when the science of preventive medicine shall have made still further progress, when the vast importance of its principles shall have been fully impressed upon the minds of our rulers, and when the middle classes shall have awakened to a sense of the great extent to which their interests are involved in its application, the cry of "humbug" will no longer be heard, but further and most important advances will be made in the art of preventing diseases now ignorantly looked on as the necessary result of the ordinary state of the social relations, or of the climate. In the science of preventing the devastations of typhus, cholera, and smallpox, greater progress has been made than in its applications to some other forms of disease affecting the welfare of the people; but the period is rapidly approaching when the whole tribe of scrofulous diseases and consumption, which are ignorantly attributed to the nature of our so-called variable climate, and not to our own vicious habits and violations of natural laws, will be brought under subjection, and, in

like manner as typhus and cholera, be considered not alone in their curative, but in their preventable relations.

V .- THE PHYSICAL POWERS AND ENDURANCE AT EARLY MANHOOD.

The experience of the medical officers of the army supplies us with the most trustworthy facts in relation to this point.

Dr. Jackson, the most eminent and practical medico-military philosopher that the world has ever seen, observes: "The peasants of a country, particularly the shepherds and the hunters, are exposed in their daily occupations to vicissitudes of weather, and familiar with the situations and hardships which fall to the lot of soldiers in times of war; on the contrary, manufacturers and artisans, men little familiar with vicissitudes of weather, unaccustomed to exertion, to hardships, to fatigue, seldom *temperate or healthy*, helpless, and dependent on imaginary comforts, are ill-calculated for the business of war."

Sir James McGrigor, the late Director-General of the Medical Department of the Army, says, "Of all classes of society from which soldiers are recruited, I believe it will be found that, *cæteris paribus*, tradesmen and manufacturers, particularly those from large towns, are soonest swept away by the fatigues and diseases of an army; and that those who have followed agricultural pursuits are the most healthy."

The unhealthiness and low standard of physical condition of the men, at the age of early manhood, who inhabit our towns, is proved by a return to the Army Medical Board of the rejections of recruits from towns and from country districts.

It appears from the Returns of Recruits inspected at the Recruiting Depôt, Dublin, that of 6229 recruits there were—

	and and the second	Inspected.	Approved.	Rejected.	Rejected per cent.
From 25th Dec., 1824, till 24th-	Town Recruits Country Recruits		2226 2613	1089 301	32·8 10·3
Dec., 1825	Total	6229	4839	1390	22.3
From 25th Dec., 1825, till 24th-	Town Recruits Country Recruits	2347 1671	$\begin{array}{c}1675\\1568\end{array}$	672 102	28.6 6.1
Dec., 1826	Total	4018	3243	775	19.2
From 25th Dec., 1826, till 24th	Town Recruits Country Recruits	1778 810	1253 753	525 57	29·6 7·09
Dec., 1827	Total	2588	2006	582	22.5
From 25th Dec., 1827, till 24th-	Town Recruits Country Recruits	841 273	570 259	271 14	32·2 5·1
Dec., 1828	Total	1114	829	285	25.5

1	BST	BACT	OF	FOUR	YEARS.
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RECRUITS.	Inspected.	Approved.	Rejected.	Rejected per cent.
Town Country	8281 5668	5724 5193	2557 475	3·1 8·7
Total	13,949	10,917	3032	21.8

It is fair to observe that this abstract does not comprehend the men rejected at first inspection by the recruiting regiments in the country.

From a table prepared by Mr. Marshall, Deputy Inspector-General of Hospitals, showing the rejections of recruits in 12 years, from 1826 to 1837, in Dublin, it appears that the rejection of town recruits per cent. were—

 $28 \cdot 6 \mid 29 \cdot 5 \mid 32 \cdot 2 \mid 42 \cdot 4 \mid 63 \cdot 7 \mid 57 \cdot 3 \mid 56 \cdot 8 \mid 59 \cdot 1 \mid 71 \cdot 7 \mid 55 \cdot 3 \mid 40 \cdot 7 \mid 46 \cdot 5$

Of country ditto-

 $6 \cdot 2 \mid \ 7 \cdot 0 \mid \ 5 \cdot 1 \mid \ 9 \cdot 8 \mid 12 \cdot 3 \mid 12 \cdot 9 \mid 23 \cdot 7 \mid 27 \cdot 2 \mid 23 \cdot 2 \mid 17 \cdot 6 \mid 10 \cdot 7 \mid 23 \cdot 1$

In Edinburgh, in five years, 1833 to 1837, the rejections of town recruits were— 43.5 | 56.5 | 48.5 | 48.9 | 57.1

Of country ditto- 19.6 | 6.2 | 15.9 | 14.9 | 13.7

In London, in the same five years, the rejections of town recruits were— 34.0 | 45.1 | 38.4 | 36.0 | 42.2

Of country ditto- 21.1 | 21.9 | 21.6 | 15.6 | 17.6

Even this enormous disproportion of the number of men in town and country fit to bear arms, does not convey to the mind a full conception of the feeble powers of endurance of townsmen.

Sir James McGrigor informs us that 353 recruits joined the 7th regiment in Portugal in 1810-11; of these 201 were artificers and manufacturers, and 152 had followed agricultural pursuits. In the course of a few months, 122 of the former died, and 62 of the latter —the proportion being 6 out of 10 in the former case, and 4 out of 10 in the latter.

If we take the circumference of the chest as a measure of strength, we find that the average circumference

Of 979 town recruits was 32.06.

Of 460 country do. was 32.91.

62.6 per cent. of the former, and 85 per cent. of the latter were approved. The average circumference of their chests measured, 32.22, and 32.99.

It appears, therefore, that the chests of countrymen in the class of recruits, whether approved or not, measure about one inch more in circumference than the chests of town recruits. The unhappy position of the labouring classes in towns—their tendency to die at an early age, leaving young and unprotected children to the fearful contamination of the streets, workhouses, and lodging-houses—their proneness to epidemic diseases—their feeble physical powers, and the general prevalence of physical infirmities, and of an imperfect development of the human frame, are, it is presumed, sufficiently borne out by the foregoing facts.

Let us, however, regard the unfortunate children of these classesthe offspring of a physically vicious parentage. Let us regard the hundreds of thousands of orphans, or abandoned children, who fill our workhouses, receive our national alms, roam about our streets, fill our gaols, create and recruit a class of criminals, and die in our hulks and hospitals, and public charities-for one-sixth of the deaths in the metropolis take place in public institutions-we shall find these children stunted in their general development-diminutive : if apparently plump, the plumpness is merely that of the abdomen, indicating an early stage of scrofulous disease; the arms and limbs thin. The colour of the skin (when washed of its dirt) pale, with a peculiar sallow, yellowish appearance; if it present a florid colour, it is generally associated with a scrofulous taint, as manifested by thick nose and lips, strumous inflammation of the eyes, or other signs; the face thin and elongated, the aspect sickly, the countenance either stolid, or characterized by a peculiar sharpness, and aspect of suspicion and cunning; the temperament excitable, irritable, yet feeble; the intellectual faculties either dull, or incapable of sustaining any effort; shrewdness, cunning, sharpness, are frequently early and prominently manifested, partly the result of training, partly the result of hereditary disposition, but these are instinctive, not intellectual faculties.

We are told that "the pauper children assembled at Norwood from the garrets, cellars, and wretched rooms of alleys and courts, in the dense parts of London, are often sent thither in a low state of destitution, covered with rags and vermin, often the victims of chronic disease, almost universally stunted in their growth, and sometimes emaciated from want. The low-browed and inexpressive physiognomy, or malign aspect, of the boys, is a true index to the mental darkness, the stubborn tempers, the hopeless spirits, and the vicious habits, on which the master has to work."

An experiment was tried in Glasgow. One set of boys was taken from the foul wynds of that city, and placed under the care of one of the most successful infant teachers. Another set was taken from a healthy district, of better physical condition, and placed under the care of a pupil of the same master. After sufficient trial, the comparative inferiority of the first set was fully proved. The experiment was superfluous to the physiologist and the naturalist, though necessary for the statist. It is as impossible to raise a highminded intellectual population out of the race of men who inhabit the dwellings we have provided for them in our towns, as it would be to raise a race of men of Grecian mould, and symmetrical form, out of the Kafirs and Bosjesmen.

When the social and moral condition of the people comes to be considered, the relation of the dwellings of the poor and labouring classes to the practices of indulging in stimulating and irritating kinds of food, in spirit and beer drinking, of taking opiates and other narcotics, will be adverted to. It is enough here to recal to mind the numerous physical evils arising from practices so vicious, so utterly opposed to a natural existence, and to offer only one or two corroborative illustrations.

Of Braintree, Mr. Cresy says, "at present inhabitants of the lowest classes in this town have neither air nordrink in awholesome condition;" the consequence naturally arises that they speedily lose their vigorous digestive powers, and cannot eat the coarse but wholesome diet prepared for them, or, if they do, they cannot digest it, and soon fall into the habit of seeking more stimulating food, which unfits them for labour, and eventually destroys the little stamina they had.

Dr. Smith, of Holbeach, says, "The excess of mortality in Holbeach, I think, may be accounted for by the fact of all the labouring classes taking opiates; they give them also to their children, and I have no doubt that many are inadvertently destroyed by so doing."

Mr. Lee says, "One great cause of infantile mortality in Ely is the large use of narcotics. Indeed, it is to be feared that this pernicious habit increases the deaths at all ages. I have found the same evil existing in other places where there is much dampness and a depressed sanitary condition of the inhabitants. They become low spirited, lose all energy, feel their misery without the power to control external circumstances, and endeavour to forget it in the temporary excitement of these noxious drugs."

These observations may be summed up in the words of Mr. Cooper, one of the Poor-Law Medical Officers of Southampton; "nothing is so destructive to the health and character of the working part of the community, as the wretchedness that surrounds them, and the constant evils to which they are exposed in the shape of *damp*, *low*, *and unhealthy habitations*. The most impoverished, overcrowded, and filthy will always be found the most unhealthy."

III. — INFLUENCE OF UNHEALTHY DWELLINGS ON THE MORAL AND SOCIAL CONDITION OF THE INHABITANTS.

To attempt to trace the social and moral evils which spring from the present neglected condition of the dwellings of the labouring population is no easy task. The evils themselves are so deeply rooted, so prevalent—have so intimate a relation with the dwellings of the people, yet are so closely interwoven, not only as effect from cause, but as re-acting cause and resulting effect, that the analysis becomes one of much labour, and demands the nicest discrimination.

Yet neither labour nor discrimination have hitherto been expended upon this question in any degree commensurate with its vast influence on the general welfare of society. True it is, we have had prize essays on juvenile depravity, and reports on the health of towns, and of prison inspectors, the records of the city missionaries, and of Children's Employment Commissioners; but the historian, the legislator, and the philanthropist, with rare exceptions, have hitherto occupied themselves in great public achievements, dazzling to the eye and obvious to the senses of the people, to the disregard of those more lowly but more solid objects of public utility which mainly contribute to the social welfare of the community. With the domestic influences, the family attachments, the home endearments, the sacred duties of parents to children, the domestic training, which create and constitute the social state of the people, they have not thought it worth their concern to interfere.

With the exception of the ragged schools, where has been the attempt to go back to the root of our social evils ? and in what light has that attempt exhibited the possibility of realizing the results it has been the object of the founders of these institutions to promote?

"It should ever be borne in mind," says Dr. Arnold, (*Hist. of Rome*, b. vii. c. 34,) "that history looks generally at the *political* state of a nation; its *social state*, which is infinitely more important, and in which lie the seeds of all the greatest revolutions, is commonly neglected or unknown;" and Macaulay, the historian, says, in reference to more recent times, "History was too much occupied with courts and camps to spare a line for the hut of the peasant or the garret of the mechanic."

First and foremost among the bad results which spring from the present mode of building, is the complete isolation of the poor and labouring from the other classes of the community, by which the beneficial moral influence which the respectable middle classes can bring to bear on those below them is lost.

In former days, when the noble and the rich, and the respectable burghers were in close proximity to, and communion with, the poor and labouring population, their mutual interests—the strong muscles and thews of the retainer, and the power and support of the feudal superior —brought about a bond of union now unfelt and disbelieved in.* The lord of the mansion in Belgrave Square is separated by a great gulf from the poor artisans in Whitechapel. He knows nothing of their wants, sees nothing of their misery, hears little of their complaints, fears less the chance of contamination by disease, and can afford to disburse an infinitesimal part of his income for the poor of his own rich and affluent district; but such a separation of the rich from the poor—with the fearful disregard which it inevitably brings about of the mutual relations of man and man—acts most disastrously upon society. An example of which, and the opposite results arising from the moral influence of the intermingling of the employer and the employed, may be given in reference to Merthyr Tydvil.

Certain it is that the poor, being taught by example and impelled by the force of imitation, find in their neglected, isolated, and peculiar districts none of those elevating influences which would tend to raise them from their present unhappy condition.

The rich, while keeping themselves pure and undefiled, and acting in obedience to a great moral law, which preserves them from an infinity of the miseries of this life, should never fail to recollect that their common humanity justifies and demands aid to the suffering poor, deprived of the means of enjoying that purity which is the external sign of purity of mind, of body, and of soul. Yet, if we regard the abodes of the industrious classes, how can we expect them to produce other than disease, wretchedness, drunkenness, dissensions, immorality, vice and prostitution, orphanage and excessive mortality.

The poor labourer, the industrious artisan, the humble clerk, the immigrant countryman arriving in London to follow some of the more remunerative employments of the capital, the toiling and laborious self-denying shopkeeper—how are they affected by the circumstances

* A modern writer offers the following very apposite and corroborative remarks upon what he calls the "reproductive gifts." "In this class of benefits that which holds by far the first place is home accommodation. I have no doubt that ever since the change of manners which the ending of slavery and feudality gave rise to, the want of house accommodation for the poor has been their greatest drawback, and the deficiency can hardly be overrated. Dampness, uncleanliness, want of means for storing and preserving food, and insufficient sewerage, in a habitation, are all immediate causes of pecuniary loss. But the indirect losses are here the greatest. Who can estimate how much money is spent for the enjoyment of the clean sanded floor, and comparative comfort of the pot-house, which might be had so cheaply at home? In mproving the house accommodation of the poor, you spend something which anticipates expense, and do a good which cannot well be taken away. Wages are said to vary according to the price of sustenance, according to the demand for labour, according to the increase of population. It may not be in your power, except indirectly, to affect these great currents of human prosperity and adversity; but raise the style of house accommodation, and you will do a solid good, which lowering of wages cannot depress."-(F. in Council, ii. 107.) which surround them? Struggling with the difficulties of their position, and liable to be surrounded by impurities of all kinds, against which it is utterly impossible they can provide, accident determines the future fortune and fate, not only of them but of their families. Already we have pointed out how disease may overtake and overwhelm them may drag them down to poverty and pauperise them, but we have not yet traced their onward course to yet greater calamities.

It is not, however, enough, in venturing to trace these, to speak of my own experience, or to record the results simply of my own observations in the metropolis. It is desirable to bring together the opinions of those men, of all classes of society, in the various parts of the kingdom, who are competent observers; and perhaps no one should hold a more forward place than Mr. Roberts, the honorary architect to the Society for Improving the Condition of the Labouring Classes.

"My own observations," says Mr. Roberts, "most fully confirm what has been stated over and over again as to the magnitude and wide extent of the wretchedness resulting from their (the dwellings of the labouring classes) actual condition, arising from the want of all those arrangements which are calculated to promote the comfort and moral training of a well-ordered family, as well as the utter absence of ventilation, efficient drainage, and a good supply of water; together with a system of overcrowding that would not be tolerated in the farm-yard, the stable, or even the dog-kennel."

The Rev. Mr. Darwell, curate of St. James's, Dover, says-

"My own observation and experience in visiting among the poor tend most decidedly to confirm the evidence to the effect, that better sanitary regulations would tend very materially to improve the habits of the people. The poor man, when fatigued, cannot be expected to remain in his house, if his wearied senses are to be oppressed by noisome stenches and disgusting objects. He naturally seeks the beer-shop as a refuge, and his wife and family are left to seek relief under such circumstances as they may. Thus the domestic bond is loosened, if not severed ; he ceases to regard his family, and they cease to respect him, and so a generation of reckless and unprincipled persons is by these means turned out upon society."

The Rev. Mr. Buckle, incumbent of St. Mary's, Dover, says-

"At Fulham, Maidstone, and Dover I found, without any exception, the worst demoralization in the worst constituted dwellings and neighbourhoods, the one being traceable from the other directly as effect from cause. To what extent we may ever succeed in raising the moral tone of our poor people's habits of life, time only can show; but I affirm, in conscience, that to raise them while they live in such places, and under such circumstances as they now do, is impossible. No sense of decency or self-respect can struggle against this difficulty; and the chief force of our pastoral ministrations is rendered nugatory wherever such difficulty either is not, or cannot be, to a certain extent done away.

The Rev. Charles Hensley says, of Gainsborough,-

"Smoking is very general among the women, and opium-eating prevails very commonly amongst the poor. I think that both these habits foster idleness, and *in consequence* their houses are not kept clean and tidy. The men find nothing but discomfort on returning from work, and resort to the public-house, and the extent of drunkenness may be partly attributed to that. I am of opinion that uncleanliness and discomfort cause the females to use the stimulants I have named." "I think there is no doubt that those (districts) in the worst sanitary condition are lowest as to their social and moral state."

The Chief Constable of Wolverhampton says-

"I have ever found in those districts where there is the greatest amount of filth, deficiency of comfort, want of proper accommodation in dwellings, and an absence of cleanliness amongst the inhabitants, that there prevail much the largest amount of drunkenness and disorderly conduct."

The Relieving Officer of Dover states-

"I have not the slightest hesitation in affirming that there is a most decided direct connexion between confined districts, bad sanitary arrangements, poverty, and vice. In such districts the moral state of the inhabitants is most deplorable. As the youth from these places grow to manhood they become habitual paupers; brought up to no regular employment, grossly ignorant and reckless, their time is spent between the union-workhouse and the gaol." "If the Government wish to prevent the increase of a most debased and vicious population, they will take measures, if not to sweep away these nests of vice and disease already built, at any rate to prevent similar places from being erected in future."

The Rev. G. Dugard, M.A., incumbent of Barnard Castle, and a magistrate, says, in reference to the social condition of the working and poorer classes there—

"Their wretched homes are abodes of filth, with all the miserable concomitants of squalid poverty; their progeny, the children of shame, defiled from their very infancy, find in these lowest depths a lower deep,' and so from generation to generation they continue shameless, godless, and reprobate, and lost, utterly lost, to all hope of amendment; for there is no sin which hardens the heart like the sin of uncleanness."

The Rev. F. F. Clarke, curate of Hartshill, Stoke-upon-Trent, says-

"I find that dirt, want, drunkenness, and disease go together. I have no doubt but that, with improved residences, the improvements would lead to improved morals."

Mr. Rawlinson says-

"The first consideration ought to be-as to the best means of securing health at home. Comfort and all social virtues are more or less involved in this."

Mr. Vivian, the clergyman of Torquay, says-

"I should say that the morals of the poorer classes will be in strict proportion to the comfort of their habitations."

The Wigan Sanitary Association thus speak-

"It is invariably found that, in proportion as a people are cleanly and comfortable in their homes, they are more moral and virtuous. So intimate is the connexion between cleanliness and morals, that no virtuous man can reside for any length of time in a filthy dwelling or neighbourhood, without his morals becoming as bad as the neighbourhood."

Dr. Southwood Smith says-

"We all know how greatly a clean, fresh, and well-ordered house tends to make the members of the family sober, peaceable, and considerate of the feelings and happiness of each other. Hence arise self-respect, a due regard for property, for the laws of our country, and for those higher duties and obligations, the observance of which no laws can enforce."

The Rural Dean of Bristol says-

"I went through the parishes. I conversed much with the poor in their houses, and ascertained, as matters of deep interest to myself, many facts relative to their temporal wants as well as their spiritual necessities. I was deeply impressed by such conversation, with a feeling, that much of the immorality and ignorance of the lower orders may be fairly attributed to the great neglect of providing them with more comfortable and healthy dwelling-places. However much may be done by the erection of schools and churches, and the appointment of clergymen and schoolmasters, I am convinced that it will be utterly impossible to reclaim from vice and wretchedness the mass of our suburban population, without furnishing them with houses, in which it will be possible for them to practise the habits of decency, order, and devotion, which we desire to inculcate at church and in school. How, for instance, could the inhabitants be decent and orderly, when they are compelled to live, by day and by night, in rooms crowded with persons, many of them of the most abandoned character, from the sight of whose disgusting habits, and the hearing of whose blasphemous and obscene words, they have no means of escape? Or how, in such times, can men and women, be they ever so well disposed, practise the duties of private devotion, self-examination, holy meditation, and prayer? How can they be healthy and cleanly in the midst of impurities, that are, to those unaccustomed to such scenes, utterly intolerable ? To a population thus circumstanced, the beer-house, with all its evils, presents an irresistible temptation, and rolls back again to these squalid dwelling-places the tide of vice, maddened with lust, drunkenness, and violence."

If we attempt to trace the career of the immigrant into some foul locality, whether a countryman newly arriving in a town, or a resident in a healthy part of a town migrating, through the force of circumstances, to an unhealthy and uncleanly district, we see poverty overtaking and overcoming him like an armed man. Constantly have I myself traced the downfal, physical and moral, of the industrious poor to the condition of their dwellings; of this I could relate innumerable instances, but I prefer to use the words of Mr. Holliss, who says:—

"He had frequently traced a gradual descent to the workhouse (in consequence of inhabiting such property). Men whom he had once known as respectable and comfortable in their position as operatives, unfortunately for themselves and for society went, through necessity, to live in a house of this class, and he had generally found their poverty began with six or eight weeks' loss of time through fever and illness, caught in such places; then debts were incurred, rent as a consequence fell into arrear, goods were distrained, the man became disheartened, and the end was hopeless pauperism for himself and his family. *Children once degraded into pauperism, rarely regain their former position amongst the working people.*"

Referring to the manufacturing districts, Mr. Worsley says-

"The houses of the poor working-class are described to be in general wretched in the extreme, without conveniences for the comfort, or even the deceneies of life, unwholesome hovels, in which the very air is pestilential, and breathes the miasma of moral disease. To such a home, (although here a term is misplaced, which brings with it to the mind a transporting association of peace, and joy, and happiness,) the jaded operative, his wife and children, are to return from the scene of their day's employment; here they are to seek the refreshment of the night's repose in an atmosphere which, from imperfect ventilation, and the total absence of draining, is impregnated with malignant vapours; and to these the fumes of intoxication are too often added; for in his state of discomfort, entrenched by a twelvemonth's gathering of filth, what wonder is it if the exhausted workman finds his only solace in the delirium consequent upon dram-drinking?"

Mr. Poulett Scrope tells us-

"M. Blanqui is inquiring into the means that can be adopted by the French legislature to quiet those very general feelings of dissatisfaction with their position which have inspired the bulk of the operative classes of France with a spirit of revolt against the fundamental institutions of society, and he places in the foremost rank, as the very first measure required, some legislative encouragement to the provision of better dwellings for the poor and working-classes."

M. Blanqui says-

"It is impossible to over-rate the mischiefs to society which arise from the wretched lodging of the working-classes. This is the origin of the dissolution of the family tie, and all the miseries that follow. The father avoids his uninhabitable home, and seeks in the public-house an asylum from the horror with which it inspires him. The wife perhaps remains alone with her children, though even she is tempted often to fly and abandon them to the care of each other, or of some charitable neighbour. The husband returns only to complain and to scold, and accustoms himself by degrees to violent conduct, which drives to despair the weak and unhappy members of his family. I have studied with a religious anxiety the domestic life of a large number of the work-people, and I am bold to affirm, that the unhealthiness and wretched condition of their dwellings is the primary source of all the misery, of all the vices, of all the calamities of their social existence. There is no reform whatsoever that so highly deserves the attention and devotion of the friends of humanity. It is by that they must begin. Other improvements will flow from that as a natural source-without it, all others will be useless or inefficient. The moral character of a working family is almost without exception to be gauged by the character of their dwelling."*

The Rev. H. Worsley says-

"At the present day, the narrowness of the poor man's cabin—the fact found to be almost universally true, that however numerous the inmates may be, one small bedroom is deemed sufficient to accommodate all, imply so much domestic discomfort, that the natural impulse of the mind is to fly from misery at home to the village beershop."†

Mr. Ranger says, of Aylesbury-

"There is almost a total absence amongst the poorer class of dwellings of the ordinary means for the maintenance of decency and propriety. If one inference is more certain than another, it is that immorality exists in proportion to the overcrowding, the filth, the scarcity of conveniences and their want of privacy, and to the impurity and inadequacy of the supplies of water."

One evil consequence inseparable from a deficiency of bed-rooms is a low state of morality, a breaking down of those feelings of

* Petits Traités, publiés par l'Academie des Sciences. Des Classes Ouvriers en France, par M. Blanqui, 1849.

+ Prize Essay on Juvenile Depravity.

delicacy that ought to be most carefully preserved in families of young persons of both sexes growing up to maturity.*

Mr. Ranger, in reference to Cheshunt, says-

"The domestic economy of the houses of the poorer class is deplorable; and the condition such, that it is quite impracticable for the inmates to keep up even the common decencies of life, there being an absence of decent separation of sex, many of whom stand in the relation of father and daughter, brother and sister, at the age of puberty."

He gives from his own inspections some-

"Cases illustrative of the physical wretchedness of the agricultural labourers; and not of those only, but likewise of persons engaged in handicraft."

Of which I quote one-

"The only sleeping-room was approached by stairs, leading from an outhouse wherein an open convenience was situated, and in this room—with sacking for bedclothing and bed, a man, wife, and eight children were living—boys of 18, 14, and 12, with girls of 15 and 10 years of age."

This, Mr. Ranger gives-

"As a fair type of the manner in which the poorer class are huddled together for want of attention in the erection of cottage dwellings."

Mr. Babbage, after giving many and painful examples of overcrowding in Old Accrington, says-

"In one case, the parents and a daughter of 18 slept in the same bed; in other cases it will be seen that brothers and sisters sleep together in the same room, and at times in the same bed. The natural consequence of this state of things is, that the children grow up without any sense of the common decencies of life, which deficiency gradually leads in too many cases, at a more mature age, to open profligacy, and to the burthening of the parish with illegitimate children."

"I may here remark that in only one of the cases which I have reported, where grown-up sexes slept in the same room, was there the evidence of the slightest sense of decency. In that case, and in that one only, a curtain was hung up between the beds of adult brothers and sisters."

Mr. Ranger, in reporting on Croydon, gives-

"As a fair but lamentable specimen, an instance where a man, his wife, and seven children occupy a two-roomed house; six of the family, four sons, the eldest 27 and the youngest 10, and two daughters, aged 25 and 15, sleep in the same room."

Mr. Bayley, one of the medical officers of Great Yarmouth, says-

"There are eight houses, having 16 rooms, and they are occupied by between 50 and 60 inhabitants." "They are generally persons of depraved character; in fact, no other persons would live there, as it is quite impossible for them to observe the decencies of life."

"Every sense of propriety," says Mr. Beggs, "revolts at the bare idea of number, of persons herding together without separation of age or sex. Abandoned women have repeatedly stated, that their first step in crime was owing to their sleeping in the same room with persons of the opposite sex in their early years. Improper intimacy takes place, and a life of depravity is the result."

* See Mr. Lee, Report on Milcham,

Mr. Baker, of Leeds, says-" Circumstances occur which humanity shudders to contemplate."

Coarse language, slovenly, filthy, and indecorous habits, and impure desires, must necessarily arise from such unhappy communion. That modesty which is the best guardian of virtue in a woman cannot be preserved, and tenderness and attention on the part of the other sex is impossible.

The passions being early roused, all the circumstances which restrain the abandonment to their gratification being wanting, there being neither moral restraint, prudential consideration, nor self-government, females are early surrounded by families of children. Themselves ill instructed, they are but badly qualified to assume the responsible position of wives and mothers. As wives, ignorant of, and indifferent to, the obligations of their position, unacquainted with domestic economy, and wasteful, careless of their homes and of their persons, incapable of conducting the ordinary household affairs, or of producing cheerfulness and comfort by the fireside, the absence from home of the husband and drunkenness are inevitable. As mothers, ignorant how to rear their children, these unfortunates perish in frightful proportions; and the lot of those who survive is worse than that of those who perish.

The affections are broken down, if they have ever been evolved; and selfishness leads to great moral and social crimes. Not only do the mothers become regardless of the lives of their children, but a slight impulse, such as the sum to be received from a burial club on the death of a child, leads constantly to the most appalling of all crimes, the murder of a child by its own parent.

Mr. Poulett Scrope says, in his Suggested Legislation,-

"The certain and direct result of this deficiency of house accommodation is, in addition to much physical suffering, disease, and moral depravity, to create filthy and vicious habits, improvidence, recklessness, intemperance, and an increase of pauperism and of crime, among those whose dwellings are thus inadequate and ill-conditioned —social evils, all of the utmost magnitude—the roots of which it is, perhaps, the most important problem of the age to discover and eradicate. Many persons are looking to the spread of education alone for the removal of these evils; but they must admit that, without a decent and well-ordered home, the best of educations will be ineffectual to this end, and that is what the existing deficiency of house accommodation practically prevents a large portion of our working classes from obtaining."

In an important document lately published, containing the Reports of the Governors and Chaplains of the Houses of Correction at Coldbath-fields and Westminster, it is stated, as the result of the experience of these most competent judges, that, among the causes of crime, the miserable condition of the dwellings of the labouring classes holds a prominent place.

G. L. Chesterton, Esq. says-

"The crowning cause of crime in the metropolis is, however, in my opinion, to be found in the shocking state of the habitations of the poor, their confined and fetid localities, and the consequent necessity for consigning children to the streets for requisite air and exercise. These causes combine to produce a frightful state of demoralization. The absence of cleanliness, of decency, and of all decorum, the disregard of any needful separation of the sexes, the polluting language and the scenes of profligacy hourly occurring, all tend to foster idleness and vicious abandonment."

"Here I beg emphatically to record my conviction, that this constitutes the monster mischief."

"Neglect of sanitary measures and drunkenness," says Mr. Worsley, "are, I believe, the two chief causes of orphanage." It is unquestionable that typhus among the poor and labouring classes, and consumption among the class of tradesmen, are the chief preventable causes of orphanage. Typhus and consumption may be, the one entirely, and the other to a great extent, prevented by efficient sanitary arrangements. It follows, then, that for the evils that spring from orphanage, we have greatly to accuse those who neglect to apply efficient sanitary measures.

Yet we have the following statements on record :--

Of 187 convicts between eighteen and twenty-eight*-

65 were without fathers ; 48 were without mothers; 18 were without either father or mother.

Of seventy-four juvenile offenderst-

2 were orphans; 5 were without mothers; 47 were without fathers.

Captain Miller says,-Of sixty-four males, "most were bereft of one or both parents in early youth."

"Orphanage," says Parent Duchatelet, "must be added as a largely controlling cause of prostitution." He states that 1255 persons became prostitutes, either from loss of parents, expulsion from home, or from being abandoned by relations.

In 1840—112,000 orphans, and 43,000 widows received parochial relief. In 1844—164,664 widows and orphans received parochial relief. In 1845—169,778 widows and orphans received parochial relief.

On examining the most recent returns of the number of widows and orphans on the poor roll, we find for 1st January, 1850, the following to be the statistics from 590 unions and parishes :--

IN-DOOR PAUPERS.

7,877 illegitimate children under 16, of able-bodied parents.

11,519 other children under 16, of able-bodied parents.

965 illegitimate children under 16, of parents not able-bodied.

2,280 other children under 16, of parents not able-bodied.

23,596 orphans or other children relieved, without parents.

46,237

* Report of Parkhurst Prison, 1844.

+ Return for Aberdeen.

OUT-DOOR PAUPERS.

- 98,616 children under 16, of adult males.
- 53,151 widows.
- 126,184 children under 16, dependent on widows. 7,055 illegitimate ditto.
 - 6,186 children whose parents were in gaol.
 - 2,269 wives whose husbands were in gaol.
 - 3,741 wives abandoned by their husbands.
 - 9,525 children abandoned by their parents.
- 17,854 orphans, or other-children, under 16 (parents not able-bodied) relieved, without parents.

It appears from these statistics that of 46,515 children in the workhouses of 590 unions, on Jan. 1, 1850, 23,596 were orphans, or other children relieved without parents. The widows in-doors are not separately classed; but out of doors 53,151 received relief, and 126,841 orphans.

53,151 widows, and 149,780 orphans, or 202,931 widows and orphans were supported by the state in consequence of the premature death of the parent.

It is difficult to estimate the appalling magnitude of such evils, but the consequences are still more fearful. It is lamentably notorious that nearly all the female children brought up in workhouses turn out bad moral characters—nearly all become prostitutes. This fact is the more deplorable, when we bear in mind the preponderating influence which female example and female morals exercise over the social progress of a nation.

Horace, justly regarding the unhappy state of the morals of the females of his age, as the cause of the general prevalence of vice and sin, observes,—

"Fæcunda culpæ sæcula nuptias Primum inquinavere, et genus et domos: Hoc fonte derivata clades Neque patres populum que fluxit."—Od. iii. 6.*

Let us turn now from these saddening details of human wretchedness and degradation to the contemplation of some of the virtues which still survive, among so much that is dark, and foul, and loathsome. The spirit of endurance, the desire of cleanliness, the love of the beautiful and of order, and lingering affections, are abundantly found among the poor. Who but those who have visited them and spent much of their time in attempting to alleviate their calamitous sufferings during the late epidemic, can tell how much there was to cheer among much that could only create despair.

> * "Fruitful of crimes, this age first stained Their hapless offspring, and profaned The nuptial bed, from whence the woes, Which various and unnumbered rose From this polluted fountain head, O'er Rome, and o'er the nations spread."

Mr. Ranger says-

" It is due to the labouring classes to state, that throughout the whole of my examination of their abodes I was forcibly and agreeably struck with the evidence of a perpetual struggle for cleanliness, and that, too, under the most difficult and forbidding circumstances—in the midst of foul gutters, stagnant pools, and numerous other distressing circumstances, utterly beyond the power of the poor creatures themselves to alter."

The Rev. H. W. G. Armstrong, curate of Burslem, says-

"I connect the low state of morality among the working population with their lamentable physical condition, having during an experience of twenty-two years as a parish clergyman, always found the latter to have a manifest effect upon the former; and whenever circumstances have arisen, calculated to improve their physical condition, I have always found increased facilities for the exercise of my pastoral office. I do not think the people are naturally dirty; the untoward circumstances in which they are placed have caused their present state."

Mr. Cresy, in referring to some cottages near Chelmsford, says-

"The eye and sense were at length relieved by the aspect of three cottages recently built, and in every way models of their kind." "Nor was the appearance of the inhabitants less cheering. There was an evident self-respect, arising from the consciousness that nothing would be presented to the observations of their visitors from which they would recoil; nothing for which an almost excusable falsehood need be uttered. It was one among the many indubitable proofs which might be adduced, that the cottagers can and do appreciate the means for cleanliness and decency, when the blessings are placed within their reach."

Of Whitehaven, Mr. Rawlinson says-

"Amidst these scenes of utter destitution, misery, and extreme degradation, there are, however, instances of a desire for cleanliness, even in some of the worst places. It is most painful to contemplate the hopeless position of such persons, who are generally English, and have known better times and happier days, confined in narrow courts or crowded rooms, and surrounded with dirt and neglect, striving to keep their own place clean and neat."

"In the midst of all this rottenness, there is, however, one sound spot, which promises success to any extensive and judicious attempt at amendment. With comparatively very few exceptions, the interiors of these cottages are clean, or, at least, there are evident symptoms of a struggle against filth. The notion that the poor are wedded to dirt is false, and it is, therefore, mischievous. If it were true, the case would be desperate, as the selfish interests of a particular class are apt to mislead them to believe it to be. Even under unfavourable circumstances, the house refuse will be found to be carried out of the house, the floor to be swept and sanded, and attempts, often indeed very unsuccessful ones, will be made at cleanliness. This is true of nearly 50 towns in all parts of England which I have inspected officially since the commencement of the cholera, and it is emphatically true of Bristol."

Mr. Scrope says-

"Looking at the character of the dwellings in which vast numbers are forced to live, owing to the deficient supply, as I have myself seen them, or known them to be from authentic reports, I find myself often wondering that disease, vice, crime, and pauperism are not far more generally prevalent than they are; that society is not overwhelmed by their accumulation. Deeply do I admire the extraordinary virtues of the poor, which urge and enable them to bear up against a condition, in which it would seem almost impossible for virtues of any kind to exist. But," he adds, "the most virtuous struggles must at times relax—the opposing instincts that lead to evil are themselves strong, too—and the circumstances in which the poor are placed give infinite aid to the natural tendencies to the passions to evil."

We may well conclude, in the words of Mr. Ranger-

"The feeling must be strong indeed that survives these disheartening influences; and when it does sink at last, of which in some few instances there was evidence, the moral feelings, crushed and worn out, give place to a morbid insensibility to the evil with which they have too long contended."

It is vain to say one word about the filthy habits of the people, as long as they have constantly before their minds such great and glaring neglect, on the part of the legislature and the authorities, of all provision for the means of health and purity. To assert that the people are uncleanly, when the rulers and the landlords are so insensible to their uncleanness as to leave matters in the present state, is like plucking out the mote and leaving the beam.

My own impression is, and I say so on due consideration, and with every possible regard for truth, the poor make very great sacrifices in the cause of cleanliness; they constantly aim at it, and constantly fail, because it is impossible. I am as much struck with admiration at their costly and continuous efforts, as I am with admiration at the patience with which they bear sufferings as oppressive as undeserved, and which, while they feel them to be overwhelming, they yet struggle 'against with a manful consistency.

Great as the evils are, the poor have to some extent overcome the evil with good, and have risen out of it. They have clearly proved, as is evident to every practical and reflecting observer, that there exists in the mind of the Englishman, when placed in favourable circumstances, a disposition which enables him to overcome obstacles to social improvements, as well as physical difficulties, under which most other men would succumb.

It is impossible to enter into a lengthened consideration of all the circumstances connected with the most approved system of building houses for the industrial population. This is more especially the business of the sanitary architect,—a specialist, created, as it were, by the discoveries of medical men, and their correct appreciation of the vast influence of local agencies in the production of disease.

The labours of the followers of this new department of applied art promise to be attended with most beneficial results to mankind, but only so long as, and in the degree in which they are kept in due relation to the application of the laws which govern life, as well as those which govern inorganic matters. Mr. Roberts, the honorary architect to the Society for Improving the Condition of the Labouring Classes, is earning for himself a worldwide reputation by his benevolent and practical exertions in this department of sanitary art; and the superintending inspectors attached to the General Board of Health have, in their Reports, given to the public a mass of information, the result of great consideration, observation, and judgment. The general measure demanded by the exigencies of society for the improvement of the physical condition of the industrial population may be stated to be—

- 1. The efficient and regular cleansing of the streets, lanes, courts, alleys, whether public or private. (As the facility of this cleansing depends on the proper paving of such places, the subject of paving necessarily requires to be considered.)
- 2. The regular removal of all solid house refuse by public arrangement without any direct charge whatever to the inhabitants, but with the infliction of a penalty if retained.
- 3. The constant and abundant supply of pure soft water.
- 4. Effective street and house drainage.
 - 5. The conversion of unfit and dilapidated dwellings into dwellings fit for human habitation; and if that change be impracticable, their abandonment as dwellings, or their demolition.
- 6. A free supply of light and efficient ventilation.
 - 7. Efficient regulations so as to prevent overcrowding of lodginghouses, &c.
 - 8. The suppression of nuisances.

All these measures it is the bounden duty of the community to attend to, because no individual can, by himself, remedy the evils which result from their neglect.

- Mr. Rawlinson considers that the great remedies required are-
 - 1. A complete set of intercepting sewers.
 - 2. The abolition of places for the retention of solid and fluid refuse, and the removal, at short intervals, of solid refuse.
 - 3. The regulation of the arrangement and construction of cottages, so as to ensure light, ventilation, and health.

Before entering upon the consideration of, or rather attempting to promulgate, any scheme for remedying the existing evils in relation to the dwellings of the labouring classes, it is necessary to advert to several matters of detail in relation to the circumstances and agencies which either lead to that condition, or which tend to prevent any improvement in it. It is also necessary to adduce sufficient evidence to disabuse certain portions of the public of great misconceptions of their interests and duties. The first point to be adverted to is the imprudence of attempting to restrict the number of dwellings which the necessities of a people may require, or have required them to provide for themselves.

In England, the desire to depopulate a locality, and to rid the soil of miserable abodes, peopled by a more miserable peasantry, is comparatively unknown. Nevertheless, the practice does exist, more. especially in some rural districts, and demands the reprobation of every good and prudent citizen. It is true, such a mode of conduct may not arise from precisely the same motives which prevail in Ireland. For instance, there are some excellent philanthropists who would limit the supply of labourers' dwellings where wages are low ; but all sanitary science proves that population and poor-rates cannot thus be diminished. Overcrowding will take place, and with it the necessary and unavoidable evil consequences. Wherever, as in this country, the tendency to increase is marked, the destruction of dwellings necessarily leads to overcrowding, and overcrowding to the ills which have already occupied our attention. So far as society at large is concerned, the demolition of house property, without making due arrangements for a supply of cheap and healthy habitations, is an infringement of its interests of the grossest kind, which should be met in a spirit of wise and humane legislation.

Mr. Poulett Scrope, M.P., who has taken a lively interest in this subject, says-

"Those who think that the poor and the working classes of this country are sufficiently well housed at present, and that it is desirable to *prevent* their being better supplied with dwellings, lest they should increase too fast for their own comfort, or for that of the ratepayers, or on any other ground, must understand clearly what they are about. They must not pretend to be shocked at the vice, filth, and misery, which the inadequate house-accommodation of these classes notoriously occasions." "Paupers are bred *faster* in crowded lodgings, or single-roomed hovels, than in decent and comfortable cottages. Prudence and foresight, and virtuous habits, are not to be generated among a people by forcing them to herd together, like swine in a sty."

Next in relation to the actual demolition of cottages is the conversion of abandoned mansions to tenements for the poor, as has been heretofore alluded to, (see Mr. Rawlinson's observations.)

"So general," says Mr. Cresy, " is this state of things, that it may be said to form an important chapter in the 'Modern History of England;' and the results are too evident in the mental and bodily degradation of the lower classes, for which no remedy can be devised so efficient as an improvement in their dwellings."*

No such changes should be permitted without some competent supervision.

After the demolitions or restrictions of dwellings, and their mal-

* Mr. Cresy's Report on Braintree.

adaptation, is the erection of ill-constructed cottages, merely in consequence of the value given to ground through accidental circumstances. Wherever there is a great demand for labourers' cottages, and there is an opportunity to build them, there are always small capitalists ready to invest their money in this way, and to cover the ground that may be available. The returns from investments of this kind in the vicinity of a large town are always so considerable as to excite cupidity to a high degree. Mr. Cresy well observes, that as, with such builders, the erection of cottages—

" Is a mere matter of investment, distinct from any more important consideration, it becomes a serious necessity that some authority should be exercised to produce a state of things more consonant to the growing feelings of the age. If builders would follow the provisions of the Public Health Act, (which, however, there is no chance of their doing in the metropolis, as it is expressly excluded from the operation of the Act,) while erecting dwellings, fitted for all the wants of their fellow-creatures, they would really benefit their own interests, inasmuch as the greater comforts provided would induce in the inmates a greater degree of attachment to their dwellings, and a consequent desire to maintain those comforts in their original state, and fewer repairs would be required."*

It is important to bear in mind that the labouring classes are necessarily drawn to the immediate vicinity of their places of employment, and that consequently they have not the same choice in the selection of their abodes that the classes above them enjoy. The rich man—nay, even the man with a very moderate income, may live, in some measure, where he pleases; but, as Dr. Southwood Smith well observes, "the poor have no choice, they *must* live in the houses they can get nearest to the places where they can find employment.

Mr. Ranger says,-

The proximity of courts, alleys, and other confined places, to establishments requiring the aid of mechanics, is in too many instances sufficiently inviting to them, from the contiguity to their places of employment, as to outweigh every other consideration, and thus they plant themselves in tenements which are, either from their construction or position, unfit for human beings. This is a matter, however, it would be easy to show, that not only affects the mechanics themselves, but likewise their employers; and other classes although not connected with any establishment, irrespective of degree, even to the nonexclusion of landlords,—there is but one common interest."+

The poor, thus led to inhabit such dwellings as are vacant, or provided for them on speculation, can, in the words of Dr. S. Smith, "by no prudence or foresight on their part avoid the dreadful evils to which they are exposed."

This utter powerlessness of the poor has been too much overlooked. Their congregation in swarms in foul abodes, and amidst disgusting nuisances, has been too much imputed to a matter of choice, and non-

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* Report on Braintree.

+ See Report on Southampton.

interference has been thereby justified. Nevertheless, to use the words of Mr. Roberts,-

"It is only the merest fraction of the working classes who have it directly within their own power in any way to help themselves, as respects their dwelling. Hence the greater claim for the kind consideration of those whose position and circumstances give them the opportunity of providing, in this respect, for their wants, on the sound principles of receiving in return a fair per centage on the necessary outlay of capital."

"It ought to be considered by those who advocate non-interference, that the poor are powerless for self-improvement; they can neither build improved dwellings, nor improve those they are compelled by necessity to inhabit."*

An impoverished, if not too often a pampered, population thus come to occupy a class of houses specially built for them by speculators, who, on account of having such tenants, are excused from rates, the ultimate result being, that a portion of the community becomes unjustly taxed, while a certain class of cottage-owners are unfairly excused, and the evil becomes aggravated by the very exemption accorded to the owners of such ill-conditioned property.

This question has been discussed by the Legislature in reference to agricultural districts, and the views, erroneous as they appear to us, of Mr. Poulett Scrope rejected.

It would be well that the question of exemption from, or compounding for, rates in the metropolis were settled on a sounder basis than the present.

Mr. Lee expresses himself to the following effect :---

"I think it exceedingly questionable whether the poor are not really injured by the very common practice, in provincial towns, of drawing out large lists of the smaller class tenements, in order that the occupants may be excused payment of their share of the local rates. Either the owner of such cottages obtains an additional rent, which will be generally more than equivalent; or, the larger occupiers pay much more than their fair proportion of rates. If the latter balance the account by selling their goods at a higher price, or pay a smaller amount of wages to the poor who are dependent upon them for employment, the burden will still fall upon the cottager, and often more heavily, because, being indirect, he has no means of calculating the amount. This must be the practical result of large excused lists in any parish, and has the farther disadvantage of depressing the energies of those who feel that in being relieved from local taxation they are treated as objects of charity. They are often only too ready to sink into this position, to secure an apparent, not real, exemption: But were it otherwise, then the increased taxation upon the larger rate-payers would be an injustice, by diminishing the value of the best property to enhance that of the inferior; by decreasing the fair and legitimate profits of business, by compelling the more opulent to relieve, along with the deserving, many who are unworthy, and by drying up, to some extent, the sources of discriminating private benevolence:

"Out of more than 700 dwelling-houses in the parish of Diss, the following classification shows that only about 800 are rated :---

* Report on Stoke-upon-Trent, by Mr. Rawlinson.

Ra	teable 1	Value.									A	To.	of Houses
	nd und												46
4	22	5											44
5	37	6											33
6	33	7											24
7	33	8											13
8	33	9											26
9		10	-										7
10	27	15					-						44
15	22	20						1					25
20	>>	25									-		13
25	33	30	-		200								5
30	33	40											8
40	33	50											5
50	33	60				1		1				1	3
60	"	70				-							
70	27	80					-						
80	33	90			•			-					1
90	33	100		•	•	•	•		•				
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100 8	nd upw	arus .		•			•	•		•		i	-
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In the report on Bristol, it is stated that-

"Many of the cottages have been erected by builders and small middle-men, on speculation, of a size and condition to harbour such occupiers as shall be excused rates on the score of poverty, and with a view to an immediate money profit, without the slightest reference to the health or comfort of the inhabitants"*

Another condition of things which it is essential we should consider and attempt to provide against, is the wholesale demolition of crowded dwellings which stand in the way of what are termed great public improvements. It does appear that while the interests of society apparently demand the sacrifice of such property, the same interests, as stated so clearly by the Earl of Harrowby, demand that adequate provision be made for the tenants thus dispossessed of their dwellings. Perhaps legislation on this point may be difficult, but there is another evil in connexion with such public works which requires observation. It has been well described by Mr. Rawlinson, but it has repeatedly come under my own observation. Mr. Rawlinson says,—

"The great evil, however, has been in an objectionable mode of re-letting those houses which were not at once taken down, to parties who have put them to a most vicious use. They have been farmed at a low rental, on the condition that they should at any time be cleared on a week's notice; and they have been relet at extravagant rentals, furnished and unfurnished, for purposes of prostitution: 5s. and 6s. a week has been obtained for an empty house, *half in ruins*, and 10s. and 12s. a week if supplied with a little scanty furniture. The consequences have been most demoralizing."

One of the difficulties with which those who would improve the dwellings of the poor have to contend is, that the owners of small house and cottage property consider their interests opposed to any sanitary improvements. They dread interference, and the possibility of expense being thrown upon them. Hence their voices are heard loud in vestries and local boards, contending about the rights (always forgetful of the duties) of property; and hence these persons have come to be viewed in a worse light, perhaps, than it is just they should be. Their interests they conceive at stake; and in contending for them, they do no otherwise than the rest of mankind in the same class of society would do if placed in similar circumstances.

Mr. Rawlinson observes:-

"I do not wish to assert that the owners of cottage property, as a class, are worse than other people; but they are placed in a position in which they think—in my opinion most erroneously—that their interests are opposed to those of the poor, and they are careless of the expense thrown on the community, from a share in which much of their property is exempt. For much house property, also, no one is responsible. It may be in Chancery; the landlord may be a minor, or poor, or in debt, or possess only a brief tenure of the land; and it would seem to be an admitted fact, universally acted upon, that the ground landlord is altogether irresponsible for what happens upon the property."

It becomes, therefore, a matter of great importance that such persons should be led to view their true interests in a better light; and that they should be induced, if possible, to take an active and benevolent interest in introducing effective ameliorations.

A committee of the commissioners of Hertford, state:---

"They are sure that nothing effectual can be done without the owners of cottages and others, more immediately concerned, can be *induced* to do their part towards remedying the many and serious nuisances pointed out."

It is exceedingly difficult at all times to disabuse men's minds of preconceived erroneous ideas, especially when they are, as the landlords of such property usually are, of mature age, and have grown up in these opinions. But such evidence as the following can scarcely be overlooked.

Mr. Clark says-

"Wherever improvements have been carried out, it has been found that they raise both the condition of the tenant and the value of the property; and the landlord who persists, as many do, in refusing to his cottage tenant the ordinary appendages of a cleanly paved back-yard, a proper convenience, or water-closet, a well-arranged drainage, and a sufficient supply of water, is as deficient in attention to his own pecuniary interests, as he is wanting in feeling for those persons who have the misfortune to be in a great degree in his power."*

Mr. Rawlinson says-

"The ruinous effect of a want of proper means to provide good sanitary accommodation is most forcibly exhibited in the condition of the property in Wolverhampton. Houses recently crected let for 2s. 6d. a-week, whilst the older ones of a similar character only bring from 1s. 6d. to 1s. 3d. a-week; and this is in a great measure owing to the deterioration which has arisen from want of drains, proper pavement, separate privies, and a good water-supply."

* See Report on Sherborne.

In reporting on Portsmouth, he says-

"There is no greater mistake committed by individuals than where, through fear of proper and legitimate expenditure, in the first instance, they blindly hasten to erect objectionable property for the sole reason of deriving an immediate per centage in excess of the ordinary rate."

It is the duty of the local governing body to control and check such operations. Unpaved streets, in time becoming impassable, reduce houses in rent, or cause them to be left empty. Slightly built and over-crowded houses re-act in the same way upon their constructors, as also upon the rate-payers at large. Those which are built slightly, with bad and insufficient materials, and without any thought to the comfort and health of the people who are compelled, from the force of existing circumstances, to inhabit them, soon show the consequences of so blind and rash a proceeding. New property is sought after, in some instances, because it is new and comparatively clean; but, having neither strength nor convenience, it soon falls out of repair. The object of the builder is to obtain a large return for his outlay in the shape of rent; which for a short time he accomplishes, and then finds that accumulating filth and dilapidation either deprive him of his tenants, or their health fails under the nuisances and miseries they involuntarily create and helplessly endure. The parish authorities must finally step in to afford the required aid and relief.

Mr. Cresy says-

"There is no more dangerous or fatal mistake than crowding houses together in such a manner as to prevent comfort and self-respect in those who are compelled to inhabit them. Houses badly constructed and crowded soon become ruinous; they are then let to the vicious and very poor. Vice contaminates unfortunate poverty; hence the crowded police courts and gaols. Vice and poverty, ever crowded in the midst of filth, and surrounded by a vitiated atmosphere, generate disease; hence heavy poorrates, numerous hospitals, and large union houses. Badly arranged, crowded, and imperfectly constructed houses are alike a curse and loss to the public, as to the owners of them. Rent is collected from such property with much loss and uncertainty."*

Having thus shown how the interests of the owners of such property may be promoting a condition of things which will elevate in place of degrade the tenants, it is desirable to show how the interests of society are compromised by permitting such property to remain in its present condition. Very few observations and extracts will suffice on this point. The testimony of relieving officers is too strong, too uniform, to be disregarded, when heard. And it is to be observed, that such testimony can but rarely be obtained, as the relieving officers are, in innumerable cases, the servants of the owners of such property, who, in what they imagine self-defence, push themselves upon boards of guardians, and thus become controllers of the rates and the masters of the relieving officers.

* See Report on Braintree.

"Excessive disease," says Mr. Rawlinson, "is constant in certain portions of Gateshead, and to a far greater extent than is exhibited by any general average which can be obtained. In fact, the mortality in such places is much beyond the highest rate known, and the money loss to the community in parish relief far exceeds the rental. The relieving officer invariably points out such places, as those which absorb the largest amount of relief, directly and indirectly. It would be true economy if the authorities had power to pull such property down, the rent charged for which is always excessive, and provide decent habitations for the poor at a reasonable cost, where health and comfort could be secured."

The relieving officer of Newport says-

"He invariably had to pay the largest amount of relief in the worst districts, as there was always the most disease and distress in such places."

Mr. Rawlinson says-

"A neglected and dirty district is sure to be the most expensive. In most cases the amount of the entire rental is drawn from the parish in out-door relief; and it would be cheaper for the authorities to buy up such property, remove it, and build new, or entirely remodel the whole of such places, so as to ensure the proper means of health."*

The same gentleman, referring to Barwick's Alley, in Charlton, Dover, gives the following description, by the relieving officer-

"About fifty separate small huts, built in steps, one over the other, against a steep hillside, with scarcely any accommodation; there is only one very dirty draw-well to supply the whole neighbourhood with water. The horrid state of this alley is beyond description."

"This property is the contrivance of a man named Barwick; he lives upon the premises, and lets the places off to the most disreputable characters, male and female. And looking to the returns and statements of the relieving officers, I have no doubt but that the parishioners would save money if they bought the property, if property it should be called, cleared it of its vicious and destitute tenantry, and took the whole place down, and then erected proper tenements on this or some other site, to be let at a reasonable rental, not, in fact, exceeding the present weekly sums obtained -namely, from 2s. to 3s. each. But the principal remedy, in future, should be preventive ; such property should not be allowed to rise into existence for the sole pecuniary benefit of one man, as the amount of rent levied from such wretched places is at the direct money cost of the general rate-payers, and as the parishes are burthened with pauperism and disease generated in such places. The health and safety of the inhabitants in the neighbourhood are endangered, and the morals of the people in the district are corrupted by this neglected class of inhabitants. From the cradle to the grave they oscillate betwixt such places and the gaol, and are, during the whole period of their lives, a direct money charge upon the parish or county funds."+

Again, of some parts of Alnwick, the same gentleman says-

"The rate-payers would, in fact, save money if such property were taken down, and proper dwellings provided for the poor."

He further says-

"When it is so clearly proved that crowded houses, dirt, and foul districts have a direct connexion with heavy rates, it is not too much to presume that an improved condition, producing the opposite of all that now contaminates and degrades the populace, would remove much of the wretchedness and misery which exist, and also reduce

* See Report on Morpeth.

the rates. Filthy crowded dwellings generate and foster disease; labour is thereby prevented; poverty and misery are the consequence; and a direct money charge upon the parish is the inevitable result."

Mr. P. Scrope well remarks-

"A population deteriorated both morally and physically, by living in crowded and inferior dwellings, is likely to be far more improvident, and therefore to multiply faster, in spite of low wages, and also to be worse workmen, and therefore *worth* less wages; and, above all, to be more likely to become and to 'breed' paupers, than one preserved at a higher moral and physical standard by the well-known influence of healthy, decent, and comfortable homes."

At the present time, in every place where the Public Health Act does not apply, the great difficulty to contend with in attempts to improve the dwellings of the labouring classes is the total want of efficient authority and consolidation of powers to effect the desired improvement. Thus the Mayor of North and South Owram states—

"Upon attempting to do anything towards improving the dwellings of the working people, they were met and frustrated at every corner; and as a consequence, all efforts had proved abortive."

The guardians of the Chorlton Union addressed a letter to Dr. Sutherland, to the following effect:--

"The guardians will be glad if you will invite the attention of the Board of Health to the evidence of the unhealthy state of the dwellings of the poor disclosed in the Report, and of the inability of any local authority at present constituted to apply an efficient remedy for the wretchedness complained of, unless some legislative enactment be obtained for that purpose."

Mr. Rawlinson observes-

"General powers are imperatively required to shut up some houses, rooms, and cellars now inhabited. Those who object to any interference, use this argument— 'the private rights of property must be respected;' and unfortunately this has been the case, to the entire neglect of all public rights, and the result is, one common and wide-spread punishment in the form of epidemic, endemic, and contagious diseases. To control the erection of houses, so as to insure full means of lighting, ventilation, and drainage, will be of as much service to the builder as to the persons compelled by force of circumstances to occupy them. It is evidently not for the real advantage of the inmates that tenements should be overcrowded, so as to produce disease; but human beings, uncontrolled, will pack themselves in rooms and cellars, to an extent almost beyond description, until the whole atmosphere reeks with pestilential exhalations. That some form of public interference is necessary to prevent this, all the evidence brought together, since the commencement of sanitary inquiry and investigation clearly proves."

In Bristol, it is stated-

"The grand defect, and the parent of all others, is the want of power, on the part of the local government, to interfere. At present, whatever may be the desire of the upper classes to raise the condition of the people, they can attempt it only by private visitings, charities, schools, and religious instruction; their exertions are checked, at every step, by an appeal to the condition of the cottages."

"A powerful local government cannot," says Mr. Rawlinson, "make employment plentiful, or bread cheap; but it is in its power to allow no house to be built, rebuilt, or substantially repaired, without compelling the owner to provide dry floors, good drainage and ventilation, decent house accommodation, and, in fine, the blessings of water, air, and cleanliness; to do much at present, and more in future."*

REGULATING LODGING-HOUSES.

With reference to lodging-houses, Mr. Rawlinson (see Report on Morpeth and Bedlington) remarks-

"Some general regulation of common lodging-houses will soon be necessary, or the vagrants will shun the towns brought under the Act, and crowd into places not under local regulation. The evil is a national one, and the remedy must be general. I cannot refrain from urging the condition of these places again and again upon the notice of the local authorities. A proper regulation of vagrants' lodging-houses should, in my opinion, be one of the first works of sanitary improvement. At present, they are forcing-houses of vice and disease, misery and crime; and are, in every respect, a direct and indirect tax upon the rate-payers."

In apposition to these remarks, may be appended the following observations by Mr. Cresy:-

"A building, 130 feet in length and 25 feet in breadth, containing altogether 324 squares on the plan, could be constructed four stories high, furnished with every requisite for the accommodation of 200 persons, for 5000*l*. I calculate the returns from such a building could not be less than 900*l*. a year (less the expenses of management, &c.)"

And now it may be asked, with these accumulated facts before us, will these observations recorded, and opinions expressed by the most intelligent and competent men in the kingdom on the subject of the dwellings of the industrious classes, what are the means at present in operation for remedying the evils which have been described, and for mitigating the harsh conditions of existence imposed upon the laborious and industrious artisans of the metropolis and elsewhere ?

What is the nature of the improvements, and what the amount of accommodation recently provided ? What, in fact, are the hopes for the future ?

It is true we may point to the erections of the Societies for Improving the Condition of the Labouring Classes, the cottages erected on the property of the Marquis of Breadalbane, the Duke of Bedford, and other noblemen, the re-constructions of the cottages on the property of Earl Grey. But such operations cannot in their nature be other than provisional, or more than *models*.

To use the words of Mr. Poulett Scrope, in referring to the laudable exertions of the Society for Building Model Houses,—

"The results of these efforts, whether of individual or combined benevolence, can only, in the nature of things, be local, partial, and temporary, and must be wholly inadequate to meet the general deficiency of fitting habitations for the great and growing bulk of the working classes."

* See Report on Bristol,

Henry Pownall, Esq., Chairman of the Middlesex Bench of Magistrates, says,-

"The utmost which individual effort can accomplish is to scatter lodging houses over the metropolis, in testimony of the degraded state of the dwellings of the poor."

In consequence of the impossibility of speedily supplying the whole labouring and industrial population with healthy homes, it is essential that some measure should be put in operation by which the present dwellings of this portion of the population should be rendered compatible with health, decency, social comfort, and moral obligations. Even although it were possible to contrive that some 150,000 or 200,000 houses should be built for the population of the metropolis on sound principles, still the old houses would remain, and, if remaining, would unquestionably be inhabited. Mr. Rushton the magistrate has well remarked, that if empty sugar-casks were ranged along the streets, they would be taken possession of as the abodes of human beings. And the habits of the lazzaroni at Naples confirm the truth of his remark. The evil would not be remedied. Nothing but the adaptation of the present houses to the necessities of healthy existence, and the demolition of those houses that are unfit for human habitation, can effect the desired object.

It is evident that in this country we have no general or local laws adequate to the necessity of the occasion; and it might be presumed that the legislature would hesitate before confiding to any body of men powers to deal with so great an amount of property as is now engaged in the dwellings of the industrious classes. This is the narrow view entertained by the owners of such small property, more especially of that kind which is in the worst condition. But it is essential that the principles already recognised by the legislature should be more fully understood and applied. Parliament has clearly provided that while a man may in a great measure do what helikes with his own, he shall not endanger the public safety. Parliament has provided for the safety of the public in a thousand ways-on the highway, on the railway, in the mercantile marine, in the mine and in the factory, in the construction of sewers, of walls, and of chimneys. It has provided against the extension of fire, and the tumbling down of crazy houses.

If a man may not—as by law he may not—inhabit a house which threatens by its fall injury or destruction to the public, why should a man be permitted to let property which must injure the public, and against the insidious danger of which the public cannot guard?

If we calculate the amount of life or property annually lost by conflagration, and compare it with that lost by preventable disease, we shall be overwhelmed with surprise at the insignificance of the former, and the vastness of the latter. Yet compare the pains which are taken, the sums expended, to guard against the conflagrations by fire, with the pains taken or the sums expended to guard against the devastations of disease.

It is clearly the duty of the law to place the great mass of the public in a position of safety as regards the enemies from without-so also from within. Yet disease, in all ages, has been a greater destroyer, a more powerful enemy, than the sword. We find in efficient inspection and regulation of the dwellings of the poor and the industrial population, the simple means of realizing the greatest results for the welfare of the people which can be achieved by legislation. Mines, factories, steamboats, highways, railways, prisons, lunatic asylums, and workhouses, as well as joint-stock companies' accounts, are inspectedand the public are greatly benefited by such inspections. Would not the thousands of poor and labouring men be thankful to have Government or efficient local boards inspecting the houses in which they live, as well as the roads they travel, the means of conveyance, the buildings, or the prisons, and workhouses, to which latter they are too frequently consigned in consequence of the deplorable condition of these houses.

While we have the rights of property, we have also the rights of humanity; and happily, in this case, they cannot be opposed to each other. Inspection, while laying bare the tricks of the heartless speculator to secure rents at the expense of the health and lives of the hapless tenants, will teach the humane and intelligent landlord that his interests are identical with those of his tenants, and that the really needful improvements which he may be required to make may be most easily and economically effected. In the emphatic language of Mr. Dickens, sanitary improvements may be had for the price of a pot of porter, or a dram a-week. Inspection will put the burden on the right back, and protect the landlord against the negligence or indifference of local boards. To the poor tenants the boon will be inestimable, and it is not too much to predict that, within six months after it shall have been efficiently brought into operation in the metropolis, one-third, at least, of the mortality from preventable diseases will cease. We are encouraged to this view of the subject by the experience which we have already had in the working of a measure, somewhat similar to that now proposed, in several of the continental towns, and of which we have an account in the Report of the College of Mayor and Sheriffs to the Communal Council of Brussels.

By the revival of an old law, an inspection has been instituted of the sanitary condition of dwellings, which has been most minute in its applications and most serviceable in its results. The tabular returns of the improvements effected show that no part of a dwelling, or of the conveniences necessarily attached to a dwelling, have been disregarded, but that a wise and prudent humanity has stepped in to regulate the condition of all those structural arrangements which are comprehended in a healthful dwelling.

It is most satisfactory to find in the report referred to, that of 2020 houses, of which 1355 were in alleys or cul-de-sacs, only sixteen houses, nine rooms, two garrets, a third floor, and a part of a house have been interdicted as unfit for human habitations; while only five houses and a part of a house required to be demolished on account of their state of dilapidation and resulting danger.

Two only of the proprietors to whom delay was accorded in order to complete the required works, refused to do anything; and only three properties required to be officially made fit for habitation. Twelve interdictions were raised by the proprietors voluntarily effecting the required works.

It is calculated from this statement, allowing a population of eleven to each house, (the Continental houses being larger than those ordinarily inhabited by the industrious classes of the metropolis,) that of 22,220 persons who were living in houses which required works of some kind to put them into a habitable condition, 21,957 derived the advantages contemplated by the law, and 263 were displaced from habitations incompatible with healthy existence, or manifestly unfit for human habitation.

In Belgium, this revived act has been found to work so easily—its application has been so well received—and other results obtained, have proved so highly satisfactory, that it is now about to be extended from Ath, Liege, Tournay, and Brussels, to other towns and villages, even in country districts.

If we go back to the Roman law, we find that ædiles were appointed as early as A.U. 260, whose duty, among other things, it was to take care of the city, its public buildings, temples, theatres, baths, porticoes, aqueducts, sewers, roads, &c., and also its private buildings, lest they should become ruinous, objects of deformity, or dangerous. These officers seem to have continued, with variations in their powers, at least as late as the time of Constantine. It is to the influence of Roman legislation upon the code of other nations, that much of the beneficial regulations regarding buildings is at the present time to be attributed. The burning of Rome under Nero, and its rise with wider streets, detached houses, and fireproof walls may be compared to the fire of London and its similar improvements. Still more may it be compared with Hamburg, the last and the best example of a great calamity resulting in a greater and an enduring public benefit. The influence of Roman ædile law is seen at the present time in the law which has effected the improvements spoken of in Brussels.

We have, however, in our earliest and most trustworthy historical record a complete account of house-inspection, and an evident and valuable appreciation of the advantages to be derived from it. In the Mosaical record there occurs this remarkable illustration of the supervision exercised over the health of the Jews, in Leviticus, chap. xiv. 34-48:

"When ye be come into the land of Canaan, which I give to you for a possession, and I put the plague of leprosy in a house of the land of your possession; and he that owneth the house shall come and tell the priest, saying, It seemeth to me there is as it were a plague in the house: then the priest shall command that they empty the house, before the priest go into it to see the plague, that all that is in the house be not made unclean: and afterwards the priest shall go in to see the house: and he shall look on the plague, and, behold, if the plague be in the walls of the house with hollow strakes, greenish or reddish, which in sight are lower than the wall; then the priest shall go out of the house to the door of the house, and shut up the house seven days : and the priest shall come again the seventh day, and shall look: and, behold, if the plague be spread in the walls of the house; then the priest shall command that they take away the stones in which the plague is, and they shall cast them into an unclean place without the city : and he shall cause the house to be scraped within round about, and they shall pour out the dust that they scrape off without the city into an unclean place : and they shall take other stones, and put them in the place of those stones ; and he shall take other mortar, and shall plaster the house. And if the plague come again, and break out into the house, after that he hath taken away the stones, and after he hath scraped the house, and after it is plastered, then the priest shall come and look, and, behold, if the plague be spread in the house, it is a fretting leprosy in the house : it is unclean. And he shall break down the house, the stones of it, and the timber thereof, and all the mortar of the house; and he shall carry them forth out of the city into an unclean place. Moreover, he that goeth into the house all the while that it is shut up shall be unclean till the even. And he that lieth in the house shall wash his clothes; and he that eateth in the house shall wash his clothes. And if the priest shall come in, and look upon it, and, behold, the plague hath not spread in the house, after the house was plastered : then the priest shall pronounce the house clean, because the plague is healed."

By the *leprosy* in buildings is to be understood that form of speech, of which we find an analogous instance in the present day in Switzerland, in the term *cancer of buildings*. Michaelis gives the wisest and simplest explanation of this expression, apparently so difficult to be understood, though he does not quite comprehend the chemical agencies in operation. Putrefaction, (such as we may understand readily to arise in the warm climate of Palestine, amid the animal (chiefly) and vegetable refuse scattered about the huts, or low, ill-made tenements, or on the earthen floors, of the early Hebrews,) gives rise, under certain circumstances, to nitrous acid, which in general, in the form of vapour, combines with calcareous earth wherever it finds it, and forms the so-called earthy saltpetre; sometimes it combines with the mineral alkali and forms cubical saltpetre; sometimes the vitriolic salts are formed. The existence, then, of this form of decay or leprosy in buildings was a proof of the presence of decomposing animal matters, whose injurious influence upon health could not but be a subject matter for the great legislator. The influence of such abominable collections of animal and vegetable remains, we have truly and quaintly told by Erasmus, when he describes the wretched, filthy hovels of the English, some centuries ago. The black death, or other mortal epidemics, owed their virulence to this neglect of house cleanliness on the part of our forefathers.

It is scarcely necessary to add, that this mural efflorescence chiefly makes its appearance in damp situations, in cellars, ground and under-ground floors. The appearances presented very closely correspond with those of which we have an account in Leviticus. The spots, it is true, are not often of a greenish or reddish hue, though they are sometimes met with of that colour.

Michaelis states that "the walls (of such houses as are affected with this disease, as it may be termed,) become mouldy, and that to such a degree as, in consequence of the corrosion spreading farther and farther, at last to occasion their tumbling down. The plaster also requires frequent repairing, from blistering, as it is called, that is, detaches itself from the wall, swells, and then falls off. The things that lie near the walls thus affected become damaged, and in the end spoiled. ... If this 'saltpetre' be strong in the occupied apartments, it is very injurious to health, particularly where people sleep near the wall."

The whole history of the procedure in this chapter is most interesting. A premium is offered to the owner to come and tell the priest, (v. 35,) because if the disease gained ground he not only lost his house, but probably his furniture, which there is no reason to believe was removed *previous* to inspection, unless when information came from the owner; and it is obvious that if on inspection the priest declared the house unclean, everything which remained within it was likewise unclean.

It is desired that the stones be taken away, (ver. 40, 41,) and the house scraped within round about, and that the dust be taken away, and fresh stones and plaster used; provision is thus made for a thorough cleansing of the whole house.

Moses farther provides (v. 45.), that on the re-appearance of the malady the house shall be demolished; thus showing that he was fully capable of appreciating the injury which such houses were capable of inflicting upon the people, and of estimating the value to be attached to a healthy habitation.

By further providing (v. 48) that the priest shall pronounce the

house clean when the malady was stayed, or the preventive measures had proved effectual, he in fact provided for a certificate of fitness for human habitation and for relieving the public mind of any anxiety, and the proprietor from any of the inconveniences attached to the temporary inhibition of the house as a dwelling.

Michaelis wisely extols the whole of this law, and wishes that some similar law were now extant in Europe.

It is lamentable to look back to the period when the sovereigns of Germany and France, and perhaps elsewhere, for the sake of the saltpetre with which to make gunpowder, established a right to this mural incrustation, even in private houses, as a sovereign *regale*; thus forming a most odious oppression—most bitterly, and, it may be added, most justly, complained of by the people.

It may be remarked, that when the importation into France of nitre, with which to make gunpowder, was prevented by the British, Napoleon was led to a similar procedure by an eminent chemist, who was, however, wise enough to conduct his offensive process in a different way from the German sovereigns, and elsewhere than in the habitations of the people.

It is unnecessary to enter into any lengthened exposition of the details of the plan for house inspection and regulation, which I first propounded in the "Journal of Public Health" for October, 1849, and which is more fully detailed in the first Report of the Metropolitan Sanitary Association. It is enough to indicate the leading features of the scheme.

Let every house, on becoming vacant, or on notice, or on certain periodical occasions, be examined by a competent person as to its being in a condition adapted for the safe occupation of the tenants. Let a certificate to that effect be granted to the owner, and let it be enacted, that the rent of every house which is not thus certified to be fit for human habitation shall not be recoverable at law; and further, that a penalty be attached to the letting of the house.

Let these provisions be enforced with a careful and due regard to the circumstances of each case, and with a becoming regard to the rights of both landlord and tenants.

In my own mind I have a deep and unchanging conviction that this plan, if carried out with earnestness and discrimination, will greatly tend to raise the industrious population of this many-citied kingdom towards the natural standard of health, and will, in its results, give to the legislator who procures its adoption the eminent title conferred by Pliny—

" Parens ac Deus salutis nostræ."

On the Government now rests the entire responsibility of remedying

the evils which have been made manifest. Expectations have been raised in the minds of the public by congratulatory and happy observations in the speeches of Her Gracious Majesty on the occasions of opening and proroguing parliament, and by successive prime ministers, as well as by enactments passed by the legislature. These expectations, so far as the metropolis is concerned, have not been *practically* realized. With whomsoever the crime of delay rests,—for delay is criminal, when necessarily attended with the sacrifice of life and health which takes place under the present circumstances,—it cannot, at least, be attributed to the sanitary reformers of the metropolis.

Mr. Poulett Scrope, referring to the rating of small tenements, uses the following words, which, if taken in connexion with the neglect of the legislature to secure healthful houses for the people, are still more apposite :—

"Surely it is time that the LAW, which is, or ought to be, framed for the benefit of society, the repression of evil, and the encouragement of right and virtuous habits among the people, should purge itself from an element in its minor arrangements (*its neglect*) which incidentally and unintentionally perhaps, but still most powerfully and directly operates to deteriorate the character of the dwellings of the poorer classes, to render them scarce, dear, and miserable, and thereby to injure in a serious degree the habits, the morals, the health, the industry, and the comfort of the bulk of the population."

THE END.

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