220 SANITARY EVOLUTION OF LONDON

In Camberwell, in 1868 = nearly 50 per cent.

In St. Mary, Newington, and in Rotherhithe = 50 percent.

In Bermondsey, in 1869-70 = 56 per cent.

In certain streets the percentage was much higher. Thus in Paddington (1870-1) :---

Woodchester	Street	• • •	• • •	56	per cent.
Cirencester	,,	•••	• • •	65	,,
Clarendon	"	•••		72	,,

The high infantile mortality betokened high infantile sickness, but of it no records have ever been kept.

In 1871, the decennial Census once more afforded reliable information as to the population of London, and gave the means of ascertaining much else of the greatest value. The population had gone up to 3,254,260 in 1871, from the 2,808,862 it had been in 1861, an increase of 445,398. But the rate of increase was declining. The decennial increase of population which had been 21.2 in 1841-1851, 18.7 in 1851–1861, had further declined to 16.1 in 1871. The returns showed that London contained 2,055,576 persons born within its own limits, and 1,198,684 persons born outside its borders.

"Whence came these multitudes of both sexes, equal in themselves, without counting those born there, to a number greater than the inhabitants of any other European city?" More than 607,000 of them came from the chiefly agricultural eastern, south-eastern, and south-midland counties surrounding the metropolis.

western counties.

foreign parts.

rushing river of humanity.

CHAPTER IV

1871-1880

A large contingent of 147,000 was drawn from Devonshire, Wiltshire, Somersetshire, and the other south-

The west-midland counties sent up 84,000.

41,000 persons had come from Scotland, 91,000 from Ireland, 20,000 from the Colonies, and 66,000 from

In fact, over 37 per cent. of the population of London in 1871 were immigrants into the great metropolis—a great

The returns were also of special interest in showing the changes in the distribution of the population. Speaking broadly, the previous movements were being continueda diminishing population in the central parts, an increasing population in the outer parts.

It appeared to be inevitable that-

"As the trade of London continued to increase, so the districts which lay close to the great centres of business must be expected to be occupied more and more with warehouses. and less and less with the miserable dwelling-houses which had hitherto sheltered its poor and working-class population."

The diminution of the population of the central parts of London was in no way a symptom of decay: it was, in reality, proof of the reverse, being the result of increasing trade, commerce, and wealth, which required more house accommodation for the carrying on of their enormous operations.

The great economic forces were in fact as active and powerful as ever. In the City the population had fallen in the decade from 111,784 to 74,635. In every one of the six parishes or districts composing the Central group the population had likewise decreased.

In the Eastern group, the population of three had decreased, whilst in the others there were increases—notably so in Poplar, where there was an increase of 37,000, and in Bethnal Green, where there was an increase of 15,000.

In the Northern group all had increased, except St. Marylebone---the increase in Hackney being over 41,000, and in Islington over 58,000.

In the West, there were also large increases-Fulham 27,000, Paddington 21,000, Kensington 50,000. Only St. James' (Westminster) and Westminster had decreased, and they in reality belonged more to the centre than to the west.

On the South side, with the exception of Christchurch, St. Olave, and St. Saviour's-all in Southwark-and Greenwich, there was an increase in all the parishes or districts, the increases in some being very large; 40,000 in Camberwell, 46,000 in Lambeth, 55,000 in Wandsworth.

The figures thus furnished by the Census enabled a fairly

accurate calculation to be made as to the death-rate. It now appeared to be 24.6 per 1,000 living.

The Registrar General, in his report for 1873, entered into a comparison with previous years which may be assumed to be as accurate as any such calculations could be.

21.5 in 1872, and 22.5 in 1873.

"The mortality never having been so low in any two consecutive years since 1840, and by fair inference never so low in any two years since London existed."

This was distinctly encouraging, demonstrating as it did the good results ensuing upon the great works of improved drainage and sewerage, and a healthier water supply.

As to the housing of this huge population, it was shown that the number of inhabited houses had increased from 360,035 to 419,642.

The reports of many of the Medical Officers of Health throw much additional light upon, and explain or elucidate the facts set out in the Census, and carry on the narrative into later years of the matters recorded by the Census Commissioners.

Thus, as regarded the reduction of the population in the central group of parishes, the Medical Officer of Health for the Strand District ascribed it in part to the new Law Courts, and to the circumstance that residential houses were, in increasing numbers, becoming converted into business premises.

"But," he added, "it is also probably in some measure due to the greater facilities for locomotion to suburban homes"; which is notable as almost, if not absolutely, the first recognition of this cause affecting the population.

In St. James', the decrease of population was "due to the fact that the district had increasingly become the centre for clubs, hotels, and splendid shops. The result had been an enormous rise in the value of houses, and a gradual extrusion of the less wealthy and important residents."

stated that :---

OF LONDON

The mortality was as high as 29.4 in 1854. It was 26.5 in 1866 (when cholera was epidemic), and it was as low as

In St. George-in-the-East, the Medical Officer of Health

"The decrease of population was due to houses being taken by a railway company, by the Poor Law Guardians for an infirmary, for a church, &c."

How considerable the clearances were in some districts may be inferred from the figures given by the Medical Officer of Health for St. Giles' in 1871.

"The clearances in the City of London for the purposes of erecting a new market, and a viaduct, and in the Strand district to form a site for the proposed Law Courts, have aggravated the evil of overcrowding. To effect these improvements (or chiefly so) the large number of 18,358 persons have been removed. Strand, 6,998; St. Sepulchre (City), 4,188; St. Bride (City), 4,211; Saffron Hill, 2,961."

And in St. Olave, on the south side of the river, the Medical Officer of Health wrote :---

"Since the census of 1861, 436 houses have been pulled down, clearing away whole streets and courts for the formation of railways and the extension of warehouses, displacing 961 families comprising 3,556 persons."

Consequent upon these clearances, and the people having to find dwelling room somewhere, the transition of houses built for a single family into tenement-houses continued in full swing.

The Medical Officer of Health for St. Mary, Newington, reported (1873) that year by year the better class of houses were becoming less and less inhabited by a single family.

The Medical Officer of Health for Paddington gave a very clear description of the process.

"There is a very dense packing of population," he wrote (1873), and he mentioned some instances :---

"Brindley Street with 801 persons living in 65 houses.

Hampden Street	"	876	**	,,	78	"
Waverley Road	"	900	"	,,	72	,,

"Builders intended these houses at first for one respectable family, but . . . in violation of common sense and decency they are let out in tenements and single rooms, without those essential conditions of a dwelling which landlords should in all instances be compelled to provide. "There is yet in reality no law to prevent the creation of unhealthy districts as long as five or six families are allowed to live in one house intended for a single family. . . . Houses should be built with reference to the future health of the people who will have to live in them.

"And now, while the fields are open and still unbuilt upon, it would be worth the attempt to overcome the destructive influences likely to be established in building tenement dwellings as the population gathers in this and other neighbourhoods. They will some day be hives of pauperism."

Furthermore, in some parishes, the natural growth of the population was very rapid. In Islington, for instance, the Medical Officer of Health wrote :---

"The Life Balance Sheet of your parish for 1875 shows that your losses and gains leave you 4,376 lives to the good, or in other words 4,656 deaths and 9,032 births have been registered in the parish of St. Mary, Islington." And the Medical Officer of Health for St. Marylebone wrote (1877) :---

"If we compare the annual number of births with the deaths, we shall find that every year some 1,200 or 1,500 more persons are born in the parish than die in it; and what, it may be asked, becomes of the surplus population? The only answer is, that it migrates; it could not remain in the parish for the simple reason that there is no room, all available spaces in St. Marylebone have long been built upon, and the houses occupied, many of them crowded."

To the migration rendered necessary by the natural growth of the population, and by the diminishing number of houses in the central parts, was added the ceaseless stream of fresh immigrants into London. These vast numbers had to find house accommodation somewhere, and they found it, in their tens of thousands, in various parts of the less central portions of the metropolis. In Kensington, for instance, the Medical Officer of Health stated (1871) that the larger portion of the increase of nearly 41,000 in the ten years was due to immigration.

OF LONDON

The Medical Officer of Health for Fulham drew a graphic picture of this inrush of humanity.

"The steady growth of London westward has thrown among us a vast and teeming population of the working classes, as well as those of more well-to-do condition, and for the housing of the former many blocks of wretched and most miserably constructed dwellings continue to be erected with the most utter disregard for drainage or other sanitary appliances now so essential. That part of Fulham. once open fields, is still being rapidly covered with streets and houses of this character, and many open spots in Hammersmith are being filled in the same way. Our healthy neighbourhood may thus be made ere long a land of sickness and disease unless some check is given to such speculative buildings. Our natural advantage with all our care will not avail us against such utter recklessness."

The increase of 21,000 in Paddington drew from the Medical Officer of Health the query-

"... Whether any and what steps should be taken to prevent the wholesale influx of a colossus of pauperism with the consequent burdens of poverty and sickness."

It had already driven the people underground for shelter, for in 1871 he described how-

"Many of the underground kitchens in Leinster Street (and four others named) have been inspected where the poor people are found living like Esquimaux in underground cave dwellings-places with impure air, want of light, admitted only through a grating in front, the upper sash of the window being often out of repair, or nailed up."

The rapid increase of population in London would not have been accompanied with such serious results to the public health as it was, if the houses which were being so rapidly built for the people to inhabit had been constructed on sound sanitary principles.

But this was very far from being the case, and the evils described in the last chapter in this respect continued over an enlarged area, and in accentuated form.

It is now almost incredible that the laws should have been

left in such a state as to enable builders, without any legal check, to put up the houses they did.

The Medical Officer of Health for Mile-End-Old-Town pointed out (in 1872) that "The position and structure of houses has a very distinct bearing upon the public health, vet very little regard is given to sanitary principles in their construction. . . . The class of small houses for the crowded occupation of the poorer classes is generally built either upon 'made ground' composed of refuse and débris of all descriptions, the organic portion of which presently fills the houses with various disease-producing gases, or upon newly opened ground saturated with miasma, without the least attempt at protection by means of previous drainage or properly protected excavated foundations."

"Water, air, and light are nature's disinfectants and preventions of disease. They are abundantly provided, but more meagrely and inefficiently used, and indeed practically ignored, by architects, builders, owners, and occupiers. . . . "

that :—

"Houses were being built upon the soil—any soil, in point of fact-and the foundations of houses consisted very often of nothing but manure, and old boots, old hats, or anything thrown into it."

The Medical Officer of Health for Poplar wrote (1873) :---"The continued rapid increase in the number of new

streets and houses in various parts of the district presents many unsatisfactory features.

"In most cases, before the buildings are commenced, the gravel is dug out, and the hole filled up with so-called brick rubbish, but in reality with road-sweepings, the siftings of the dust yards and similar refuse. The dwellinghouses, mostly of the poorer class, are largely built of soft ill-burnt bricks, and are tenanted generally as soon as they are finished-frequently even before they are complete.

1874. P.P., vol. x.

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And in 1876 he reverted to the subject :--

A witness before a Select Committee testified in 1874*

* Select Committee on Metropolitan Buildings and Management Bill,

"As a matter of course the walls are still damp, the streets unpaved, and the residents suffer often very seriously in their health."

The Medical Officer of Health described ten acres of houses in Hackney as "almost entirely built upon a great dust heap," built, too, of porous bricks and bad mortar.

And another witness before a Select Committee in 1882 described how, in the other end of London-in Wandsworth -on an estate "which practically might be considered a small town," the ground has been filled in to a depth of six or seven feet with filth of every description, and houses have been rapidly built upon it. The results to the health of the inhabitants were disastrous.

This, however, by no means completed the description of the evil condition of the buildings.

The Medical Officer of Health for Shoreditch wrote (1876-7):---

"Not only was the health of the inhabitants endangered by the presence of a large number of old decayed brick drains, but also by many new drains which had been carelessly laid. Their joints leaked ; in some places neither cement nor clay had been used, and pipes had been connected with drains at right angles."

And the Medical Officer of Health for St. George-the-Martyr added his testimony (1877-8) :---

"Not only may the materials of which our buildings are constructed be thus defective, but the drainage may be and is indeed mostly laid carelessly and imperfectly. . . . An eminent Civil Engineer, one who has had a very large experience in this division of his profession, informs me that 90 per cent. of the houses built are imperfectly drained, that the drains are laid in a reckless manner, the joints often not cemented, and that the way in which they are laid is unscientific and dangerous. No wonder we have continued ill-health of the occupants."

The Medical Officer of Health for Fulham described in 1872-3 how in "Fulham New Town" the basements of the houses had been built below any available sewerage, with great danger of the public health.

And the materials of which the superstructure was made were as bad as they well could be. Porous, and half baked, and broken bricks being used, and mortar mixed with garden mould or road scrapings---" some without a particle of lime in it."

In Battersea Fields-"You will find them there putting the houses together in such a way that you may kick the walls down with your feet. '' *

The Medical Officer of Health for Whitechapel put the subject very tersely when he wrote in 1880 :---"In the construction of houses the only thing that appears

to be considered is that of cheapness."

Until near the end of this decade of 1871-1881, a building could be constructed without any supervision of the materials, and any number of structures which could not be occupied without danger to life or health might be put up, for no one had power to interfere. The London Building Act had no adequate clauses to secure the effectual purity of new dwellings, nor had the Sanitary Authority any power to check the practice of building houses on rotten filth.

And so all these evil practices were very widely indulged in; for though there were many respectable men among builders of small houses, there were many who, regardless of all consequences, covered the suburbs with "small, rotten houses." And immense numbers of the people were absolutely unprotected either by the Government or by the local authority from abuses which entailed upon them ill-health and death, and from practices which created and spread disease throughout the community.

The Medical Officer of Health for St. George-the-Martyr, Southwark, referring to "the dishonest and scandalous way" in which some houses were built, said (1877-8):---

* Evidence of G. Vulliamy, Select Committee, 1874. Superintending-Architect to that Board.

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the result of constant floodings of cesspool matter to the

"From the greed of a few builders this traffic in human life, and in what makes life valuable, is openly and defiantly carried on. Under such circumstances full health is impossible. Yet for the success and per. manence of natural existence a high standard is absolutely necessary."

Of builders such as these it may be truly said that having created a damnosa hereditas in one place, they moved on to create fresh ones in others, and no one prevented them.

So glaring were these evils that a Select Committee, which sat in 1874 on the Metropolitan Buildings and Management Bill of that year, recommended-

"That the District Surveyor or the Metropolitan Board shall have full power to stop the progress of any building in which the materials or construction is calculated to be dangerous or injurious to health, and to summon the builder or owner before the magistrate."

At the rate houses were being built, the defective Building Laws were a grave disaster.

In the two parishes of Bow and Bromley in Poplar, in the five years ending March, 1878, notices were approved for 1,981 new buildings.

In Hackney, in the year 1876-7, notices were given of intention to erect 800 new houses, and the extension of streets and houses into the fields had gone on so rapidly that by that time there were but few fields left in the district, or even large grounds belonging to any of the houses.

In Kensington it was reported in 1875 that the increase in the number of new houses brought into occupation had for a considerable period averaged 700 annually.

In Wandsworth, in 1874-5, notices were received for 887 new houses.

In 1877-8 for 1,432 new houses.

,, 1878–9 ,, 1,845 "

,, 1880–1 ,, 3,073 ,,

And in every place land was being grabbed for building purposes.

in 1879:---

"We are now paying very dearly both in health and money for the errors of preceding generations in their having allowed houses to be packed closely together. . . . Several cases have recently occurred in this district of landlords erecting dwelling-houses in the back-yards of those houses which were formerly occupied by a single family. This is a serious evil and ought to be prevented. We have power to prevent the overcrowding of rooms, and we certainly ought to have power to prevent the cramming together of houses on sites of insufficient size for the healthy existence of the tenants."

St. Luke :---

"The Quakers' burial-ground by the side of Coleman Street is now (1876) in progress towards being covered with buildings, and a portion was taken by the London School Board for the erection of a school. In the process of excavation for the foundation, human remains were discovered."

And the areas at the backs of houses were also being rapidly covered over. The Act of 1855 had provided that 100 superficial feet should be left open-

"But the exigencies of trade have led the Metropolitan Board of Works and the District Surveyors to permit the area on the ground storey to be covered over."*

In fact, the insufficiency of the laws as regarded buildings intended for human habitation, and the mal-administration or non-administration of those laws which existed, resulted in the creation of evils which inevitably and most injuriously affected the health of the public, not merely at the time, but for many years to come.

"It is very much to be desired that the law gave more stringent powers to local authorities to prevent the re-* See Report of Select Committee, &c., 1874, Q. 23,445.

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The Medical Officer of Health for Whitechapel wrote

Even burial-grounds were not sacred, nor were public authorities even immaculate in this respect. Thus in

The Medical Officer of Health for St. Giles', in 1871, pointed out the necessity of a change of the law.

erection of buildings upon the old sites, so that the new buildings might not become as unfavourable to health as the old ones. . . . Such a perpetuation of mischief ought not to be permitted, and the rights of landlords should b_{θ} subordinated to the public good."

The condition of existing, as apart from new, houses also stood in need of many changes of the law to effect their redemption. The necessity was forcibly portrayed by the Medical Officer of Health for St. Marylebone in 1870. He wrote:---

"Of all the obstacles that stand in the way of anything like effective sanitary operations, not only in St. Marylebone, but in nearly every other district of the metropolis, there are none so formidable, so apparently irremediable as the miserable house accommodation provided for the labouring classes. Year after year I am called upon to tell the same unvarying story of rotten floors, broken walls and ceilings, windows and roofs that let in the wind and the rain, chimneys that will not let out the smoke, and of these wretched tenements being crowded with honest, hard-working people, from the cellars to the attics."

Parliament continued in this decade the greater solicitude about and interest in matters connected with the public health, which it had recently been showing; and the first year of the decade, 1871, is noteworthy for the adoption by Parliament of a measure which had far-reaching effects upon the sanitary evolution of the metropolis. This was the creation (by "The Local Government Board Act, 1871") of a Central Government Authority for the supervision by Government of the sanitary authorities in England and Wales, and also of those in London.

Matters relating to the health of the people had become so large a portion of the work of government, that the necessity had forced itself upon Parliament of concentrating in one department of the Government the supervision of the laws relating to the public health, the relief of the poor, and local government.

The new authority, which was entitled the Local Government Board, was not a representative body, but was a Government Department. It was to consist of a President, appointed by the Queen, and of the following "ex-officio" members-the Lord President of the Privy Council, all the Secretaries of State for the time being, the Lord Privy Seal, and the Chancellor of the Exchequer.

All the powers of the Poor Law Board were transferred to it, also certain powers and duties vested in Her Majesty's Privy Council. Several of the powers vested in or imposed on a Secretary of State, relative to health matters, were also transferred to it. Henceforth no bye-laws made by the sanitary authorities in connection with their duties were to be of any force until approved by the new Board.

Also the Board was to possess, in reserve for great epidemic emergencies, a power to issue directions under the Diseases Prevention Act, 1855.

But with the exception of such special cases, the function of the new Central Authority in regard of local sanitary action was primarily one of observation and inquiry.

The various Vestries and District Boards of the Metropolis being sanitary authorities thus came under the supervision, and in some respects under the control, of the new Central Government Board, instead of, as previously, under a branch of the office of the Secretary of State for the Home Department; but to all intents and purposes they retained their liberty of administration, or, to state it more accurately, their liberty of non-administration. Their relations to the elected central body, the Metropolitan Board of Works, remained unchanged.

In 1871, also, Parliament dealt with the water supply of London. The essential importance to the health of the population, especially in large towns, of an adequate supply of wholesome water was becoming more generally recognised. "Without water life cannot be sustained, cleanliness cannot be maintained, sanitary measures are at a standstill, drains become blocked, offensive and deleterious gases are retained or driven back into the dwellings, disease is caused and fostered, and public as well as private injury

caused in all directions."

OF LONDON

The Act of 1852 had failed to secure for the inhabitants

the advantage which they ought to have long since enjoyed. of a well-regulated supply of water in their houses for domestic purposes.

A Select Committee of the House of Commons recom. mended that every company should afford a constant supply of water to each house,* so that the water might be drawn direct and fresh from the company's pipes at all times during the twenty-four hours, and free from the pollution so often acquired in dirty receptacles. And a Royal Com. mission, appointed in 1867, after an elaborate inquiry, declared that earnest and prompt efforts ought to be made to introduce the constant service system to the furthest extent possible in the metropolis. The Report of the Royal Commission is memorable for the very strong ex. pression of opinion that the water supply of the metropolis should be consolidated under public control.

The duty of supplying the inhabitants of a city with water had from a very early period been regarded as a peculiarly municipal function, and the supersession of the municipalities by joint stock companies was a comparatively modern innovation.

Thus far, however, Parliament was not disposed to go, But (by the Metropolis Water Act, 1871) Parliamentcontenting itself mostly with "mights"-directed that any company might propose to give a constant supply of water, or the Metropolitan Board of Works might apply to a company for it; failing both of which, and under certain conditions, the Board of Trade might require a constant supply to be provided. Also every company should-

"On Sundays, as on other days, supply sufficient pure and wholesome water for the domestic use of the inhabitants within their limits."

But the Act did not curtail the power of the companies to cut off the supply to a house if the water-rate was not paid by the landlord or owner. An opinion was expressed on this point by the Medical Officer of Health for St. Mary, Newington, in 1872:-

* Select Committee of 1867. † P.P., 1868–9, vol. xxxiii. "I maintain that water is absolutely necessary for the "In the present and increasing crowded condition of our

health, cleanliness, and sanitary condition of every one, and that if a monopoly of its supply is granted to any company, no power of withholding it should be allowed. poorer houses the act of one person may enable a water company to refuse it to a household of ten or twelve people... I do most strongly protest against a continuation of a power which in its exercise undermines the very foundation of sanitary improvement."

Little, however, was done either by the Metropolitan Board of Works, the Board of Trade, or the companies to avail themselves of the optional provisions of the Act.

"Perhaps," wrote the Medical Officer of Health for Wandsworth, "there never was an Act of Parliament so completely ignored in many districts as the one in question."

"The companies," wrote another Medical Officer of Health, "are too busy in looking after their trade interests to concern themselves much about the health of the people."

postponed to the distant future. Parliament.

An epidemic of smallpox of unexampled severity began at the end of the year 1870, "the like of which had not been known in England since vaccination was first practised." It increased in London at an alarming rate until it reached its height in May, 1871, when 288 people died of it in one week, and it killed in London alone, in that one year, 7,876 persons. And as it was reasonable to assume that one death represented at the very least eight or ten times the number of cases of that most loathsome disease, the results were frightful, and the injury inflicted upon the community, present and future, disastrous.

OF LONDON

And the constant supply to the people of London was

In 1871 another subject also claimed the attention of

At one time more than 2,000 smallpox patients were under the care of the Metropolitan Asylums Board, and

the admissions into the Board's hospitals about the same time averaged 500 a week.

In a report on the subject the Committee of the House of Commons wrote :---

"It is impossible to say what ravages might not have been the result of the smallpox epidemic of 1870-1 had it not been for the efficiency and energy of the Asylums Board. Although the prophylactic virtues of vaccination have been recognised on all sides, it must be remembered that as yet but a small part of the growing population has been subjected to the operations of the Compulsory Vaccination Act."

And they expressed "their strong sense of the great services rendered to the metropolis by the managers."

The prevention of smallpox by vaccination was not yet a very potent factor in the diminution of that disease. Only slowly could the Compulsory Vaccination Act of 1867 produce effect, and as the appointment of public vaccinators and the establishment of vaccination stations had been made only optional, the mortality of the outbreak in 1870-1 had been but little, if at all, modified by it. The epidemic, however, was used by some to enforce a lesson.

Thus the Medical Officer of Health for St. James' wrote:—

"The lesson of the great epidemic of smallpox is the necessity for vaccination.

"The history of no other disease supplies so assuredly and necessarily the means of its entire destruction."

And the managers of the Metropolitan Asylums Board, in a report issued in 1871, wrote :---

"The necessity for re-vaccination when the protective power of primary vaccination has to a great extent passed away, cannot be too strongly urged. No greater argument to prove the efficacy of this precaution can be adduced than that out of upwards of 14,800 cases received into the hospitals, only four well-authenticated cases were treated in which re-vaccination had been properly performed, and these were light attacks."

Parliament passed an Act in 1871, making the appoint-

ment of paid Vaccination Officers compulsory on all Guardians, and the law generally more effective.

Likewise in 1871 Parliament dealt with another matter affecting the public health, and placed on record its opinion of the Vestries and District Boards by relieving them of the duty of enforcing the sanitary provisions of the Workshops Act, which they had failed to carry out, and transferring it to Government Inspectors appointed by the Home Secretary. This was quite an unprecedented amount of sanitary legislation by Parliament in one year, and is very notable as showing the greater position health matters were assuming in the opinion of the nation, and the greater

necessity Parliament felt itself under for dealing with them.

An improvement as regarded the food of the people of the metropolis was also commenced about this time.

The Corporation of the City of London had undertaken to carry out the provisions of Part III. of the Contagious Diseases Animals Act, 1869,* and had purchased the site of Deptford Dockyard for the purpose of a cattle market, and for the reception and slaughter of foreign cattle. The market was opened in 1871, and the system of inspection there inaugurated secured the good quality of a great portion of the meat consumed in London.

In the following year (1872) the purity of certain articles of the food and drink of the people engaged the attention of Parliament.

Under the Act of 1860 the Vestries and District Boards might each appoint an analyst, but the great majority of them availed themselves of the permissive character of the Act, and did not appoint one.

A sidelight is thrown upon the effect of this inaction of the local authorities by evidence given in 1862 by a master baker named W. Purvis. He said :---

"When the Act passed for preventing the adulteration of articles of food and drink there was an immediate apprehension among those bakers in the trade who adulterate their bread that they would be liable to have their bread fre-

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* 32 and 33 Vic. cap. 70.

quently analysed, &c. But when it was found that no sufficient means were provided by the Act to meet the expenses of this kind of active and constant supervision (the purchaser having to pay the analyst), they became confident again, and have resumed their practice of adulteration without any fear of detection."*

It was felt now that some further move should be made, and Parliament added another Act for preventing the adulteration of food, drink, and drugs to the long list of those which had gone before.

"Whereas the practice of adulterating articles of food and drink and drugs for sale in fraud of Her Majesty's subjects, and to the great hurt of their health and danger to their lives, requires to be repressed by more effectual laws than those which are now in force for that purpose—

"Be it enacted-" †

This Act made it incumbent upon all Vestries and District Boards to appoint public analysts to analyse all articles of food, drink, and drugs, on the request of any parishioners, on payment of a fee; and imposed the duty upon them of procuring and submitting for analysis articles suspected to be adulterated, and on their being certified to be so, of taking proceedings before a magistrate, who was given power to impose severe penalties. The offences were more clearly defined, and the expense of executing the Act was to be paid out of the rates.

The Act did much good, but the amount of good was not to be judged by the number of prosecutions and convictions. "Its deterrent effects were undoubtedly great." ‡

A Select Committee of the House of Commons, which had been appointed in 1872 to inquire into the subject, recommended the repeal of previous Acts dealing with the subject, and the enactment of a new and more compulsory measure, and in concluding their report they said : "Your Committee believe it will afford some consolation to the public to know that in the matter of adulteration they are cheated rather

* See P.P. 1863, vol. xxv. Report by Tremenheere on Bakehouses, p. 113.

than poisoned. Witnesses of the highest standing concur in stating that in the numerous articles of food and drink which they have analysed, they have found scarcely anything injurious to health."

In 1875 a further Act dealing with this matter was passed amending and strengthening the existing law.

In September, 1872, another notable step in the sanitary evolution of London was taken in the creation of an authority for the protection of the metropolis against the importation of disease by sea from foreign countries or from home ports.

"It is now acknowledged," wrote the Port Medical Officer of Health in his first report, "that, as a natural result of the insular position of the kingdom, and the vast extent of our commerce, the sanitary condition of shipping and of the floating population must exercise a considerable influence on the health of the country as regards the importation and transmission of epidemic diseases . . . the urgent advisability of using all means to prevent the introduction of disease into this the largest port in the world is sufficiently apparent."

Hitherto the prevention of the importation of the various sorts of disease into London by vessels trading to the Port of London from all quarters of the world had been confided to the officers of Her Majesty's Customs, and was of the most superficial and inadequate character.

The district assigned to the Port of London Sanitary Authority extended from Teddington Lock to the North Foreland, and was 88 miles in length. It included 8 sets of docks and 13 "creeks."

In the section of river lying between London Bridge and Woolwich Arsenal Pier, about 10 miles in length, there was a constant average of no less than 400 vessels of all descriptions moored on both sides of the river, more than 90 per cent. of which had crews on board.

The creeks were more or less occupied by barges containing manure, street-sweepings, gas-liquor, bones and other varieties of foul cargoes, inasmuch as depôts for the storage of these materials existed on the banks.

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And lying in the docks there was an average of between six to seven hundred vessels, over none of which had the sanitary authorities on the sides of the river any control whatever.

This was a most unsatisfactory condition of things, and left London open to the practically unchecked importation of infectious and contagious disease of every kind.

By "Provisional Order" of the Local Government Board, the Corporation of London was constituted the Sanitary Authority of the Port of London,* and was made responsible not only for taking proper steps, under Orders in Council, to prevent the introduction of cholera, but was required also to carry out, within its allotted area, the provisions of the various Nuisances Removal Acts and Prevention of Diseases Acts for England, and the Sanitary Act of 1866.

Its authority extended only to things afloat. Whatever was landed came within the province of the local Sanitary Authority, except things landed in the docks, and things "in bond," which were under the control of Her Majesty's Customs.

The work was undertaken at considerable expense by the Corporation out of the City's cash, and at no charge to the ratepayer.

And a Medical Officer of Health for the Port and some Inspectors were appointed.

It was the duty of the Port Medical Officer-

"To inspect, before landing, all emigrants that arrived in the Port from the Continent for purposes of transhipment, and to isolate all suspected cases, and to carry out all Special Orders in Council relating to the prevention of cholera, or other epidemic diseases."

He was also charged with the duty of inspecting, at Gravesend, any cases of sickness on inward-bound vessels reported to the authorities by the officers of Her Majesty's Customs.

As to the prevention of the importation of epidemic

* Issued on the 17th of September, 1872, and renewed the 25th of March, 1873.

diseases other than cholera, reliance was placed upon a speedy and proper examination of vessels as soon as possible after they had come to moorings. A large proportion of these vessels required constant general inspection.

Among the various other duties, fumigation and disinfection of vessels, also of clothing, were not the least important.

at Gravesend.

The work done by the Port Authority was, in spite of many limitations and difficulties, considerable; and the inspection of thousands of ships, the cleansing and fumigation of foul or infected vessels, the removal to hospital of seamen suffering from infectious or contagious disease, and the disinfection of clothing were, sanitarily, of the greatest advantage to the inhabitants of the metropolis. In another matter Parliament, in 1872, made a com-

In another matter Parliament, in 1872, made a completely new departure.

It declared that "it was expedient to make better provision for the protection of infants entrusted to persons to be nursed or maintained for hire or reward in that behalf." And it inaugurated a plan for the protection of the health of the most helpless of its numerous charges—a plan embodied in the Infant Life Protection Act.

"Houses of persons retaining or receiving for hire two or more infants for the purpose of nursing must be registered."

The Local Authority (the Metropolitan Board of Works) was to cause a register to be kept and make bye-laws, and might refuse to register an unsuitable house.

children, &c., &c.

If proved to the satisfaction of the local authority that such person has been guilty of serious neglect, or is incapable of providing the infants with proper food and attention, the house might be struck off the Register, and penalties be imposed—six months with hard labour, and up to £5 fine.

The start made was slow, only six houses having been 17

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For isolation of the sick a hospital ship was maintained

And the registered owner must keep a register of the

registered in 1876; but the Act laid the foundations of a scheme which has had considerable developments.

Specially valuable is it to have the views of one of the foremost men of his time upon the phase of opinion existing at this period upon the general question of the public health. They help to mark progress along the road. The late Mr. W. E. Forster, speaking at the meeting of the British Association at Bradford in 1873, said :--

"I think our aims in this direction are higher than they used to be. We are aiming not only at preventing death. but at making life better worth living by making it healthy. And we no longer forget that in fighting our battle against disease it is not only those who are killed that are merely to be considered, but also the wounded. In those terrible inflictions of preventable disease throughout the country the loss of life is very sad; but even more sorrowful to my mind are the numbers of our fellow-creaturesfellow-countrymen and women-who are doomed to strug. gle and fight the battle of life under the most severe conditions because of wounds they have received from preventable diseases."

While Parliament was thus legislating on several matters considerably influencing the sanitary well-being of the people of the metropolis, the powerful economic and social forces also affecting it were silently and uninterruptedly continuing their work with never-ceasing energy.

With the marvellous industrial developments of the time, trade, and commerce, and businesses of various kinds and sorts were spreading over a wider area, and constantly claiming accommodation to carry them on; and the process continued of the conversion of residential houses into offices and shops and warehouses and workplaces.

The increase of houses in other parts of London, rapidas it was, barely kept pace with the increase of population, whilst it had practically done nothing as yet to relieve overcrowding in the central parts of London.

The excessive density of the population was a great sanitary evil.

"It is a well established law," wrote the Registrat

General in 1872, "that, other things being equal, the insalubrity of a place increases with the density of the population, and that the fevers generated in crowded dwellings have a tendency to spread among the whole of the population."

And it was already pretty generally recognised by Medical Officers of Health that the chief condition affecting the mortality of a locality was the density of population. The Medical Officers of Health never ceased pointing

out the evils of overcrowding. "Overcrowding," wrote the Medical Officer of Health for Whitechapel in 1877, "concerns the whole community, as is strikingly shown by the spread of many diseases which are, perhaps, in the first instance endemic, and confined to these overcrowded places, but which soon become epidemic and extend over large areas, attacking, indiscriminately,

all classes." And their reports are full of instances which had come under their observation. Thus, in 1871, the Medical Officer of Health for White-

chapel wrote :---

"At No. 13, Goulston Street, I found in the back room of the ground floor, closely contiguous to three closets and a dust hole, one man, six women, and three children sleeping there. The room measured $12 \times 9 \times 7$ feet, giving only a cubic space of 756 feet for ten persons."

He mentioned also "a room in Cooper's Court, occupied by man, wife, and seven children, which contained about 630 cubic feet of space, which allows only 70 feet for each."

And numerous other cases of overcrowding and indecent occupation, and a case in which the dead body of a child had been retained in a room for fifteen days.

Passing on to the larger aspects of this dreadful overcrowding, he wrote :---

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"It is manifest that persons living in such circumstances must become so enfeebled in health as to be unfit for any employment which requires much physical strength. The mental capacity of such persons is also so low as to prevent

them earning a livelihood in any occupation requiring much thought, and the consequence is an increase of paupers or of criminals, or perhaps of both."

"Consumption and the whole tubercular class of disease are chiefly caused by the defective ventilation of dwelling. houses, and particularly of sleeping rooms, in which at least one-third of one's existence is passed."

And the Medical Officer of Health for Paddington, in his report for 1871, wrote :---

"Serious evils of physical and moral character are found to afflict the population of these overcrowded houses. The want of fresh air, habitual uncleanliness, bad washing accommodation, with other unsanitary conditions, favour the spread of contagion. There is a notable increase of tubercular and consumptive maladies in our large cities, and the low form of vitality engendered in people who do not enjoy fresh air, leads to the abuse of stimulants and tobacco."

In 1874 he wrote :---

"... Eighteen per cent. of the whole deaths-a formidable proportion—are from the tubercular class of diseases: a greater proportion than zymotic. The 206 deaths from consumption at ages between 20 and 60 show that there exists some general cause silently working great mischief and undermining the constitution of parents at a period of life in health and strength when they can least be spared from their families."

And he added :---

"Large numbers of sickly and weakly children abound in the tenement-houses of our thickly populated streets."

Nor were the homes of the people the only place where overcrowding worked its evil will. Many children-how many there is no means of knowing-suffered from it in the schools which they attended.

The following extracts from reports of an Inspector of the School Board * present a vivid picture of the condition of many schools in existence so late as the year 1874.

* Final Report of the School Board for London,

1. — School. place is closed the better." 2. — School.

"As regards the accommodation provided, thirty-six young children were sitting in an upper room into which the rays of the sun on a bright day in June could not enter -twilight in mid-day." 3. —— School.

"It would be impossible for words to describe the inefficient state of this so-called school. Eighty-two children of different ages-boys and girls-huddled together in a miserable, badly lighted, badly ventilated room, affording accommodation for twenty-three at the utmost.

"No books, no apparatus, no seats; floor and bare walls: the 'teacher' an aged man, standing in the midst of a crowd of children and wielding a cane to keep the 'scholars' quiet, and thus the time goes on." 4. —— School.

"This is not a school—it seems a baby-farm. Seventeen children in a small, filthy hovel. There were four infants a few months old; one lay on a small bed, another in a small cot, and the two others in positions which I cannot here describe. The little ones were quite naked. The woman who pretends to look after this 'school' was engaged in a back yard washing. From the woman down to the infant, all here seemed steeped in ignorance and wretchedness." Here is a case reported by the Medical Officer of Health for Whitechapel, so late as 1880 :--"A schoolroom at 11, Pelham Street, Spitalfields; 9 feet or

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"This is a wretched place, a disgrace to the metropolis. The 'school' is held in an old dwelling-house in Clerkenwell. The house was at one time used as a stable. The approach is most unwelcome, and on entering the schoolroom (upstairs) a most deplorable picture presented itself to the eye. Fifty children crowded together in a small, dingy, shapeless room with space for sixteen, and the window and door carefully closed—in fact, the latter and the doors downstairs carefully bolted. The sooner this

long \times 8 \times 8. There were twenty-five children aged 4-7, and the master and his wife, in all twenty-seven persons, giving 21.3 cubic feet for each."

And here is a report of an early crêche, or baby farm, also in Whitechapel, in 1879 :---

"The Sanitary Inspector found on the ground floor of 24, Freeman Street, Spitalfields, a woman and twenty-five children all under three. They were left in charge of the occupier of the room from nine until 5.30 p.m., who was paid 3d. per week per child. The room was 15 feet \times 7 \times 7, thus affording 28 cubic feet of space per child!! The room was badly ventilated, there were neither chairs nor seats, the children were on the floor, which was in a wet and dirty condition."

The other causes of insanitation were also flourishing. "Noxious businesses" of various kinds continued to pollute the atmosphere, despite legislation against them, and the existence of local authorities charged with the administration of that legislation—a permanent pollution all the year round, and from which there was no getting away.

Very commonly the arches under the railways were used for making and storing artificial manures, the smell from which was intolerable.

The Medical Officer of Health for St. Mary, Newington, 1871 :---

"The private manure-mixing yards have ever been the cause of much annoyance and illness to those living in the neighbourhood. One of these," he added, "had for years been complained of."

And yet the Vestry had not shut it up. And the air was tainted and vitiated by the emanations from them, the owners having no vestige of regard for other people's health.

Another cause of insanitation was the existence of slaughter-houses throughout London, in the most crowded parts, and in close propinquity to dwelling-houses; indeed, in the yards of some of them slaughter-houses, with all their unpleasant concomitants. Cow-houses, too, also close to houses, were numerous, and, in the outer parts of London, even piggeries. A great opportunity was lost in 1874 for greatly diminishing, if not actually terminating, the great "nuisance" of slaughter-houses.

"nuisance of statighter house the statighter house declared absolutely By an Act passed in 1844, it was declared absolutely illegal, on the expiration of thirty years after the passing of the Act, to carry on certain noxious businesses in any premises nearer a dwelling-house than 50 feet, or nearer a public way than 40 feet—the business of slaughtering being among the number. Until 1851 there was no control over slaughter-houses; any one could conduct a slaughter-house who pleased, subject only to the common law as to doing anything which might be considered a nuisance.*

The Metropolitan Market Act, passed in that year, required that all slaughter-houses should be licensed by the justices, thus establishing some form of control over them.

them. When, in 1874, the expiration of the thirty years drew nigh, doubts were raised by those interested in their continuance as to the interpretation of the Act of 1844. The Select Committee, which was investigating the subject of "Noxious Businesses," stated that no evidence had been given before it to show that any of these trades when properly conducted affect the health of the persons living near the premises, and Parliament, accepting this view, passed an Act which undid the enactment of 1844, and allowed slaughter-houses to be continued indefinitely under license. At the same time it conferred on the central authority, the Metropolitan Board of Works, power to make bye-laws with respect to certain noxious trades. And so this fertile cause of insanitation—slaughterhouses—was perpetuated to the present time.

There was, however, a far more general and potent cause of disease and death, and general detriment to the public health, than the pollution of the atmosphere by noxious trades, and that was the reckless scattering abroad of infectious or contagious diseases by persons afflicted with or in contact with such diseases.

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* See Select Committee on Noxious Businesses, 1873. P.P., vol. x.

The Metropolitan Asylums Board had already erected hospitals, and were doing a vast amount of good and preventing the spread of disease.

But by the people themselves the seeds of infection were scattered broadcast.

Dr. Simon, the Medical Officer to the Privy Council, in his Report of 1865, wrote :---

"As to contagions already current in the country, practically any diseased person scatters his infection broadcast, almost where he will-typhus or scarlatina, typhoid or smallpox, or diphtheria, ... the present unlimited license seems urgently to demand restriction."

But the license to kill remained without restriction, except that of entering a public conveyance.*

As the Medical Officer of Health for St. Mary, Newington, wrote in 1871 :--

"How many are the ways in which the spread of contagious disease is, as it were, invited, no one knows better than a sanitary officer. Washing, mangling, needlework, go on in many an infected house; children, aye adults also, the sick and the sound, mix indiscriminately. I have even known the exhibition, as a sight, of the corpse of a smallpox patient. . . ."

And the Medical Officer of Health for Paddington called attention (1873-4) to---

"The extreme indifference displayed with regard to these diseases (measles, &c.), by many of the lower and middle class is an unmistakable sign of an ignorant belief that they are natural events; and such a belief leads to a carelessness of management much to be condemned.

"... The working classes generally visit freely during sickness, allowing their clothes to become saturated with contagious poison."

The Vestries and District Boards did do a certain amount of disinfection; but more than three years after the Sanitary Act of 1866 was passed, in twenty-nine districts (out of thirty-eight) no proper disinfecting establishment

* See Sections 25 and 26 of the Sanitary Act, 1866.

provided (Strand, 1869-70).

The Medical Officer of Health for St. James', West-"No legal obligation on the part of the head of a family ignorance of a so-called civilised and enlightened nation allowing such a cruel and terrible scourge as this to pass

minster, pointed out (1870-1) that in London there wasor landlord, or a medical man, to declare the presence of scarlet fever to the sanitary authority. The consequence is, that long before any knowledge of the existence of the disease has been obtained by the Medical Officer of Health the disease has spread far and wide. If it were not so melancholy, one feels inclined to deride the folly and over the country without any attempt to control it."

"In sixteen years we have lost $\overline{479}$ persons by scarlet fever in St. James'. Where one person dies, 10-20 get it and get well. It is vain to calculate the pecuniary expense of such a curse, but every one can make something like an approximation to the cost of such a waste of human life, and form an opinion of the vast benefit of legislation that should put a stop to this disease."

The Medical Officer of Health for Paddington referred (1876) to the disastrous results of cases of infectious illness not being notified to the sanitary authority, and so enabling precautions being taken to stamp out the infection.

"Such a state of matters, with the annual huge mortality consequent thereon, will continue until an educated people, conscious of its duties and jealous of its rights, demands from a tardy executive the intervention of the legislature to prevent it."

The Vestries and District Boards were gradually doing a good deal of useful work of the sort which did not much conflict with private interests. The great main drainage works of the Central Authority had enabled them to improve and extend their sewerage and drainage works, and from 1856 up to March, 1872, they had borrowed from the Metropolitan Board of Works £757,000 for this purpose;* and the total length of brick and pipe sewer * See Report of Metropolitan Board, 1871-2.

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in accordance with the requirements of the law had been

which they constructed in that period was very close upon 700 miles.

"The large amount which has been expended on works of sewerage and paving, shows that the local authorities in the metropolis have not been unmindful of the require. ments of their several districts."

St. Giles' reported in 1872 that its sewerage was very complete, "not a single street or court being without a sewer." St. Marylebone reported in 1877:-

"£33,500 has been spent in new sewers in the parish in the last three years, and £7,000 is to be spent. Over three miles of new sewers were constructed. These are large items in our parochial expenditure, but the fact cannot be ignored that the sewerage of the parish had got into a disgraceful and indeed dangerous condition.

"In some of the finest streets and squares of the parish the sewers were but little better than elongated cesspools."

Bermondsey reported, in 1872, that the entire district was drained into low level sewers, all open sewers, tidal and other ditches, and cesspools having been abolished; £5,200 expended in widening and improving certain streets, £92,000 spent in sewerage, paving, and other improvements.

St. Mary, Newington, reported in 1871 that the whole of the open sewers and tidal ditches had been covered over; that the drainage was in a satisfactory condition, and that within a few pounds of £400,000 had been spent since 1856 in various parish works and maintenance.

In the Wandsworth district (1873-4) :---

"The enormous sanitary works carried on by the Metropolitan Board of Works and the Board of the District have, by drying the soil and altering the waterlogged condition which formerly prevailed, completely changed the sanitary aspect of the locality."

Not all the work reported as done, however, was done as satisfactorily as was to be desired.

Thus the Medical Officer of Health for St. James', Westminster, wrote (1871-2):---

amount of 'scamping' work. to which 'scamping' can be carried."

(1878) that—

dangerous than the old." improved.

In Lambeth, in 1872, 646 houses without proper water supply were provided with it; and in 1873, 804 houses. Read one way, this was satisfactory. Read the other, it was a revelation of the number of houses in Lambeth which had been left until 1873 without that great essential

of health--a "proper water supply."

out.

Considering the very limited staff of Inspectors which it suited the policy and purposes of the Vestries to appoint, a fair amount of sanitary inspection was done in some parishes and districts. The striking fact about the inspections made is the very high proportion of houses in which the sanitation

was defective.

In Bermondsey, in 1879, where 1,577 houses and premises were inspected, 1,495 notices were served.

In Limehouse, in 1879, 1,411 houses were inspected; and 1,070 orders for sanitary amendments issued.

In Shoreditch, where there were 15,500 houses, the two Sanitary Inspectors appear to have done a lot of useful sanitary work. In 1877-8, 5,465 separate nuisances dangerous to health were abated.

If anything like a similar proportion prevailed generally throughout London, the housing of its huge population was indeed in a dreadful state.

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"Sewers and drains being out of sight admit of a great

"Speaking from experience, some of the local sewers in St. James' are specimens, I hope unique, of the extent

And the Medical Officer of Health for Shoreditch wrote

"Some of the new drains (being so badly laid) are more

The arrangements for water supply were also in some few parishes, in process of years, being slowly

A large amount of street paving had been done, and a few small street improvements had been carried

In some ways the local authorities were awakening to their responsibilities, and beginning to avail themselves of some of the provisions placed by Parliament at their disposal.

In Paddington, St. Giles', and Rotherhithe, the Vestries had adopted the Baths and Washhouses Act of 1846, and thus helped to promote habits of cleanliness, and to diminish some of the insanitary evils consequent on the tenements being turned into temporary wash-rooms.

And in St. James' (Westminster) and Lambeth, mortu. aries had been provided, which, in some cases, at any rate, obviated some of the insanitary evils consequent on the retention of dead bodies for long periods in single-roomed tenements where death had been caused by contagious or infectious diseases.

More action was being taken, too, as regards the disinfection of rooms where there had been cases of infectious disease. Thus in Lambeth in 1877-8, 824 houses were disinfected.

Here and there, too, the owners of noxious trades were being compelled to adopt methods rendering their businesses less insanitary and objectionable to their neighbourhoods.

The Local Government Board had caused an elaborate inquiry to be made by Dr. Ballard as to-

"' In what measure and by what means nuisances and injury to health from offensive businesses might be avoided,' and the report led to quite a satisfactory result.

"It showed that by the application of such knowledge as was at command, all or nearly all businesses that are in a serious degree offensive might be carried on either without offence, or with such important reduction of offence, as should make it tolerable, or even trivial."*

In Fulham several piggeries were closed by law; not without regret, apparently, for the Medical Officer of Health stated in his report:---

"It certainly is very hard on the pig keepers individually, * P.P. 1878-9. Report of Local Government Board, vol. xxix., p. xiii

the welfare of the many."

results of inspection and supervision in the registered Common Lodging Houses. In the parish of Spitalfields (in Whitechapel, 1880) there were 109 of these houses containing 454 rooms The class registered to accommodate 3,992 lodgers. of persons occupying them were, notoriously, the very

lowest. "We failed to learn that any respectable mechanic with his wife and family ever applied at these houses for lodging accommodation. Yet," reported the Sanitary Inspector (1880), "we discovered no case of overcrowding. The bedding was clean; the yards and closets were in a good sanitary condition; there was a good water supply, and the walls and ceilings of the houses were clean."

If these results were obtainable in dealing with the worst classes, in the overcrowded parts of Whitechapel, a fortiori, inspection and supervision would have been productive of similar benefits among the general tenement population.

is speedily given."

While thus recommending inspection, supervision, and compulsory rules, another view was also expressed.*

* By the Medical Officer of Health for Whitechapel, 1878.

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but it is in accordance with the recognised law of civilisation, that the interests of the few must be sacrificed to

Upon one course of action all the Medical Officers of Health were in agreement—the absolute necessity of inspection and supervision of the houses of the people. In season and out of season they advised it, and urged it as the most essential and the most useful of all duties.

In support of these views they could point to the

The Medical Officer of Health for St. George-in-the-East referred to the low mortality in model lodginghouses, where also there was supervision.

"There we find good sound dwellings, &c., &c. No overcrowding is permitted, only a certain number in family being accepted as tenants. Cleanliness on their part is expected—enforced if necessary—or a notice to quit

"As laws have been enacted for the abatement of overcrowding, it is easy to say: 'let those in authority put them in force'; but I much fear unless the question is taken up with a spirit of love towards the poorer and more ignorant classes by the upper and middle classes, and measures adopted to give instruction to the poor in matters concerning their physical well-being, the existing state of things will long continue."

"No class will become civilised by being left to themselves, as unfortunately is the case in the numerous back slums of London, but improvement, physically and socially, can only be effected by a superior class mixing and associating with a class below them."

The Medical Officer of Health for Poplar wrote:--

"The poor want more than model dwellings, more than warmth, food and clothing; they want humanity, and the knowledge of the laws governing health."

Unfortunately those remedies were, at best, a matter of considerable time, and improvement could be but of slow growth. Immediate measures were required to cope with the appalling evils, and for the house-owners, even more than for the unfortunate tenants, were supervision and compulsory rules requisite.

But not one tithe of the Vestries and District Boards would enforce against owners the regulations under the 35th Section of the Sanitary Act of 1866.

Though something was being done as regarded the inspection of houses and the repair of sanitary defects, hardly any progress could be said to have been made for the improvement of the dwellings of the poor.

The Artisans' and Labourers' Dwellings Act (Torrens) of 1868 was to a small extent being made use of.

In some parishes houses considered by the Vestry or District Board as unfit for human habitation had been closed, and were only allowed to be reopened upon proper repairs having been carried out. In other cases where no amount of repairs could put the house into habitable condition, the landlord was directed to pull down the buildings (without his receiving any compensation), and,

in default, the Vestry could pull it down at his expense. The site remained unoccupied, until the owner or landlord used it again for building purposes, or sold it to some one else.

In St. Giles' (1873-4) the District Board has been enabled under the Act to enforce "considerable improvements in and immediately adjoining the worst parts of St. Giles'." (Houses in yards and courts were demolished.) In St. Luke the total number of houses "pulled down

or closed " amounted by the year 1875 to 104.* In Holborn the Board had been-

"Applying or threatening to apply the Act to houses that could be fairly subjected to it. Besides having 150 houses, chiefly belonging to one owner, put into a complete sanitary repair, it has been actually applied to 136 houses; 70 thoroughly repaired, 40 demolished, 26 to be rebuilt, and 10 to be closed."

There were many difficulties in using the Act. Notice of houses being unfit had to be given to "owners." A certain case in Chelsea was mentioned where-

"There were freeholders, lessees, under-lessees, and sublessees, and their trustees and mortgagees, and besides there were the occupiers."

But in the great majority of parishes or districts no steps were taken under the Act. The Act did not give any compensation to the owners of condemned property, as Parliament had declared by it that compensation should not be given to those who permitted their property to fall into such a state, whilst at the same time extracting the fullest benefit from it.

To such a doctrine there was, of course, the strongest hostility by all those who held the opinion that a man might do as he liked with his own, and extract from it the uttermost farthing regardless of the infliction of disease and suffering and death upon those who were so unfortunate as to become his tenants, and reckless as to the injury his action was inflicting upon the community at large. And so :---

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* P.P. 1875, vol. lxiv.

"The reluctance of the local authorities to take away a man's property was insuperable, and consequently no very great demolition took place."

The Medical Officer of Health for St. Pancras wrote (1876):--

"The Act is almost inoperative. The highly penal nature of this statute, which in the event of demolition gives no compensation to the owner whose property is destroyed, makes Courts of Justice extend every possible leniency to the owner. Moreover it does not contemplate any scheme for the reconstruction of the houses demolished, or other provision for population displaced. . . ."

And the Medical Officer of Health for St. James', Westminster, where no action was taken under it, wrote (1872-3):—

"It is scarcely necessary to say that such an Act could not be acted upon without the grossest injustice to the owners of property, and the infliction of the greatest hardship on the poor."

But there was another view, much nearer justice, which was given expression to before the Select Committee in 1881.

"An owner of property who allowed his property to fall into such a miserable state as to be unfit for human habitation is not a man that deserves the slightest consideration of any kind from Parliament—he ought to be treated rather as a criminal than an owner of property. To compensate him is a mistake entirely."

And the Medical Officer of Health for Whitechapel said it was his opinion that—

"If the landlord leaves his house in a very bad state, and will not listen to any representations, he ought not to be paid by the public when he is creating a nuisance."

The Act of 1868 having helped so little to a solution of the housing problem, and the matter being one of everincreasing urgency, an effort was made to deal with it in 1875, when a Bill for facilitating the improvement of the working classes in large towns was introduced into Parliament by Sir R. A. Cross, and was carried. It often happened that in some of the worst slums, the houses were the property of several owners, and it was not therefore in the power of any one owner to make such alterations as were necessary for the public health.

"Dealing with whole areas, where the houses are so structurally defective as to be incapable of repair, and so ill-placed with reference to each other as to require, to bring them up to a proper sanitary standard, nothing short of demolition and reconstruction. Accordingly, in this case, the local authority, armed with compulsory powers, at once enters as a purchaser, and on completion of the purchase proceeds forthwith to a scheme of reconstruction." †

An official representation, that the houses within a particular area were unfit for human habitation, was to be made to the Central Authority, the Metropolitan Board of Works, by the Medical Officer of Health of a Vestry or District Board, and the Metropolitan Board was empowered to declare the same to be an unhealthy area, and to make an improvement scheme in respect of it. If it decided that an improvement scheme ought to be made, it should forthwith make such a scheme, which, after sundry formalities, was embodied in a Provisional Order which had to be confirmed by Parliament.

The compensation to be paid for the property so taken might be settled by agreement between the Metropolitan Board of Works and the owner, but where no agreement was arrived at, an arbitrator was to be appointed by the Secretary of State. The arbitrator was to assess the compensation at the fair market value of the lands concerned, due regard being had to the nature and then condition of the property, but no additional allowance was to be made in respect of the compulsory purchase of the area.

The value settled, and the land having passed into the hands of the Metropolitan Board of Works, the obligation

* "The Artizans' and Labourers' Dwellings Improvement Act," 38 and 39 Vic. cap. 36. † See Royal Commission Report, 1884.

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The Act* of 1875 contemplated-

18

was imposed on that body of pulling down the buildings, and selling, or letting, the cleared ground for the erection of improved dwellings for the same number of people.

The hardship of working class and poorer persons being turned out of houses and no other accommodation being provided for them was formally recognised in this matter, and the scheme had to provide for the-

"Accommodation of at the least as many persons of the working class as may be displaced in the area ... in suitable dwellings which, unless there are any reasons to the contrary, shall be situate within the limits of the same area, or in the vicinity thereof. It shall also provide for proper sanitary arrangements."

The Act was intended to relieve owners of such property without loss or benefit, and several representations as to unhealthy areas were made to the Metropolitan Board. The facts stated in these representations and subsequently brought out in evidence in the public inquiries held, were illuminating as to the terrible depths which the conditions of life of numbers of the people had been allowed to reach, without the intervention of the law, or the staying hand of the freeholder, lessees, or sub-lessees, who derived financial profit from the property.

The Medical Officer of Health for Limehouse described one of them :---

"The area, though not large, contained abominations sufficient for an area three times its size. Here were crowded houses, built no one knows when; how they stood was a marvel, their walls bulged, their floors sunk, an indescribable musty odour pervaded them; water supply, drainage, closets, all were bad, and in my opinion, nothing could remedy such a state of things short of pulling down the rickety buildings."

"The area is inhabited by about 800 people, and the death-rate is about 36 per 1,000."

In another of these schemes, in one Court (Sugar Loaf Court) the death-rate was 105.2 per 1,000.

The Medical Officer of Health for the Strand gave a report on the sanitary state of Bedfordbury:--

light and air difficult of access. for the poor to live in.

"Even this bright and sunny morning the staircases were so dark that you could not see a single stair-there was not a scrap of ventilation, and no means of getting light or air to them.

"No. 37 is occupied by 33 people living in six rooms; on the second floor the two rooms are tenanted by two families, respectively five and seven, and the third floor by two families of six each."

No. 41 was very similar. "These two houses may be taken as a type of the condition of the houses in Bedfordbury."

"Off this street were various Courts, one of them of six three-roomed houses; its width three feet five. Another Court-seven houses, 20 rooms in all-population 71. All of them apparently as bad, or worse, than those in the street -miserable hovels, the birthplace of disease and vice, and centres for infectious diseases, which are likely to spread through the whole community."

The births and deaths were almost equivalent. In 1872, there were 92 births and 95 deaths. In 1873, there were 108 births and 108 deaths.

"In 1874, there were 95 deaths and only 82 births. The deaths are exclusive of those people who have been removed from the neighbourhood and gone elsewhere to die, either in the hospital or the workhouse, where a great many people at the present time do go to die." Of the overcrowded rooms he says :---

"Here legions of crimes and legions of vices unite,

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"Bedfordbury is the black spot of this parish. It and the contiguous courts are a little over three acres. Population census of 1871 = 2,163. It is a long narrow street of 47 houses with courts leading out of it on either side. Some of the courts are blind and very narrow, thus rendering

"These 47 houses are so old and dilapidated that it is quite impossible to make them fit and proper habitation

fostering diseases of body, weakened intellect, and utter destruction of the soul; leading inevitably to a career of wickedness and sin."

Confirmatory of the Medical Officer of Health's descrip. tion, was that given in a memorial to the Metropolitan Board by 118 persons: "The Clergy, Medical Men, Bankers, Residents, Professional men, and Traders of the parish of St. Martin-in-the-Fields, in support of a scheme of improvement."

"Bedfordbury, with its swarming, ill-built, badly ventilated, rotten, inappropriate, unsavoury tenements, has seemed to us a very forcing pit of immorality."

"In it there are 797 people living on one acre of land."

"There is a very large number of interests to be paid for. There is first the freeholder; then there is the first lessee; then there are numbers of under-lessees, and all the trades of those little shops, and they ought all to get something."

And another area was the "Great Wild Street Scheme," in the parish of St. Giles'-in-the-Fields.*

"This area has long been a hot-bed of disease. It contains about $5\frac{1}{2}$ acres, and 227 houses stand upon it inhabited by 3,897 persons.

Great Wild Street 58 houses containing 926 persons.

Drury Lane	- 31	53	,,	َ 425 ⁻	,
Princes' Street	14	,,	,,	315	,
Wild Court	14	"	"	346	,

"Many of the courts and passages are approached by a narrow passage under a house at either end which renders ventilation very defective. Some of the houses are built close together and have dark passages and staircases, others have no back yards, and their sanitary arrangements are placed in the basement. Health under such circumstances is impossible. This part of St. Giles' has long been noted for its heavy sick and death rates, especially from diseases of the respiratory and pulmonary organs, and from typhus fever and other zymotic disorders in their most contagious forms." †

* 1877, 24th March. † Inquiry by Cubitt Nicholls, March 24, 1877.

Dr. Lovett, the Medical Officer of Health, stated that diseases were very rife in it, and a very high rate of mortality as compared with the number of cases.

And he added, "The district is a nest of zymotic diseases of the most contagious kind. In 1874, 27 cases of typhus were sent to Stockwell Hospital. This state of things cannot be dealt with under Torrens' Act. The houses are built so close together, the people are so huddled together . . . you must make a clean sweep of the buildings."

Another of these insanitary areas was Pear Tree Court, in Clerkenwell, "consisting of small tenements of an exceedingly inferior description. All are more or less calculated to engender disease and filth. The condition of the property has been such as to be a reproach to the neighbourhood.

"Occupied by the very poorest of the community. When disease made its appearance it has been fostered and engendered and continued by the state in which the property and its surroundings have been—the death-rate is nearly double of that which prevails over the whole parish.

"Some of the tenements are of the most wretched description—some constructed of lath and plaster—some wooden houses—the floors rotted partly by the cisterns, partly by rain coming in.

"In some cases the sanitary convenience is in the very rooms themselves—also the water-butt—thereby engendering and perpetuating the worst kind of zymotic disease : the chosen home of fever and also of smallpox.

"... When we come to those occupying only one room each, and remembering that in many of these rooms the closet, the water-butt, the water supply, and everything else was contained in the room itself, and that there was no provision for manure, ashes, or refuse of any kind, you can easily conceive what a wretched state of things that presents. On the average there were 2.80 persons per room permanently occupying them. So it cannot be wondered at an outbreak of the zymotic disease finding a resting-place

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"An entire absence of ventilation.

there, and that such a locality becomes a plague spot in the neighbourhood, and extends its ravages thence into healthier neighbourhoods."

Some of the houses the Medical Officer of Health had known to be in the same state for the last 36 years.

"... An ill-constructed, unhealthy warren;" some were "regular old shanties—you could hardly find anything like those in the metropolis, they are worth looking at as a curiosity."

"Some in Clerkenwell Close are large and very old wooden houses, all tumbledown. There is no straight line in roof or windows—the windows are like cabin windows."

One more case is worth giving details about, as it is one of those rare cases in which one gets a more continuous account of the effects of slum ownership than is usually accessible.*

This was the Little Coram Street scheme, in St. George, Bloomsbury, in St. Giles' District, comprising 119 houses -1,027 inhabitants.

The Medical Officer of Health, in his representation to the Metropolitan Board, gave a minute description of the place.

"The houses are principally let to cab owners, who stable their horses in the lower floor, and reside with their families in the rooms over; they are without back yards, and the rooms mainly derive their ventilation from the staircase leading out of the stable, so that the air is contaminated by the noxious gases which issue from it. All the closets are inside the houses; there are no dustbins, and the drinking-water is often obtained from underground tanks, which serve both for stable, cleaning, and culinary purposes.

"These houses are unfit for human habitation."

"The district now represented as unfit, &c., constitutes the worst part of the parish of St. George, Bloomsbury, and has been notorious for years as largely contributing to the sick and death rates of the sub-district."

In 1862 it was reported that it had "habitually a much higher mortality than the rest of the parish."

* Appendix. Select Committee Housing, 1881, p. 354.

In the followin increasing there."

in a short time. During the same year the deaths in Chapel Place from three classes of disease—the zymotic, pulmonary, and tubercular—having been 17, the death-rate to population was 70 per 1,000 without reckoning those from other causes.

In 1871 the general mortality was 50 per cent. greater in it than that in the parish, whilst that of cholera was four times greater.

In 1874, nine cases of typhoid and typhus fevers occurred in it, "and the locality was conspicuous for diseases and premature deaths." In 1876 scarlet fever was prevalent.

Asked what class of disease the people chiefly suffer from, the Medical Officer of Health replied :—

"Mostly from debility—zymotic diseases, and infectious diseases—such as whooping cough, typhus, typhoid fever, cholera, diarrhœa, measles, scarlet-fever, &c., &c., smallpox, and gin liver disease. . . They are obliged to resort to gin on account of the close and depressing condition in which the people live in these Courts free from the public eye.

"The women have to stop at home; they do not get out, and therefore do not get any excitement. Then they take their drops. You can often see women at twelve o'clock in the day drinking in public-houses." The Parochial District Medical Officer said :---

"The houses are so old that the air is really poisonous; it is full of miasma and dirt . . . all the whitewashing and ventilation in the world would do no good. The condition of the property has got worse year by year."

These are but some of the cases about which "representations" were made to the Metropolitan Board of Works sufficient, however, as illustration of others. And what an awful and appalling picture they present. Had the condition described been only temporary, a mere passing phase, it would have been dreadful enough; but it had been going on

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In the following years "the mortality was seriously

In 1870 smallpox broke out first in it, and 25 cases occurred

for years—it was permanently so—producing year after year its fearful crop of misery and crime, of disease and death, and scattering broadcast the seeds of disease and death, the "owners" all the while exacting the uttermost farthing they could in rents from the miserable inhabitants, and placidly and remorselessly giving disease and death in return: going on, too, during twenty years of government by "local authority"—Vestry and District Board—and nearly ten years after the passing of the Sanitary Act of 1866, with its provisions for the abatement of overcrowding and the maintenance of a certain standard of cleanliness.

A few years' experience of the working of the Housing Act of 1875 proved that it was dilatory, cumbrous, and costly to the ratepayers of London.

The arbitrator frequently awarded to owners of places unfit for habitation compensation equal or almost equal in amount to what would have been given if the houses had been good and sound. This the Metropolitan Board felt to be an injustice to the ratepayers upon whom the charge fell, and an encouragement to owners of houses occupied by poor people to allow them to fall into or remain in a dilapidated condition.

In the year 1879 the Board accordingly made representations to the Government, and suggested that the owners of unhealthy houses should not be compensated in proportion to the profit they derived from such houses, but according to their value as places pronounced unfit for habitation. The Board also pointed out—" the great loss entailed upon the ratepayers by the obligation which the Board was under to provide for the accommodation in suitable dwellings in the same area of at least as many persons as were displaced. This obligation rendered it necessary for the Board to sell, at a very low price, ground, which, with the dilapidated buildings upon it, had cost the Board seven or eight times as much, and which, if the Board had been free to dispose of it for commercial purposes, and to provide for the dispossessed people elsewhere, would have realised a much higher price."*

* See Report of Metropolitan Board, 1888.

On the six areas which had been sold to the Peabody Trustees it was estimated that the Board—or in other words, the ratepayers of London—would lose the large sum of £562,000.

The Board suggested that it should have power to dispose of the cleared ground for commercial purposes, and to provide for the re-housing of the displaced families in other parts of London.

This latter suggestion was not adopted, but Parliament passed an Act in 1879 which to some extent lessened, though it by no means removed the defects of which the Board complained, for the Board declared that "after careful consideration, it thought it well not to prepare any more improvement schemes until some further experience has been gained of the working of the Amendment Act of 1879."

And in 1879, also, an Act * was passed which nominally "amended," but in reality destroyed the real good of Torrens' Act of 1868, and gave the owner power to require the local authority to purchase the premises which had been condemned as unfit for human habitation, and which the local authorities were to rebuild and hold—thus practically relieving the worst class of slum house "owners" of any consequences for their malpractices, relieving them, too, in the most open way at the expense of the ratepaying public, as it empowered the Vestry "to levy a rate of twopence in the pound to bear this expense as well as that of building sanitary dwellings on the site."

By one means or another it invariably worked out that the slum owner obtained large sums for his vile property, and that the public had to pay heavily for his iniquities.

The work which was within the power of the Vestries and District Boards to do, in connection with the sanitary condition of houses, was far more wide-reaching in extent, and more immediately effective than any the Central Authority could do under its powers. Practically the Vestries had under their supervision the sanitary condition of all the houses of London. Moreover they could act upon * 42 and 43 Vic. cap. 64.

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their own initiative, whereas the Central Authority could only act when representations were made to it.

But with few exceptions, they resolutely fought shy of dealing with the crucial evil-the condition of the tenement. house population of the metropolis.

"There is no doubt," wrote the Medical Officer of Health for Paddington, in 1871, "from the abundant experience and records of the Sanitary Department of this and other Vestries, that houses let out in single rooms, and to several families, have endangered the life of people, have favoured the spread of contagion, and are a source of pauperism and degradation."

The various Health Acts gave them power to deal with most of the prevalent nuisances.

But no Act gave them such rapid and effective means of action, or so fixed upon the owner the responsibility and cost of keeping his houses which he let as tenement-houses in proper sanitary order, as did the Act of 1866 by its 35th Section.

This Act had conferred power upon them to make effective bye-laws or regulations as regarded such houses; and in 1874 the Sanitary Law Amendment Act conferred further powers upon them. Regulations could now be made as to the paving and drainage of premises, the ventilation of rooms, the separation of the sexes, and to securing notices being given to the Medical Officer of Health, and precautions being taken in case of any dangerously infectious disease occurring in a registered house.

By such regulations the notification of infectious disease occurring in tenement-houses could have been made compulsory, and such notification would have been of the very utmost value in enabling sanitary authorities to combat the ravages of infectious disease.

The regulations struck at the root of the very worst and most prevalent evils in the homes of the people, and had they been enforced, would have been a charter of health to millions of the people.

The Medical Officer of Health for Chelsea, in one of his reports, well enforced their importance.

"When it is remembered that the whole of the labouring population occupies but part of the house in which their families live; that in many houses three or four families live together; and not infrequently each family occupies only a single room; and when it is considered that whenever necessary all such houses may be registered, it will at once be seen how important is this regulation." *

These sections nevertheless remained absolutely a dead letter in nearly every one of the metropolitan districts, and even the newly constituted Local Government Board did not exercise its power of declaring them to be in force in any district.

From a return compiled in 1874 it appears that :---

(a) In only seven parishes or districts † were regulations made and enforced; how imperfectly even in these is illustrated by Lambeth where, in 1873, 47 houses only had been registered-there being 29,000 in the parish, one half of which were probably let in lodgings.

(b) In six districts regulations were made but no attempt made to enforce them.

whatever had been made.

made of the regulation.

on the part of the Vestries not to enforce the sanitary laws as regarded houses was their regard for the financial interests of the ratepayers. But the real ground of their aversion was that action would put house-owners to expense. "Vested rights in filth and dirt" were strongly represented on the Vestries and District Boards.

As a witness said before a Select Committee in 1882:---"So long as vestrymen own little properties, and so long

as their relations and friends do the same thing, and they are all mixed up in a friendly association, you can never get

parish),

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(c) And in twenty-five parishes or districts no regulations

In Hackney and Chelsea alone was any widespread use

The explanation usually put forward of the determination

* The Medical Officer of Health for Chelsea (writing of his own

† Chelsea, Hackney, Shoreditch, Lambeth, St. George (Southwark), Camberwell, Plumstead.

the prevention of the continuance of unhealthy tenements carried through."*

And not only was there a passive but often an active opposition to work being performed which it was their duty to do.

A general inspection would have shown what houses ought to have been made subject to such regulations, but it would also have exposed too publicly the iniquities of house. owners, and would have entailed a heavy expense on those who left the houses in a perpetual state of dilapidation, insanitation, and filth; and so the staff of inspectors was kept as low as possible.

A thorough enforcement of the regulations would have necessitated a supervision of their houses by the owners in addition to expense.

Many straws showed which way the wind blew. Thus the Medical Officer of Health for Bethnal Green wrote :--

"It is by the constant inspection and reinspection of property inhabited by careless and destructive tenants that most good can be done. I recently felt it my duty to recommend a house-to-house inspection of the whole parish—a procedure urgently required to ascertain the condition of the drainage and water supply arrangements. I regret to say this recommendation was not acted upon."

And the Medical Officer of Health for St. Pancras, in referring to house-to-house inspection, wrote :---

"This most important branch of all sanitary work has received as much attention as the number of the sanitary staff will admit."

And so the regulations were not made, or if made were not enforced. And, as the result, the great masses of the working classes, and the poorer classes in the metropolis, were by the deliberate decision of the great majority of Vestries and District Boards deprived of the protection which Parliament had devised and provided for their sanitary and physical well-being; and all the well-known evils of overcrowding were indefinitely perpetuated.

* Goddard, 1882, Select Committee, p. 576.

other motives which might have done so. in 1871 :---

"... As the local rates are continually increasing for the relief of sickness and the support of widows and orphans, the building of asylums for the insane, and the providing of workhouse infirmaries for the debilitated and prematurely old, it is probable that local boards will direct more attention to the condition of the houses of the poor than they have hitherto done."

The cost was brought home to them in 1871—" an exceptional year of mortality caused by the continued spread of smallpox."

"It has been," wrote the Medical Officer of Health for Lambeth, "one of the most alarming and expensive epidemics that have visited the country for a century. The cost in a pecuniary sense has been great, but it is nothing as compared to the cost of human life. "... I know of no disease that can be made so preventable

as this."

wrote :---

"No extravagance can be compared with that of sanitary neglect. Pounds are willingly paid for cure, where ha'pence would be grudged to prevent. Some diseases we can create, most we can propagate, and send on their errand of misery and destruction."

In 1878 the Medical Officer of Health for Whitechapel again referred to the subject :---"It may be asserted without fear of contradiction, that all

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Apart from the sense of duty or responsibility to the people which ought to have appealed to them, there were

The Medical Officer of Health for Paddington called attention to one of them in 1872. He wrote :---

"The costliness of preventable disease is enormous.

"(a) Sanitary supervision. (b) Removal to hospitals. (c) Disinfection. (d) Expenses in hospital. (e) Cost of burial. (f) Loss of work in wages. (g) Loss of life to the community. (h) Cost of widows and children."

And the Medical Officer of Health for Whitechapel wrote

The Medical Officer of Health for St. George-the-Martyr

money laid out for the improvement of the public health will secure an ample dividend. . . .

"The alleviation of suffering and the prolongation of human life is the duty of every noble-minded man to endeavour to promote.

"It cannot be too frequently reiterated, too extensively known, that the rich not only pay a heavy pecuniary penalty. but often suffer a heavy affliction in themselves and families by neglecting to improve the sanitary condition of the houses and localities occupied by the poor. It is well known that defective sanitary arrangements in the poorer localities are the chief causes of disease among the poor, and when a contagious disease is once located it soon assumes an epidemic form and attacks, indiscriminately, all classes of the people."

These views were sound and true, but the contingencies described always appeared remote, and arguments of more immediate and remunerative results were constantly present.

If the conduct of the Vestries and District Boards was reprehensible for not administering the existing laws for the improvement of the sanitary condition of the poorer classes, and if the consequences of their deliberate inaction were so fatal to the lives of countless thousands of the people and so disastrous to the well-being of the community, the conduct of the "owners" of the houses, for the manner in which they allowed their tenants to live, was still more so.

"I often wonder," wrote the Medical Officer of Health for St. George-the-Martyr (1874-5), "what many of the owners of property think man was created for except indeed that he should be housed in foul, wretched dwellings in order that money may be put in their purses, and so they may reap where they have not sown. A grim kind of harvest that will prove. Surely the owners have neither humanity nor justice on their side when they allow their houses to become hotbeds for the fostering and spreading of disease, moral and physical, and in which it is impossible either to maintain cleanliness, or support health, or practice morality. There are thousands of such houses. . . .

"The only true and lasting foundation upon which the

glory and safety of a nation can be built, must be upon the cultivation of the moral and physical powers belonging to man." The "owners" were of all classes.

from insanitary house property."

and ladies." "The class of landlords we have here are very shrewd money-making men, and they would not show much consideration to their tenants."

The Medical Officer of Health for St. George-the-Martyr, Southwark, reported (1876-7) :---

"We have heard denounced, times out of number, and in the strongest terms, the conduct of the holders of small property as being most selfish, and they themselves the most persistent and obstinate opponents of sanitary measures and improvements; and moreover that this class formed a considerable portion of our Vestries. However this may be, they cannot claim a monopoly to this unenviable distinction. . .

"Much of the small class property is placed in the hands of agents who neither hold nor cultivate any interest in the welfare and comfort of the tenants.

"To get the most rent with the least possible trouble and outlay seems to comprise their whole duty (of course there are exceptions).

"How much better in all respects would it be that the owner himself should give some personal supervision to his property and to the state of those who dwell in it."

And there was another class of "owners"-the middlemen-" the very curse that is incident in all society."

"There are a great many middlemen dealing with these properties. A great deal of it is to let out in lodgings. A man goes and buys this wretched property at public auction * Mr. Hunter Rodwell, O.C., M.P.

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An experienced witness * before the Committee of 1881, who had acted as arbitrator in some of these cases, referring to some of the worst slum areas in London, said :---

"It came before me that a great many people in life better than that supposed, do draw considerable incomes

"Some of these worst places are held by rich gentlemen

in different parts of London to pay him 10 or 12 %, and he underlets it at so much a room to weekly tenants."

"It is these small men who go into it to make a profit. and screw the poor, wretched holders down to the last farthing—in fact they get as much as they can out of the property, and do as little as they can."

Some of the Medical Officers of Health referred to the difficulties of getting the "owners" to do anything to keep their property in order.

Thus the Medical Officer of Health for St. James' wrote (1877-8):---

"On eastern border of parish a large number of houses are now increasingly being underleased in order to be let out as tenement-houses. . . . Dealers in these houses make enormous aggregate rentals out of the improvident working people whom they thus herd together; and persistent efforts on the part of the sanitary officers are needed to goad some of these 'landlords' into keeping their 'property' in a decent condition."

With a very large number of house-owners and other sanitary misdoers, nothing but the vigorous administration of the law would induce them to abate nuisances or do anything for their tenants.

"I am quite sure," wrote the Medical Officer of Health for Hackney in 1880, "that a prompt and strict enforcement of the various sanitary Acts is beneficial not only to tenants, but landlords, because the latter will not allow tenants to occupy their houses who frequently bring them under the notice of the sanitary officers."

With many, however, the fact that the law had been put in force against them, and would, if necessary, again be put in force was sufficient.

"The number of statutory notices this year was not much more than half. Owners have carried out the necessary works for fear of being summoned."

And numerous other reports were to the same effect. But a vigorous administration of the sanitary laws against owners was the very last thing which it was of use looking to the Vestries or District Boards for.

Some of the Vestries and District Boards put pressure upon their Medical Officers of Health to prevent energy upon their part.

Thus the Medical Officer of Health for St. Pancras in 1875 tendered his resignation, giving the following reasons:---"That while I am held responsible for the sanitary condition of the parish, I am denied that assistance in outdoor inspection of houses either visited with contagious diseases or habitually in an unsatisfactory condition, which I believe to be necessary. I feel that the severe condemnation which a house-to-house visitation of the poorer parts of the parish has received from a majority of the sanitary committee must of necessity hopelessly weaken my authority with the sanitary inspectors, and render nugatory my efforts to carry

out the Sanitary Acts. . . ."

Parliament was passing some useful legislation for the improvement of the public health, and taking some action against some of the more heinous existing abuses.

Several of the evils already described connected with the building of houses were dealt with in an Act * passed in 1878. It was at last declared to be-"expedient to make provisions with respect to the making, filling up, and preparation of the foundation of sites of houses and buildings to be erected within the metropolis, and with respect to the quality of the substances to be used in the formation or construction of the sites, foundations and walls of such houses with a view to the stability of the same, the prevention of fires, and for purposes of health."

The Metropolitan Board of Works was empowered to make bye-laws respecting the foundations and sites of houses to be constructed, and with respect to the material used in the construction of such houses and of the walls and buildings; and the Board issued a set of comprehensive regulations upon the subject.

"Considerable opposition was manifested by builders before the Secretary of State." But, nevertheless, the regulations were sanctioned and approved.

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* 41 and 42 Vic. cap. 32. 19

And in the same year (1878) Parliament had passed an Act which materially improved the sanitary conditions under which men, women, and children worked in factories and workshops.*

Guided by experience, Parliament had gradually been extending the operation of the previous Acts from one trade to another, and as Lord Shaftesbury said :---

"The general result had been to introduce and establish a system of order, content, and satisfaction. The children in the factories presented quite a different appearance from that which was their characteristic in former times; they were now hale and stout."

And the Factory and Workshops Royal Commission † in 1876 wrote :---

"The improvement in the sanitary arrangements and ventilation of factories had been most marked in recent years; and the cases in which young persons and women suffer in labour unfitted for their years, or in which young persons and women suffer physically from overwork, are now, we believe, as uncommon as formerly they were common.

"Much of this great improvement is undoubtedly due to factory legislation."

The Act directed that :---

"A factory or workshop should be kept in a cleanly state and free from effluvia arising from any drain, or other nuisance."

And that they should "not be so overcrowded while work is carried on therein as to be injurious to the health of the persons employed therein, and should be ventilated in such a manner as to render harmless, as far as practicable, all the gases, dust, &c., generated in the course of the manufacturing process and that may be injurious to health."

By subsequent order of the Secretary of State, 250 cubic feet air space were to be given to each adult during the day, 400 cubic feet after eight o'clock at night.

It was to be "the duty of the sanitary authority to make such inquiry and to take such action thereon as to that

+ P.P., vol. xxix.

* 41 Vic. cap. 16.

authority may see

A very material factor in the health of the people was dealt with in this Act—namely, the condition of the bakehouses where the daily bread of the community was prepared.

Legislation as to bakehouses had been left unchanged since the Act of 1863, and in harmony with the usual disregard of their duties by the local sanitary authorities, little use was made of that Act.

The Royal Commission of 1875 reported that it was "only here and there that any active steps had been taken by the local authorities to carry out the provisions of the Bakehouse Act."

By the Act passed in 1878 the Bakehouse Regulation Act of 1863 was repealed, and the duty of regulating the sanitary condition of bakehouses was transferred from the local authority to the Inspectors of Factories.

In 1878, also, the Contagious Diseases Animals Act was passed. Primarily it was directed to the protection from cattle plague of the cattle of the country, and the prevention of the spread of disease, which had been entailing heavy losses upon their owners, and very stringent precautions were imposed.

But it contained also some very valuable provisions as to the condition of cowhouses and dairies, and early in 1879 the Privy Council issued an Order providing for the registration of all persons carrying on the trade of cowkeepers and purveyors of milk, for regulating the lighting, ventilation, cleansing, drainage, and water supply of dairies and cowsheds, for securing the cleanliness of milk stores, milk shops, and milk vessels, and for protecting milk against infection and contamination.

Inspectors were appointed by the Board.

"At the time of the passing of the Order the London cowsheds were, with few exceptions, unsuitable in construction and in sanitary arrangements. By opposing the renewal of licenses the Metropolitan Board succeeded in abolishing from two to three hundred of the worst of them,

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authority may seem proper for the purpose of enforcing the

and obtained improvements, amounting to entire recon. struction, in the remainder. In the larger dairies and milk stores much improvement was also effected."

It was this Act of 1878 which drew from the Medical Officer of Health for Whitechapel the following remarkable passages in his report; passages which are enlightening as to the prevalent views of the time.

"We have a striking instance of the great interest that is shown in the protection of property and the comparatively little value that is attached to the health of the people in the recent Act—'The Contagious Diseases Animals Act 1878.'

"As regards the laws which are in force for the protection of the health of cattle, which may be looked upon as property, I have nothing to complain; but as a health officer I may express my surprise that similar laws to those which are now in force respecting disease in cattle are not enacted to prevent the spreading of infectious and contagious diseases among the people. At present there is no general law in force to compel persons, who may become acquainted with the existence of an infectious disease in a dwelling-house, to give notice of the same to the Sanitary Officer....

"Surely it is more important to protect the lives of the people than to protect from loss the dealers in cattle; but until the care of public health is considered to be of more importance than the care of property, little improvement in the laws relating to health can be expected."

"The preference which is given by our law makers to the protection of the supposed vested rights of property above that of public health is likewise shown by the rejection of the several Building Bills for the amendment of the Building Act.

"The opinion of the House appeared to prevail that 'a man has a right to do what he likes with his own, as regards the building of as many houses as can possibly be packed together on his own land, without taking into consideration the health of the people who are to inhabit them, or the health of those in the immediate neighbourhood.' So long as the Building Act as regards open spaces at the rear of houses remains unaltered, so long will unhealthy houses continue to be built."

Some of the more capable of the Medical Officers of Health in their reports did not content themselves with mere tables of the births and diseases and deaths in their parishes, and a narrative of the principal incidents in their work during the year, but pointed out the defects in the laws, and made suggestions as to the best ways of coping with some of the great sanitary evils daily confronting them.

Based upon actual experience, their views and suggestions were entitled to great weight, and were often of very great value.

One point, and that the most important of all, finds expression in the reports of more than one of them, namely, that the administration of many of the health laws should be compulsory instead of permissive, and that merely declaring a law compulsory without providing the means for making it compulsory was of little use.

What was wanted in London was a real central authority which should have power to make the local authorities carry out the orders of Parliament. This did not exist, for the Metropolitan Board of Works had no such powers, and the Vestries and Districts Boards were independent local governing authorities acknowledging no master and free to obey or disobey Acts of Parliament just as they pleased. "It has been one of the great faults of our sanitary

"It has been one of the great faults of our sanitary arrangements and legislation for London," wrote the Medical Officer of Health for St. James' in 1872, "that the metropolis has not been regarded as a whole, and that through the ignorance, or carelessness, of one District or Local Board the whole of the others may be put in peril."

"It is impossible, with our present municipal machinery, in London, at any rate, to exercise all that power which is necessary for the prevention of the spread of infectious diseases."

And the Med 1873 wrote :—

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And the Medical Officer of Health for Whitechapel in

"If any alteration is made in the constitution of the Metropolitan Board of Works it would be desirable to add to its functions that of a sanitary supervision over the whole metropolis."

And in 1881 the Medical Officer of Health for Kensington wrote :---

"London is grievously in need of a Central Sanitary Department to establish something like unity in the sanitary arrangements of its 39 divisions. . . . Every other large centre of population has but one sanitary authority."

Though much more time, thought, and labour, were being devoted than ever before to matters relating to the public health, and with very beneficial results, one matter appeared to be quite unaffected thereby, for none of the great measures of sanitary improvement which had been carried out since the central and local authorities had come into being seem to have had any effect during the 1871-80 decade upon infantile mortality.

If anything the figures appear higher. In St. Georgein-the-East in 1871-2 the deaths of children under five years were 51 per cent. of all the deaths.

In Mile-End-Old-Town in 1872-3, out of a total of 2,200 deaths, 1,087, or practically 50 per cent., were deaths of children under five, a mortality which evoked the comment from the Medical Officer of Health:---

"Apart from congenital causes, a large majority of these young lives would, under conditions more favourable to existence, be preserved. . . . It is certain that the present generation of London children is physically degenerate."

And a year later he wrote :---

"I consider about two-thirds of the infantile mortality attributable to neglect, improper feeding, impure air from overcrowding, and general bad management through ignorance and carelessness of parents and nurses."

In Kensington, away in the west, the average annual infantile mortality over a period of ten years-1863-73was 42 per cent. of the total deaths.

The Medical Officer of Health for Whitechapel wrote (1873) :---

"There must be something very wrong in the condition of the people when we find that out of all children born about one-fifth die before they are one year old, and one-third before they are five."

was 72.4 per cent.

Paddington wrote :---"In taking fifteen streets typical of the ordinary con-

dition of the dwellings in which the working-class reside, I find the annual proportion of deaths under five ranges from 41 to 75 per cent. of the total deaths. . . "The deaths from all causes in eighteen such streets varies from 21.7 to 50 per 1,000."

1874 :---

"As usual we find that of 1,000 deaths more than 500 are those of children under five." Two years later it was 53 per cent.

Nor was it only in the central parts of London that the infantile mortality was so frightful. In Wandsworth, the mean annual rate during the years 1865-74 was 49.6 per cent.

The infantile death-rate did not diminish as the decade proceeded. In Islington in 1875-6 the infant mortality was "much about the same" as it had been twelve years previously.

In Kensington it had increased to 46.3 in 1878; in St. George-the-Martyr to 57.7 per cent.; in St. Pancras in 1877-8, of 5,068 deaths, 2,212 (or 45.6 per cent.) were of children under five. The Medical Officer of Health for Poplar wrote (1877-8) :---

"The deaths of children under five years have been more

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In the north part of his district in the quarter ended December 28, 1872, the rate of mortality of children under five was 61.1 per cent., whilst in the quarter ended September, 1873, in Goodman's Fields the rate

In St. George-the-Martyr, Southwark, in 1873-4, of 1,256 deaths 694 (=55.3 per cent.) were under five.

In the same year the Medical Officer of Health for

The Medical Officer of Health for Limehouse wrote in

than half the total of deaths-truly a 'massacre of the Innocents."

The Medical Officer of Health for Islington wrote (1880):---

"The number of deaths of children under one year is still painfully large. . . . Children seem to be born for little else than to be buried."

Passing from record to comment, there are some striking passages in the reports of the Medical Officers of Health,

Thus the Medical Officer of Health for Paddington wrote :---

"... Of infantile mortality one is tempted to ask whether the provision of so much life, such a prodigality of being, to be followed so soon by an almost Pharaoh sacrifice of it, is necessary to the multiplication of the race."

And the Medical Officer of Health for St. Marylebone (1877) :---

"It is sad, and in a sanitary point of view, humiliating to contemplate, that for every three children born in Marylebone, one dies before reaching the age of five years; 'tis true that in this respect Marylebone stands in no worse position than other large parishes in the metropolis, nor so bad as in the majority of them, but the knowledge of this fact will, I apprehend, afford but slender consolation to those who know from experience and daily observation that hereditary diseases, habitual neglect, unwholesome dwellings, together with other preventable causes, are largely concerned in the sacrifice of infant life."

And the Medical Officer of Health for Rotherhithe (1881) :---

"Whilst the houses' drain-pipes, from defective construction and workmanship, and want of being cut off from the main sewer, act as much as sewer ventilators as channels for removing filth . . . whilst overcrowded houses and foul smells in living and sleeping rooms are taken as a matter of course; whilst infectious disease is sedulously propagated first by concealment, and then by criminal exposure and neglect, . . . so long the yearly recurring Herodean

massacre of helpless children, whose almost sole use in life appears to be the providing of fees for doctors and undertakers, will continue, in spite of all efforts of sanitary authorities and sanitarians."

not limited to the children who died. Probably ten or twenty times the number of those who died went through the illness and survived-but of those many were injured in constitution for life. In other respects, however, sanitary progress was being made, and slowly but steadily the conditions of the health of the public were improving. Undoubtedly the main causes of that progress were the great system of main drainage and sewerage which had relieved London of the incubus of enormous accumulations of the deadliest filth in its houses, and of an open main sewer through its midst; and the greater quantity, and improved quality, of the water supplied for household consumption which relieved her inhabitants from the necessity of drinking liquid sewage.

And the construction of sewers in nearly all the streets, and the substitution of an effective system of house drainage instead of the abomination of cesspools, was also a great stride to improvement.

Since 1856 plans for the construction of a total length of nearly 1,000 miles of local sewers had been submitted to the Metropolitan Board for their approval, many of them being in substitution of old and shallow ones for which the Board's new main and intercepting lines afforded the means of improving the gradient and outlet.

In their report for 1881 the Metropolitan Board of Works gave "a brief summary" of what it, as the Central Authority, had accomplished since 1856.

"There was the great main drainage work which had cost about five and three-quarter millions, an undertaking which 'although fruitful of good results, and of greater magnitude than anything of a similar kind that had previously been accomplished, has left, as might be expected, few visible marks of its existence."

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The evil done, however, by bad sanitary conditions was

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It is rather the Thames embankments and broad new streets which remind the inhabitants of London of the great changes and improvements that the Board's operations effected.

"On the north side of the Thames, from Blackfriars to Westminster, and from Grosvenor Road to Battersea Bridge, and on the south side, from Westminster to Vauxhall, embankments have been made which, whilst reclaiming from the river a considerable extent of ground, have substituted for the unsightly and offensive mud banks that formerly prevailed, handsome river walls, with broad and commodious thoroughfares, relieved and ornamented by public gardens. New streets have been made, some of the principal of which are Queen Victoria Street, Southwark Street, Northumberland Avenue, Commercial Road, and the new thoroughfare from Oxford Street to Bethnal Green; many other leading thoroughfares, which had become inadequate for the increased traffic of the present day, have been widened and improved, greatly to the convenience and comfort of the public; and liberal grants of money have been made by the Board to the authorities in aid of the cost of smaller street improvements which have not been of sufficient extent or importance to be carried out by the Board.

"Two new parks have been provided, in districts previously unsupplied with such places of needed recreation. Public gardens have been laid out and are maintained in the neighbourhood of dense populations; and suburban commons, to the extent of about 1,500 acres, have by the action of the Board been secured in perpetuity for the undisturbed enjoyment of the public.

"Many areas formerly covered with dwellings unfit for human habitation have been cleared, under the operation of the Artizans' and Labourers' Dwellings Improvement Act, and the ground let to societies which have undertaken to build, and in some cases have built, improved dwellings, in which the humblest class of the working population can live with health, decency, and comfort."

These and many consequential improvements, and the

better paving of the streets, and the better cleansing of streets, places, and yards, the more rapid removal of filth from London, had made the general conditions of life much less unwholesome.

The work, too, being done by the Metropolitan Asylums Board was greatly diminishing the dangers of infection in the metropolis, as well as restoring to life and health thousands who would otherwise have fallen victims to disease.

And by "The Poor Law Act, 1879," the Vestries and District Boards were authorised to enter into contracts with the Board, for the reception and treatment of infectious sick who were not paupers, thus in a measure depauperising the Metropolitan Asylums Hospitals. And a very large amount of most valuable work was done

by the Port Sanitary Authority; in the year 1879-80 over 15,000 vessels of all classes having been visited and inspected, the infectious sick removed, and disinfection carried out.

Writing of the year 1877 the Registrar General said :---"London maintains its position as the healthiest city in the world. During the past year its prosperity was indicated by a birth-rate above the average of the preceding 10 years, while a remarkably low death-rate bears testimony to the success which has attended the efforts that have been made during the last half of a century to promote the public health and safety."

Among the public authorities from which much might have been hoped in the way of improving the public health of the inhabitants of London was the School Board. The Board stood in an exceptionally favourable position for moulding the physical constitution of hundreds of thousands of children and of successive generations, but education appeared to have almost excluded the consideration of health. In 1871 the Board resolved "that it is highly desirable that means shall be provided for physical training, exercise and drill in public elementary schools established under the Board." But beyond this, little if anything was done, and even it was not made applicable to the girls. And no Medical Officer was appointed, and no systematic means

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organised for the prevention of the diffusion of diseases by the schools. Indirectly, however, good results were flowing from the schools. The attendance of the children at the schools took them out of their overcrowded tenement-homes for several hours in the day; their playgrounds afforded better means of exercise; the cleanliness expected of them raised their ideas as to cleanliness; the supervision over them was of great use in improving their conduct and character, all helped to improve their physical condition. But how infinitely greater the improvement might have been, not merely at the time but to the rising generation, if the School Board had given greater attention to this branch of the children's welfare. About 230,000 children were in attendance in the Board's Schools in 1880.

The really encouraging feature of the general position was that a larger section of the public was taking an interest in matters relating to the public health.

In Battersea, wrote the Medical Officer of Health (1881) :---

"Much assistance is now derived from the general public, who are more alive to the necessity of sanitary measures than at any previous period."

The Medical Officer of Health for St. George-the-Martyr, Southwark, reported :---

"The health of the people occupies the thought and consideration of an ever-increasing number," and he quoted the declaration of the head of the Government that "the sanitary question lies at the bottom of all national wellbeing."

The Medical Officer of Health for North Poplar stated that-

"Gradually the labouring portion of the population, which so largely outnumbers the remainder with us, is becoming educated to the fact that they must neither breathe air, drink water, nor take food, polluted by filth."

But, as a whole, public opinion was more or less inert.

"The apathy of the public in matters of health is truly lamentable."

Nor was all the apparent progress as genuine as appeared

on the surface. The Medical Officer of Health for St. Mary, Newington, in his report of 1874 disclosed this material fact. Writing of some Returns which he had prepared of

sickness in seventeen years, he said :----

"In the period we have seen the end of many fever haunts. We have seen hundreds and hundreds of the old tenements removed and new abodes raised in their stead; but with it, alas! we have seen all the defects of new buildings, all the defects of badly laid drains, all the evils of work ill done, its dangers too often not capable of recognition until sickness and death forced the discovery. We have seen too often in the new houses defects of ventilation, of construction, of drainage, and of overcrowding: we have seen many an evil allowed by law, and over which we cannot extend our sanitary rules. We have also to contend with the indifference, the carelessness, the blindness of the people themselves-intemperance and crime stand in our way....''

But in 1881 he wrote : "Sanitary work has borne fruit." The progress of sanitation is almost necessarily slow.

"There is not," wrote one of the Medical Officers of Health, "a more difficult task than that of carrying out sanitary reform, for although every one agrees that sanitary laws should be put in force, they are greatly objected to when they interfere with one's self."

And another wrote :---"Nuisances crop up, are removed, and re-appear. It is acontinuous warfare due to many causes, such as carelessness and wilfulness on the one hand, and accidental circumstances on the other."

And another :----

"The sanitary labours of your officers increase year by year as the population becomes denser, and the need for sanitary precautions grows more urgent."

And underneath all was the view expressed by the Medical Officer of Health for Islington (1881):--

and taxes."

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"I fear the public have not even yet learned to regard health as a matter of infinitely greater moment than rates

How far-reaching were the effects of disease was admirably set forth by Dr. Simon :---

"I do not pretend to give any exact statement of the total influence which preventable diseases exert against the efficiency and happiness of our population, for it is only so far as such diseases kill, and even thus far but very imperfectly, that the effect can be reported in numbers. Of the incalculable amount of physical suffering and disablement which they occasion, and of the sorrows, and anxieties, the permanent darkening of life, the straitened means of such subsistence, the very frequent destitution and pauperism which attend or follow such suffering, death statistics testify only in sample or by suggestion."*

Few people realise the infinite importance of health to a great community.

As one of the Medical Officers of Health truly wrote :--

"It is a question whether the greatness of countries will not in future to a very large extent depend upon the standard of public health."

One of the very best and most experienced of the men who held the responsible office of Medical Officer of Health during the last half century—Dr. Bateson, the Medical Officer of Health for St. George in Southwark—in his reports often dwelt upon this aspect of the subject :—

"The only true and lasting foundation upon which the glory and safety of a nation can be built must be upon the cultivation of the moral and physical powers belonging to man."

"... The quality of a race is of far more importance than the quantity."

"Health to the majority of the population is their only wealth; without it they become pauperised."

"The welfare and safety of this country need a healthy, stalwart race of men—men who can labour and endure."

And in his last report (1878), after twenty years' service as Medical Officer of Health, he quoted the Prime Minister (Lord Beaconsfield) as saying :---

"The health of a people was really the foundation upon * J. Simon, vol. ii., 1874. which all their happiness and all their powers as a state depended. If the population of a country was stationary, or that it yearly diminished, or that whilst it diminished it diminished also in stature and strength, then that country was ultimately doomed." "Nothing," said Dr. Bateson, "could be more solemn

and emphatic."

"For the success and permanence of national existence a high standard of health is absolutely necessary. To maintain in its integrity the vast power which England now wields, and to retain the high position which she now holds will depend upon the nation's health."

Before considerations such as these, how lamentable the blindness of those who could not see that even a measurable expenditure in health matters would have been productive of immeasurable benefits; how reprehensible the conduct of those who refused to administer laws which it was their duty to administer, and the administration of which would have been of inestimable value to their fellow citizens; and how disastrous their studied inaction to the great metropolis, and through it, to the nation itself.

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