is so important, that I shall briefly return to it before concluding the present Report.

III. It will be at once apparent that a large number of diarrhocal attacks must have been neglected, and that almost of necessity, by persons being seized when engaged at their work, and when absent from home. These persons, returning in the evening, usually delayed obtaining aid, and were often seized in the night with cholera; whilst others, attacked with diarrheea in the early morning, just before going to their daily avocation, could only have obtained medical advice by sacrificing a part of a day's employment, and in this way numerous cases were neglected, and often with the most fatal results.

IV. Various other subordinate causes led to the neglect or concealment of diarrhoa, even when express inquiries were instituted. Thus in workhouses the fear of being placed on sick diet operated in some instances, of which the following is a specimen: -Several deaths occurred in a large workhouse, where, notwithstanding notice was carefully given to all who had diarrhea that immediate application should be made for medicine, which was kept in readiness, attacks of cholera still took place, in which it was ascertained there had been neglected bowel complaint. Adopting the plan pursued in India, where, when cholera breaks out among the troops, sentinels are placed over the privies to detect any one suffering with diarrhoa, I advised that the water-closet should be watched. On the first day several persons with relaxation were thus discovered; and on being questioned, admitted that they had concealed its existence lest they should be placed on sick diet. It may not be out of place to mention that one of the guardians of this parish stated in a public inquiry that after this precaution not another attack of cholera took place. A somewhat similar instance is mentioned by Mr. Liddle, in a workhouse of one of the parishes which he superintended, where the medical officer denied the existence of diarrhea among the inmates, but which was detected by placing a watch over the water-closet. Dr. Gavin relates a similar case in a workhouse where there was a serious mortality from cholera, and in which the amount of diarrhea, which was very large, was unknown to the attendant surgeon.

## SECTION VIII.

· Measures adopted by the Boards of Guardians during the late Epidemic.

In any Report professing to give a description of the late epidemic, it must be obvious that the measures adopted by the various Boards of Guardians (to whom, as will immediately appear, extensive powers were intrusted) to meet and control it ought to form a very important feature of such a document. In the present instance there are many circumstances which particularly indicate the necessity of entering into this subject; among the foremost of which is the fact, so distinctly

proved by the extended experience of the General Board of Health, that in a great number of instances the proceedings of the local authorities were altogether inadequate for insuring those prompt, comprehensive, and vigorous measures so urgently demanded in the presence of a great and destructive epidemic like malignant cholera.

Having witnessed the lamentable results of those proceedings; knowing that the health, the lives, and the happiness of the labouring classes of this great city are immediately and deeply concerned in the subjects about to be discussed; and labove all considering, that, if our poorer fellow-citizens are to be guarded by sanitary measures against the neverceasing ravages of typhus, small-pox, and other destructive but preventible diseases, a desideratum infinitely more important than protection from the occasional invasions of cholera, some more efficient machinery than has hitherto been employed must be devised,-I am impelled by an imperative sense of duty to enter upon the discussion of topics I would, if permissible, have willingly avoided.

But before doing this there are some preliminary points, which, from

their great importance, will require notice.

As London and its vicinity are excepted from the operation of the Public Health Act, all the measures calculated to arrest the progress of cholera in the metropolis depended on the "Act for Removal of Nuisances and Prevention of Contagious Diseases." The provisions of this enactment, so far as the Board of Health is concerned, apply so long only as they are put in force by an order of the Privy Council, which order must be renewed every six months. When thus in operation, the General Board is authorized to issue such regulations for the prevention or mitigation of epidemic, endemic, or contagious diseases, as the Board shall think fit; and they are further empowered to require the guardians of the poor to put such measures into execution. But in connexion with this point, it is necessary to explain a circumstance which led, in various instances, to the most injurious results. This enactment not only contemplates the guardians of the poor as the executive body for the removal of nuisances and the cleansing of streets, &c., but also various other local authorities are named, such as the town council, trustees or commissioners for draining, paving, lighting, and cleansing any city, town, borough, or place; and also commissioners of sewers. Divided powers, and consequently a divided responsibility, are thus created; and as in most of the metropolitan unions and parishes there exist, independently of the guardians of the poor, such local bodies for paving, lighting, and other purposes, it is not surprising that, when regulations were issued by the Board of Health, such of them as related to external cleansing and the removal of nuisances were considered by the guardians as appertaining to the authorities specially charged with such matters. It is true the Act provides that, where there is default or delay in the execution of the regulations by the bodies above named, the responsibility shall fall on the guardians; but in the absence of any officer or officers to see to the execution of the directions of the Board of Health, the enforcement of them was, under such circumstances, difficult, or rather impossible. .The following is a case in point:—On the 19th of November, 1848,

up to which time seven deaths from cholera had taken place in the Whitechapel Union, the guardians received from their medical officers lists of places where epidemic and infectious diseases had lately prevailed; upon which the Board resolved that their clerk should communicate the particulars of these Reports to the respective local Boards, and inform them that it became their duty to cleanse the places referred to once in every twenty-four hours. On December 21st, when, in consequence of 20 additional deaths having occurred, I visited this union, I found, on carefully inspecting it, that almost all the courts were still in a very dirty and filthy state; that in many of them foul water and black mud were accumulated and ordure lying about, so as still further to infeet the air; that the privies were in a most disgusting state, and totally unfit for the use of human beings; and that, among many other nuisances, were two dung-heaps in Cartwright-street, Aldgate, close to Peter's-court, where there was at the time a case of cholera, which had been reported several times to the beadle by the medical officer, but without leading to the removal of the evil.

A similar instance of the evils springing from this divided responsibility occurred in another union, in connexion with a coroner's inquest, held on the body of a person who had died from cholera. The place where the person had lived was in a most filthy condition, with over-flowing privies and obstructed drains, and had, indeed, attracted considerable attention: one of the medical officers had reported that it was ill paved, ill drained, and likely to be productive of disease. This Report was presented to the Board of Guardians before the attack of cholera occurred, and was by them referred to the Commissioners of Paving, which led to considerable delay, and in the interval the person was attacked and died.

"The Nuisances and Contagious Diseases Act" was, till amended at the end of the Session of 1849, clogged with another impediment to prompt action, a notice signed by two inhabitant-householders being required before the local authorities could proceed in certain cases to remove causes injurious to health. This condition often created difficulties, the persons who were the greatest sufferers being afraid to come forward lest they should give offence to their landlords.

It is also to be borne in mind that the Act of Parliament had only just come into operation (on September 4, 1848), and that the General Board of Health was scarcely formed, when cholera broke out in London, and that various new and important measures were to be instantly adopted and carried into effect by unpaid authorities not accustomed to such proceedings, and occupied moreover with other and onerous duties in respect to the relief of the poor. It has appeared to me proper to allude to these circumstances, as they doubtless operated in some degree as obstacles to speedy and efficient action; but they might, by zeal, have been overcome, and cannot be received as a valid reason for the great and general neglect of sanitary measures during the late epidemic.

Independently of the difficulties explained above, others, and of a most serious character, arose from the unfitness of the authorities charged with the administration of the Act of Parliament for the duties imposed upon them. By that enactment various measures are prescribed,

which interfere with private interests, and especially with interests which, in all parishes, but particularly in large and populous ones, are largely represented in Boards of Guardians. Thus, for example, in many instances, owners of small houses and cottage property, to which class of dwellings the provisions of the Act more particularly apply, are themselves members of such Boards; and when this is not the case, they can exert an influence not the less powerful because it is indirect. This interest often conspired to impede efficient sanitary measures, and even in cases where there was a general wish among the local authorities to effect improvement.

As the Boards of Guardians are 'subject to annual election by the ratepayers, an inclination to economize, as far as possible, the parish funds, is a natural and obvious result. This feeling was unhappily allowed very generally to operate during the prevalence of cholera, whenever the question was mooted as to the adoption of the several proceedings indicated by the Board of Health as essential for the protection of the public health.

Local interests even operated when cholera actually prevailed in a parish, the great apprehension being, that, if active and really efficient measures were adopted, the trade of the neighbourhood would suffer. In one instance, when the epidemic had extensively prevailed among the poor, its existence was denied and house-visitation resisted; till, after considerable delay and loss of life, a number of shopkeepers were attacked by the disease, and then all opposition ceased.

Another obstacle arose from the absence of that knowledge which is indispensable to the superintendence and execution of a code of sanitary regulations. Mr. Liddle, who is well acquainted with the parochial system, points out some of the injurious consequences springing from this cause, in the following extract from his Report:—

" Among the members of Boards of Guardians there is often an antagonist power at work which prevents proper attention being paid to the sanitary condition of the localities inhabited by the poor. Some of the guardians entertain the idea that the Inspector of Nuisances is only to visit those places when complaints are made by the poor people, or whenever the medical officers report that an epidemic, endemic, or contagious disease has appeared; while other members of the Board of Guardians, entertaining more enlightened views upon the subject, think it better to prevent disease by giving instructions to the Inspector of Nuisances to examine from time to time the different districts, to find out and remove all those causes which are likely to engender disease, and not to wait until disease has broken out and life been sacrificed. If the law does not give this power to the Board of Guardians, it ought to do so; the performance of sanitary duties ought not to be left to the mere chance of a decision of the majority of the Board, but the question of all preventive measures should be decided by the district officer of health. The expense of preventive measures is not always readily granted by the guardians of a union composed of several parishes, inasmuch as the sick become chargeable to the whole union, whereas the destitute applying for relief are a charge upon the parish. If the casual sick were to be made a parochial instead of a union charge, more care I think would be evinced by the Boards of Guardians to prevent disease."

Throughout the epidemic, another great evil arose from the delay interposed with respect to active measures of relief. The Boards of Guardians usually meet once a-week; and till towards the close of the

disease, no arrangement was made to secure more prompt action. Owing to this circumstance, and to other sources of delay, much valuable time was lost in all parts of London; which, in such a pesti-

lence, was equivalent to a considerable sacrifice of life.

The last and the most influential of the causes which operated injuriously during the late epidemic, and the existence of which there was, from first to last and day by day, reason to regret, was the want of proper power on the part of the medical officers of the several unions and parishes, on the one hand, to initiate and carry out those general and enlightened measures of sanitary improvement by which the progress of the epidemic might have been controlled; and on the other, to provide suitable aid for the relief of persons actually attacked. The Act of Parliament gave no power to the parochial surgeons to act without the previous direction and sanction of the guardians; and even if such authority had been granted, the existing relations between the medical officers and the local authorities are of such a nature, that the former would not have been in a position sufficiently independent to direct and put into operation the various measures so urgently demanded for the safety of the poor.

The powers bestowed on the General Board of Health by "the Nuisances and Contagious Diseases Act" are of a twofold order. The first, and by far the most important—for they strike at the very root of the evil-are those which relate to the removal of nuisances, the cleansing of streets, alleys, and courts; the cleansing, purifying, and whitewashing of all dwelling-houses; the cleansing of foul drains, ditches, and cesspools; and in fact to the removal of all causes injurious to the public health, so far as they come within the operation of the Act. The powers and duties of the second class relate to the limitation and prevention of epidemic or contagious diseases, on the actual occurrence of which, in any parish or union, the guardians are required to provide such additional medical officers, and to adopt such other measures, as may be needful. Ample powers were given to enforce these measures; if, for example, the owners of houses neglected to put them into a proper state, the guardians could order the necessary works to be done and compel repayment; or, if the owners were too poor to pay, then the expenses could be charged to the poor-rates, out of which were also to be defrayed any outlay rendered necessary for cleansing streets, courts, and alleys.

I. Proceedings of the Guardians in reference to Sanitary Measures.

Regulations of the General Board of Health .- On the 6th of November, 1848, when some cases of cholera had already occurred in London and in several towns of England and Scotland, the General Board of Health issued a series of regulations to the guardians of the poor throughout England, of a most comprehensive, and, as I would affirm, of a most efficient character. Among these regulations appear the following:—

"I. And we do further authorize and require the guardians to direct their clerk to make out from the Register of Deaths or from the District Medical Relief Books, and from any public books or other sources from which information may be obtained within the union, a list of places where epidemic, endemic, and contagious diseases have of late been frequent.

"II. And we authorize and require such guardians to cause the medical officers employed by them, or specially appointed for the purpose, to visit the places of which a list shall be made out as aforesaid, and all such neighbouring and other places within such union as shall appear to such medical officers (from being under like circumstances with places included in such list or otherwise) to require visitation or examination.

"III. And each such medical officer shall, where it may be necessary, certify, in writing, to the board of guardians, and to the surveyors, trustees, occupiers, or others required to execute these directions and regulations, all such places as are in a state dangerous to health, or need frequent and effectual cleansing by way of preservation against disease, and such dwellinghouses as are in a filthy and unwholesome condition, and all such nuisances and matters injurious to health as ought to be abated, cleansed, and removed

under these regulations."

By the first of these connected regulations a certain and simple clue is indicated for detecting places where preventible disease exists; by the second, the only persons capable of discovering the various causes of removable disease-namely, medical practitioners-are to inspect the infected localities; whilst by the third direction provision is made for the guardians receiving clear and exact information, as to the remedial measures required for the protection of the public against destructive epidemic disease. Other regulations were at the same time issued, directing the guardians to take the necessary measures for the cleansing and purifying of dwellings; abating and removing nuisances; and generally for the removal of all matters injurious to health.\*

Inattention of Guardians to these Regulations.—It must be obvious to all unprejudiced persons, that, if any combined and efficient efforts were to be made by the agency of sanitary amelioration, to guard the population of this vast metropolis from the ravages of the destructive pestilence with which it was at the period in question threatened, no initiatory measures could be better adapted to secure that all-important object than those set forth in the above regulations; and yet I am bound to state that, with some few exceptions, they were disregarded by the various boards of guardians in London and its neighbourhood for many months after the cholera had given unmistakeable evidence of its presence, by severe though restricted outbreaks in divers metropolitan parishes. In spite of these regulations and significant warnings much precious time was thus irrevocably lost; no systematic sanitary precautions were adopted; and I consequently found on visiting various localities on the reappearance of the disease in June and July, as the medical visitors did subsequently in September, that foul and obstructed drains, filthy houses, and overflowing cesspools, were as rife as they were before Christmas, when the epidemic first broke out. This was even the case in the various spots where cholera had formerly prevailed, and where the whole class of epidemic diseases had again and again recurred.

Medical Officers not consulted .- On seeking to learn the reason why the preventive sanitary measures prescribed by the General Board had in so many instances been neglected, one of the most fundamental

<sup>\*</sup> See Official Circular of the General Board of Health. No. 2, pp. 18 et seq.

omissions connected with the local management of the late epidemic, and to which, according to my judgment, by far the larger portion of the evils that followed ought to be attributed, came to light. The parochial medical officers, with some few exceptions, had neither been consulted by the guardians on the measures required at such a crisis, nor authorized to examine into the causes affecting the public health, and this notwithstanding the express requirement contained in the official regulations, that the guardians should "cause the medical officers employed by them, or specially appointed for the purpose," to visit all places where epidemic, endemic, and contagious diseases had of late pre-

vailed, and report on the sanitary precautions required.

Fully to appreciate the fatal consequences of a negligence thus arising and persisted in till thousands had perished, it is essential to explain what is familiar to all who are practically acquainted with the progress of epidemic cholera, that the main attacks of the pestilence fall upon precisely the same streets, courts, houses, and even rooms, in which during ordinary seasons fever and other forms of zymotic disease specially prevail, or, in general terms, that the habitat of cholera and of fever is one and the same. So early as the beginning of November, 1848,\* the General Board of Health gave ample and distinct information upon this all-important point; it published a large body of medical evidence, derived from the most competent observers, to show that, as the neglected and filthy parts of a town,-the parts unvisited by the scavenger, the parts unsewered and undrained, the parts having no proper supply of water for washing away their filth or for domestic use, -were the chosen spots where typhus prevails, and decimates the population, so were they the special seat of cholera; it pointed out that this had been universally proved in respect of the epidemic of 1832; and in order to ascertain if, as could scarcely be doubted, the same law would be again observed in 1848, the General Board instituted extensive inquiries, and all of which distinctly demonstrated that the march and progress of cholera, so far as it had then extended, was, as in the former attack, in the midst of the fever districts.

Now these districts were as familiar to the medical officers of the metropolis as if they had been marked out on a map; each and all of these gentlemen, had they been required to lay before the guardians the information they possessed, could, before a single case of cholera had occurred in their districts, have placed their finger upon the very spots and houses which, supposing no ameliorations to be effected,

would furnish the victims of the coming disease.

But, unhappily, after all the information that had been collected and published, after the repeated efforts made by the General Board to ensure to the public the benefit and protection of well-considered and efficient sanitary precautions, the lessons of experience were but too generally neglected by the authorities more especially bound to adopt them; and the population of London, and specially the poorer classes

of it, found themselves, when cholera began to rage among them, as unprepared to meet it as in 1832, if they were not, owing to increased numbers, even in a worse position. It is not intended by this to deny that some measures of cleansing, &c., were adopted; but they were limited in their application, insufficient in their nature, and devised by no competent authority. In some parishes more extensive, but still partial, ameliorations were effected.

Instances of neglect.—It has been stated that this neglect of comprehensive sanitary measures was general, and instances might be adduced from every part of the metropolis of the evils resulting from it. The limits of this Report will, however, only allow me to adduce one or two examples. In the Holborn union-where, as if a warning had been sent to awaken the watchfulness of the authorities, cholera having appeared for a time in the preceding January and February, when it carried off 22 persons, and then ceased for three whole months-I found, on making inquiries in the month of August, at a time when 107 deaths from cholera had already occurred, that the medical officers had not been required to visit and report upon the places in which epidemic and infectious diseases had prevailed; and yet it was stated to me by the district surgeons that there were in the union places in which the houses were in so filthy a state as to be unfit for human habitation; that in one of these houses in Tindall's-buildings as many as 15 or 20 cases of cholera had occurred, whilst in others several members of the same families had been attacked in succession. It was the opinion of these gentlemen that, by medical inspection and proper measures, the sanitary state of these localities would have been improved; but, beyond some partial cleansing, no effectual remedies had been applied.

Another specimen of the same kind of neglect, involving also an entire disregard of the precautionary measures of the General Board of Health, may be selected from a parish which has suffered most severely, namely, St. George's, Southwark. The guardians in this parish had earlier warning of the approaching evil than in the case of the Holburn union, for it was one of the very first in which cholera appeared in the metropolis, the first death in it being registered in the week ending October 21, 1848. Nor were the indications of a severe outbreak wanting, since, at a time when 77 out of the 135 registration districts of London and its suburbs were entirely free from cholera deaths, and many of the other localities were only slightly visited, there were, in the Kent-road district of St. George's parish, absolutely and proportionately to the population, more deaths in the week ending November 4, 1848—namely, 9—than in any other district in the metropolis up to the same date. In consequence of an outbreak of cholera in a place called the Mint, in February, 1849, I received instructions on March 7th to visit this parish, when, from the statement of the Chairman, it appeared that up to that date the guardians had not directed their medical officers to visit, inspect, and report upon the localities in which epidemic or infectious diseases had lately prevailed. And yet there was abundant evidence to show such diseases were at that time rife in different parts of the parish: thus one of the surgeons states in evidence that "fever has prevailed more or less in different parts of his district; that in certain localities it is rarely absent; and

<sup>\*</sup> See Official Circular, No. 2, p. 25. It is proper to remark that in the earlier Reports of the Metropolitan Sanitary Commissioners, among whom were comprised the members of the General Board of Health, the same kind of evidence and the same conclusions were announced.

that these places are in a bad condition as to cleanliness, drainage, &c.:" whilst one of the relieving officers, who had been appointed an inspector of nuisances, stated that there had been in the preceding three weeks a good deal of fever in his district, including the Mint, and that in one house the whole family had been seriously ill from that disease. Four inspectors of nuisances, consisting of the relieving officers, had been previously appointed; but such persons, possessing no professional knowledge, were not competent to the discharge of the duties contemplated by the Board of Health. Subsequently to my visit the medical officers were appointed to report upon all places requiring sanitary

It has been above noticed that, when sanitary precautions were adopted, they were partial and inefficient. Thus in Whitechapel, where the guardians, as already stated, initiated some proceedings, other great evils remained. To show the injurious effects of such omissions, the example of Bakers' Arms-yard may be mentioned, where I found in one of the houses what had been the room of the ground-floor converted into a stable; whilst in the room above, and thus exposed to the poisonous exhalations, lived a man, his wife, and five children, all the latter of whom four months before had, as the mother informed me, suffered from fever. Now, can it be doubted that persons thus situated were in a state hazardous as regarded an attack of cholera, or that a house with its ground-floor occupied as a stable did not come within the express meaning of the Act, which enjoins the guardians to proceed against the owner of any premises upon which "any accumulation of dung, manure, offal, filth, refuse, or other matter or thing, are or is kept, so as to be a nuisance to or injurious to the health of

any persons"?

If further proof were needed in support of the position I have advanced, it may be found in the evidence extracted in a preceding section from the reports of the medical inspectors. The amount of sanitary evils of every kind detected wherever the system of house visitation was applied, and which till then had been unnoticed, is in fact one of the strongest proofs that could be adduced to show the necessity of efficient and constant medical inspection of the populous districts of London. In order to demonstrate that these evils, by which the poor are habitually surrounded, and from which, in the existing state of things, it is not possible for them to escape, are general, some additional extracts may be made from the evidence of the medical visitors. Mr. Cleave states, of Bethnal-green, that he has seen the water which the poor were obliged to use, green, and smelling most disagreeably. Mr. Vivian, another visitor of the same district, says the landlords never think of making any repairs as long as they can find tenants to occupy their premises in their present miserable condition; in two instances, complaints having been made that the back yards were overflowing from the cesspools and want of drainage, a kind of gutter was made across the floor of the dwelling, covered only by the boards, liable to overflow, and exhaling the most pestilential odour. Mr. Powell reports of Clerkenwell,-

"Insufficient supply of water, and its results, dirt and filthy habits; bad drainage; dust not removed for several weeks; want of receptacles for dust; cesspools full and eliminating most noxious effluvia; crowded habita-

Mr. Molloy reports also of Clerkenwell,-

"Long-standing collections of dust, which the contractors had failed to remove, and refusals by the men to do so without a gratuity, which the poor were not always able to pay."

This is an evil which has repeatedly come under my own knowledge, and of which the poor make most urgent complaints.

In Islington Mr. Campbell reports,-

"Bad and defective drainage; insufficient accommodation for the poor; close and confined lanes, courts, and alleys; a defective and vitiated supply of water; unemptied cesspools; water-closets (privies) common to whole courts; pigs kept in confined yards."

Mr. Scott, another visitor in Islington:-

"Bad drainage; foul privies; ill-ventilated houses; insufficiency of water; cesspools; open ditches."

Of Whitechapel, Mr. Liddle gives the following as the summary of the information received from the visitors:-

"Insufficient supply of water, overflowing privies, dust-heaps, filthy houses, want of privies, dilapidated houses, rain coming through the roofs, privies in the cellars, the effluvium of which penetrating into every room of the house; stagnant water in cellars, matter of cesspools soaking into cellars, and staircase almost impassable in consequence; matter oozing through the walls of houses and into sitting-rooms; bone-boiling, piggeries. A lower room in Whitehorse-court, Mile End New Town, is described by Mr. Carpue as being in a most disgusting state; and about 14 to 20 persons, boys and girls, living and sleeping there."

Inspectors of Nuisances appointed by the Guardians .- In several unions and parishes inspectors of nuisances were appointed, in many instances, however, in an advanced stage of the epidemic, and in consequence of the special order of the General Board; and in some cases committees of the guardians were also constituted for the purpose of inspecting the various districts. By these and other means numerous nuisances were removed; courts and alleys were in some districts better cleansed; foul privies and cesspools were in some localities repaired; and whitewashing and greater cleanliness enforced: thus the trustees of Whitechapel parish, a body distinct from the guardians, since October, 1848, took legal proceedings against 384 persons for nuisances of various kinds. But speaking generally, the cleansing operations were altogether inadequate to the emergency. With respect to the inspectors of nuisances, it is also essential to point out several fundamental defects often connected with their appointment. It is evident, from all the information I have received, that, with some limited exceptions, the guardians, in appointing these inspectors, intended they should, in addition to the duties properly belonging to their office, perform those which were assigned by the Board of Health to the medical officers. Now, although such officials would, if properly selected and under medical direction, render valuable service, it is requisite, for the protection of the public health, and especially for the welfare of the swarming population of the courts and alleys of the metropolis, distinctly to explain that they

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do not possess the knowledge requisite for the efficient discharge of the important duties which devolve on an officer of health; to expect of such persons the detection of the multitudinous causes of the diseases which decimate the poorer classes of the community is therefore

altogether futile.

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But, besides the mischief arising from the cause just stated, there is abundant evidence to show that these officers are frequently not in a position compatible with the efficient discharge of the duties properly belonging to them. They are, and, according to the existing state of the law, of necessity, appointed by the Board of Guardians, under whom they are very often already engaged in the capacity of relieving officers, beadles, &c. Now, it happens, and especially in the most populous localities, that the landlords of the small houses let out to the poor, and which are the very class of dwellings most urgently demanding sanitary reformation, are members of the Boards making the appointment; and it therefore cannot be a matter of surprise if, under the circumstances stated, as Dr. Gavin mentions in his Report,— "the men selected for the office should be those accessible to the influence of these parties, and who would in reality be blind to the offences of their immediate employers."

Another of the medical inspectors, Mr. Liddle, gives many individual instances of the benefits derived from sanitary improvements in Whitechapel, Clerkenwell, &c., when properly directed. The mode of procedure adopted by this gentleman was as follows:-

"In order to bring the sanitary condition of the localities of the poor under the more immediate observation of the local authorities, I directed the visitors to record all nuisances and supposed causes of disease they met with in the course of their visitation, and I requested the Inspector of Nuisances to meet me daily at the time when the visitors attended with their reports. I then gave instructions to the Inspector of Nuisances to copy into a book prepared for the purpose all nuisances and complaints of the poor people; all these complaints were entered on one side of the Inspector's book, and on the other side he was directed to enter how they were disposed of. This book was presented to me daily, and it was laid before the Sanitary Committee at their meeting."

"So long as the Inspector of Nuisances," reports Mr. Liddle, "is responsible to a superintending medical officer, but no longer, will the services of such an agent be useful. The various interests of the different members of the local Boards will at times bias the judgment of their servants, and hence it is absolutely necessary for the security of the health of the people that the Inspector of Nuisances should submit his reports to an officer totally independent of all local influence."

Although it unfortunately happened that in those very districts where the vigilant, sustained, and uncompromising discharge of their duties by the inspectors of nuisances was most required, there was often the greatest neglect, yet the experience of other and richer parishes, where such influence is more difficult of exercise, shows that these officers are capable of rendering, under medical direction, very valuable services. Thus, in St. George's, Hanover-square, Dr. Lewis reports that

"Much had been done in this parish towards improving the state of the districts during the previous twelve months, the authorities having employed

a very active Inspector of Nuisances. Any nuisances discovered by the medical visitors in the day were reported in the course of the evening to the Inspector of Nuisances, who had instructions to visit the locality immediately afterwards: in this way many evils were brought to light and corrected."

But even in this locality, where so much has been done, much more remains to be accomplished. Dr. Lewis states that

"A very large number of these receptacles (cesspools) still disgrace this wealthy parish. Many of the best streets in the district have houses built over these poison-yielding pits, as New Bond-street, Oxford-street, Mountstreet, Hertford-street, Mayfair, &c. Many of the causes of unhealthiness still remain unremoved in the parish; in many parts there is scarcely a house without some latent cause of ill health in or adjoining it. The mere casual inspection that the parish receives by the present system will not, in my opinion, discover all the removable evils under which it labours in 20 years. Many sanitary evils exist which do not strike the eye of unprofessional persons as such, but which a medical man would quickly perceive to bear the relation to disease of cause to effect. I am of opinion that a modified system of house-to-house visitation by a medical man, invested with the necessary authority for removing nuisances prejudicial to the health of the population, would do more towards relieving parochial rates than any other means. Zymotic diseases would be comparatively unknown; typhus, diarrhœa, and cholera might almost be extinguished as endemics and epidemics; and although some cases would occur here and there of these diseases, they would be isolated cases, and would find no nidus to fayour their spreading over entire districts, as is the case at present."

## II.—Proceedings of the Guardians in reference to the Medical Aid provided on the outbreak of Cholera.

It has been shown in a preceding page, that, irrespective of preventive sanitary measures, the Legislature has assigned to the guardians of the poor special and important duties on the actual occurrence of any epidemic or infectious disease. And here I may be permitted to direct special attention to the spirit, and indeed to the very wording, of the enactment; for upon the right apprehension of this all-important point hinges a large part of the merits of the inquiry now entered upon. The words of the statute then are these: "The General Board of Health may issue such regulations as the said Board shall think fit for the prevention, as far as possible, or mitigation, of epidemic, endemic, or contagious diseases; and may by any such directions and regulations authorise and require the guardians of the poor, by themselves or their officers, or by officers specially appointed in this behalf, to provide for the dispensing of medicines, and for affording to persons afflicted by or threatened with such epidemic, endemic, or contagious diseases such medical aid as may be required."

Now it is evident from the whole tenor of this passage, that what was contemplated upon the outbreak of serious epidemic disease was not the employment by the guardians merely of their ordinary medical officers, but also of such extra medical aid as the emergency might demand. It is still more essential to point out that this aid is not simply to be provided for persons actually afflicted or attacked; but likewise for those who might be "threatened with such epidemic, endemic, or contagious disease," the main object in fact of sanitary

legislation being the prevention of disease. It must be further apparent to all unprejudiced persons that, if there ever were an occasion in which all the provisions of this enactment were to be put into active operation, it must have been on the advent to these shores of a disease which had already once traversed and desolated Europe; a disease which, regard being had to the number of its victims, and to the terror it has inspired, has no parallel save in the great pestilences and plagues of former ages; a disease, in fine, against which all enlightened Governments have deemed it to be their first duty to guard and shield their subjects by all the appliances, both of science and wealth, at their command. As the deepest interests of the public, and especially of the poor, are involved in this matter, and as it is a point of paramount importance to the cause of humanity that for the future there should be no recurrence of omissions and of neglect which have led to a large sacrifice of life, I am particularly concerned that on the one hand the principles enunciated by the General Board of Health as being alone applicable to the medical management of this destructive epidemic should be clearly apprehended; and on the other that the measures adopted by the boards of guardians, and so often persisted in, notwithstanding my urgent recommendations, and in some instances of the express orders of the General Board, should be as distinctly understood.

Principles enunciated by the General Board of Health.—Contemporaneously with the outbreak of cholera in this country, the General Board of Health proclaimed the principles upon which the preventive and other measures for meeting the epidemic ought to be conducted. Confidently assuming, what an ample experience has shown to be one of the most general laws of the disease, that cholera is, as a rule, preceded by premonitory diarrhoa, the General Board took this as the basis for all the proceedings of the guardians of the poor. In the document just referred to appears the following instruction:—

"It will be indispensable, therefore, on the first outbreak of cholera, that the local authorities should immediately make arrangements for daily house-to-house inspection of the poorer localities in their respective districts; this being the only practical means by which, in the most dangerous situations and among the most susceptible subjects, the existence of the premonitory symptom can be ascertained in time to administer the proper remedies, so as to arrest the progress of the disorder."\*

In this passage, thus promulgated when scarcely a single case had been reported as having arisen in this country, is enunciated what may be emphatically denominated the one principle for the successful management of cholera; namely, that as the disease is, as to the rule, preceded by diarrhæa, as this diarrhæa is, if seen early, most manageable, all the efforts of the local authorities should be directed to seeking out and promptly treating through proper medical agency all persons affected with the first or incipient stage. The epidemic has for this time run its course; the science of Europe has been exhausted, but in vain, to find a remedy for it; thousands have perished in spite of the most

varied modes of treatment zealously and even tenaciously applied; and now after this vast experience the plan of procedure thus laid down by the General Board has been shown, as will subsequently be established by a weight of evidence that nothing can shake, to be the only one calculated, so far as our present knowledge extends, to grapple with this fearful pestilence.

It is further to be observed that in all its proceedings the General Board has considered that the only method of carrying into practical operation the intentions of the Legislature as to the prevention and mitigation of cholera, as of other epidemic diseases, was through the agency of competent medical officers. Thus, by the regulations of November 6, 1848, as already stated, it was directed that the medical officer of every union and parish throughout the kingdom was to ascertain on the occurrence of epidemic disease the causes producing it; he was to regulate the number of inmates in any room occupied by one family or more, in which epidemic or infectious disease might arise; and in the event of the fatal termination of any cases of cholera or other epidemic disease in such rooms, he was to cause to be removed as speedily as possible either the corpse or the persons occupying and sleeping in such rooms till the corpse could be conveniently removed and properly interred; in fine, the medical officer of the district was charged with the execution of the orders of the General Board for preventing the spread of cholera and other epidemic disease.

So strongly impressed was the General Board with the conviction that the public interests demanded that all the resources of the medical profession should, in such a visitation, be made available, that in the second notification, dated October 31, 1848, the following urgent recommendation was made to the guardians:—

"It appears to the General Board of Health to be absolutely necessary, in the present emergency, to concentrate responsibility on the medical officers, and to intrust them with discretionary powers, because the rapidity of the course of cholera will not allow them to wait for direction from the guardians at their weekly meetings; and seeing the many and arduous duties that devolve upon the medical officers, the General Board of Health cannot but express a hope that the remuneration of these officers will be more proportionate to the value of required services than it was upon the former occasion."

From the preceding statement it will be seen that in these proceedings the General Board directed prompt, vigorous, and sustained efforts; that it deprecated as the worst of all evils, in the presence of a disease which often carries off its victims in a few hours, all delays; and that, by a maturely considered and complete code of regulations, it placed in the hands of the local authorities the best means which, from former experience, could be devised for controlling the destructive epidemic then commencing its attacks.

In turning to consider the measures adopted by the guardians, I am bound to state that, in the great majority of instances, all the essential regulations and instructions of the General Board were disregarded or directly rejected. The most serious, or rather, as it ought from its results to be called, the most fatal mistake which pervaded the

<sup>\*</sup> Notification of the General Board of Health, dated October 5th, 1848.

whole of these remedial measures, from first to last, was this:--the guardians-herein departing diametrically from the injunction of the General Board, that cases should be sought out—in all their arrangements acted upon the principle that the poor, when attacked, should apply to the medical officer, who thus, instead of discovering cases in their first incipient stage, waited for an application—a delay which led, as I am prepared to show, to the most fatal consequences. The evidence collected from all parts of the metropolis points but to one conclusion; the patients who suffered from cholera, and who were treated under the system of the guardians, were in the great majority of cases, seen for the first time by the medical officers when in complete or incipient collapse; when consequently the aid of medicine was almost as nothing; when, whatever mode of treatment was adopted, from 40 to 50 per cent. of those attacked would perish. So generally, or rather universally, was this the case, that on reflection I cannot recall the instance of a single parish or union in London where, so far as the proceedings of the local authorities were concerned, apart from the Board of Health, any plan was adopted for seeking out persons affected with the premonitory, first, and curable stage of cholera. That partial steps were taken—that the medical officers overtaxed their powers in the effort to supply assistance to the multitudinous sufferers—that they again and again visited the afflicted localities, is true; but, large as were the numbers relieved by their meritorious exertions, still larger numbers were overlooked, many of whom subsequently fell into collapse, and swelled the weekly tables of mortality.

It appears desirable, in consideration of the importance of this subject, to select a few of the statements received from the medical officers of the various parishes and unions, as they will place in a striking light the defects not merely of the course pursued by the guardians for affording medical relief, but also as regards their general management of the late epidemic.

Sr. Pancras.—On August 23, 1849, Dr. Milroy, by direction of the General Board of Health, visited this parish, in order to ascertain the progress of the disease, and the measures adopted by the authorities to meet it. On this day Mr. Eastcott, surgeon of the central district, stated that

"three fatal cases of cholera had occurred in a house in Paradise-place; the family lived in a room over a very filthy stable, and the floor, being full of openings, readily admitted the foul effluvia to pass through; in addition to this nuisance there was a heap at the door, consisting of horse-dung and putrid fish."

On August 30th Mr. Eastcott states,

"he had had 10 cases of malignant cholera since the 23rd; that there was a steady increase of diarrhoea, and that the attacks occurred in groups."

On September 6th this gentleman stated to me that

"he had seen most of the cases of cholera for the first time when in collapse; that, according to his experience, cholera was preceded by diarrhœa; that no attempt had been made to visit from house to house; and that he had applied for nurses some days before, but none had been provided."

Mr. Tod stated, on August 30th, that

"he had seen since the 23rd four cases of malignant cholera, all of which were in collapse when he was called in; three had died, and the fourth was under treatment; two of these occurred in the same room."

Mr. Popham, surgeon, of the East District,

"has had several cases of cholera since August 23rd; five cases occurred in one house; there is a family in every room in this house, and several of the inmates have been affected with diarrhæa; the occupants of the kitchen floor state that they cannot shut the windows at night from the horrible stench of the drains; wished to remove some of the inmates out of this house, but no house of refuge had been provided."

## Dr. Milroy reports that

"No list of localities in which fever had prevailed had been made out by the clerk, as directed by the regulations of the Board of Health. Numerous streets were named to Dr. Milroy by the medical officers as being generally the seat of fever."

It is important to state the further proceedings of the guardians in this parish, where, in eight weeks-namely, from July 28th to September 22nd—no less than 239 persons died of cholera. On August 29th they appointed four medical assistants; but these were not sufficient to make a house visitation, and, as seen above, none was attempted. On September 12th one of the medical officers stated that four visitors would be required for his district alone. A special order of the General Board was subsequently sent, directing the appointment of four medical visitors; and on the 18th Mr. Liddle, who was then acting as medical inspector for that parish, attended the board of guardians, and strongly urged the necessity of the order being complied with. As this was resisted on the ground of the parish being in so healthy a state, though in the three preceding weeks, ending September 1st, 8th, and 15th, the deaths from cholera amounted, respectively, to 48, 50, and 40, Mr. Liddle requested that one of the medical officers should be called in, to whom he put the following questions:-

"Have you many cases of cholera?---Yes.

"Were they in a state of collapse when visited by you?—Yes.

"Had they diarrhoa previously?—Yes.

"Would the cases have proved fatal had you visited them during their diarrhocal stage?—In all probability their lives would have been saved."

Notwithstanding these representations, no appointment was made at this meeting, though subsequently a medical visitor was appointed to one of the districts.

Bethnal Green.—A striking instance of ignorance on the part of the guardians as to the actual state of the disease in their own parish (which, as it had been ascertained by the inspector of the district, was suffering from choleraic diarrhoca) is recorded by Dr. Gavin with respect to Bethnal Green. In consequence of the great population of the parish, and the large number of poor inhabitants, the General Board issued a special order for the appointment of four additional medical visitors:—

"The board of guardians at first determined not to conform to the order of the General Board of Health, and rested their justification on the plea that choleraic disease had not then affected the other districts of Bethnal

Green. They denied that either cholera or diarrhoea prevailed there. The registrar's returns disproved the first plea; but it became necessary to disprove the second also. Accordingly I directed the four visitors then employed to visit next day, and attend to all cases in their districts which required to be seen, and then to employ the rest of the day in visiting those districts said to be unaffected and free from choleraic disease. In the evening the returns of the visitors exhibited no less than 211 cases of diarrhœa in the alleged healthy locality."

The result of this experiment was so evident, that the aid demanded could no longer be refused; but the evils of this procedure were too serious to pass by unnoticed. The order of the General Board was issued on the 10th of September; but the evidence of the official documents, the registrar's return, and the information acquired by an express investigation by the officer appointed to secure efficient aid to the suffering poor, being alike rejected, the order was not acted on till the 20th, thus allowing ten days to elapse in the midst of the epidemic, a delay which from experience it is certain must have caused a sacrifice of life. But the mischief did not cease here, for, owing to the withdrawal of the visitors already appointed only for a part of one day from their district, it was found on their return that several cases of diarrhea being neglected had gone on into approaching collapse, thus placing the patients in imminent danger. The question naturally suggests itself, if this amount of mischief happened in a single district of a single parish in a portion of one day, what must have been the sacrifice of life throughout the metropolis when the poor were left so much to their own judgment as to the necessity of applying for medical aid.

St. Leonard's, Shoreditch.—On August 3rd, 1849, Mr. Burchell, one of the surgeons, stated he had attended in July about six cases of developed cholera; and that in the preceding week there had been an increase in the attacks:—

"Saw all the cholera cases first in collapse, though all had had preceding diarrhea. The poor, when suffering from bowel complaint, often neglect it till it becomes serious. The ordinary duties he has to discharge entirely prevent him visiting the affected districts with the view of discovering diarrhœa. Is often called up at night."

On the 14th August this gentleman, who was overwhelmed with incessant labour, having had, as he informed me, at least 100 applications before 11 A.M., and having been called up six times in the previous night, reported that the cases of cholera, of which he had attended five the preceding day, were still seen first when in collapse. Another surgeon, who was acting as one of the medical officers, Mr. Bower, also stated it was very difficult to induce the poor to apply early in bowel complaints, or even to admit or understand that relaxation of the bowels is any attack at all. Up to this date no extra medical assistants had been appointed.

St. George's-in-the-East.—Mr. Wilson, on July 27th, stated he had attended, since the reappearance of the cholera, about 14 cases, of which 9 were fatal: all these cases had premonitory diarrhoca, which had been neglected. Many of the poor disregard the attack for several days, till it becomes so bad they are compelled to apply for relief: no case of diarrhoea which was seen early had passed into cholera. Another

surgeon, Mr. Rygate (a partner of one of the medical officers), stated that several cases of cholera had occurred in the district of St. Paul's, all of which had premonitory symptoms, which the poor neglected: "in all the cases of diarrhoa, when seen early, the attack was controllable."

St. Olave's Union.—The medical officers of this union stated in evidence that the cases of cholera attended by them were first seen either in incipient or complete collapse. Thus Mr. Bayfield, on August 10th, stated that-

"he had last week seven cases of developed cholera; all of these, with one exception, had had preceding diarrhoea of some hours' or of one or two days' duration. They had not been treated for diarrhœa. First saw them in consequence of application."

Mr. Leadam had, from July 28th, 22 cases of cholera, all of which were seen for the first time in incipient or complete collapse, and of which six were fatal. The evidence of these gentlemen, and of two extra surgeons appointed by the guardians, shows, however, the vast importance of early treatment. Thus Mr. Leadam states he had attended about 800 cases of diarrhoa in July and August, of which only two went on to cholera. Mr. Bayfield had seen upwards of 200 similar cases, and of those treated early not one had passed into collapse. Mr. Viner had attended about 400 cases of diarrhoa, including many of rice-water purging and vomiting, and of these only two passed into cholera; whilst Mr. Russell, who had attended from 20 to 25 cases of diarrhea daily, states that if seen early all are curable. These gentlemen further stated, what is in keeping with all experience, that the poor often neglected to apply; so that in many instances diarrhoca had existed two or three days without anything being done to arrest it.

These instances of the unhappy consequences resulting from the measures adopted by the local authorities may be concluded by the case of one of the most populous unions in London, and where the disease prevailed severely. This case will also serve to illustrate a species of intimidation exercised not unfrequently by the guardians over their medical officers in matters strictly pertaining to their professional duties, which, in my opinion, is totally incompatible with the welfare of the poor: it is, indeed, this consideration, joined to a sense of the duties which I have to perform, that alone could induce me to publish these painful details. Finding towards the end of July that a decided increase of the epidemic had taken place, I saw one of the surgeons who had charge of a most unhealthy district. In the preceding week he had, in addition to his ordinary duties, 12 cases of confirmed cholera; he had also to give assistance to a multitude of very severe cases of choleraic diarrhœa, of which he had 20 on the previous day. Some time afterwards, the epidemic having greatly increased, I again saw this surgeon, when he stated that there had been an immense number of diarrheal cases; that in the 13 days preceding, he had had 41 cases of developed cholera; that he had been called to three such cases before six A. M. on the day of my visit; that he had seen 41 cholera cases for the first time, when either in incipient or complete collapse, and in consequence of application, he having no time to attempt a systematic house visitation; that in all these cases there had been premonitory diarrhœa, in some of them for several days; that diarrhœal cases, when

seen early, were so capable of being controlled, that he had not seen one thus treated pass into collapse; and, lastly, that of the 41 cholera

attacks, 15 had already proved fatal.

On more close questioning, it appeared that the medical officer had not any assistant; that he, therefore, had to dispense medicines as well as visit; that in the midst of such an overwhelming and destructive epidemic, he had not been allowed any extra medical aid; and that in the three preceding weeks he had not had more than one night's undisturbed rest. This gentleman avowed to me confidentially that he was quite exhausted, and unequal to the task of attending to such a multitude of cases, though previously, when in the presence of one or two of the guardians, he attempted to show he could single-handed manage his district. This statement, almost incredible as it may appear, is, however, taken literally from written evidence signed by the officer in question. It will appear even more remarkable, but at the same time most illustrative of the whole system, that, when the appointment of three medical officers was by an order of the General Board directed, the guardians hesitated, and made a formal appeal whether it was necessary, in which step they were supported by their medical officers.

Evils arising from "Orders" being required.—In many instances the guardians required that applicants for medical aid should, as under ordinary circumstances, obtain an "order," either in the first instance, or subsequently, as the condition for the continued supply of advice and medicine. The assistance afforded was thus stamped with the character of pauper relief; a circumstance which in itself, as will be at once apparent to all who are acquainted with the independent poor, would deter multitudes from making application; and which unquestionably contributed powerfully to that fatal delay to which thousands of lives were sacrificed.

Erroneous Principle regulating extra Medical Appointments of the Guardians.—Having given these illustrative details of the principle adopted by the local authorities for affording relief in cholera, it is essential to explain the nature of the appointments when in any union or parish extra medical aid was provided. The same fundamental error that prevailed with respect to the ordinary applied to the extra medical officers: they were appointed upon the principle that they should wait till applied for by the sick poor before giving their services; and, acting according to this idea, the guardians (I do not here speak of the assistants granted to the ordinary surgeons) almost invariably selected gentlemen in private practice, who were expected to give up a portion of their time to these new duties. It formed no part of the agreement that the practitioners thus chosen should institute a houseto-house visitation; and on inquiry I ascertained that nothing of the kind was attempted beyond the ordinary inquiries made by the surgeon when going his round, or when called to see patients in affected localities. In several instances the guardians, with the best intentions and at a very considerable outlay, engaged a large staff. In the parish of St. Mary, Newington, for example, no fewer than nine surgeons, all gentlemen in private practice, were appointed so far back as November, 1848; and they continued in office, with some exceptions, throughout the epidemic. In Lambeth, again, in addition to many assistants allowed to the ordinary surgeons, it was stated on August 11th that six extra medical officers, private practitioners, had been appointed; on this day the total staff for Lambeth, exclusive of one surgeon at Norwood, was as follows:—

Ordinary surgeons,	incl	ading	the	surgeor	of	the	0
workhouse .	•	•		•	•	•	10
Assistants to ditto	ě	•	•	•	•	•	13
Extra medical office	rs	• .	•	•	•		_6
Total	_				•	•	27

In the City of London Union a considerable number of private prac-

titioners were also engaged to attend on cholera cases.

The evils of this mode of procedure are shown in the following instance, in which, however, the local authorities deliberately neglected the order of the General Board for a plan of their own. The West London Union, including the parishes of St. Bride, St. Dunstan, Bridewell Precinct, &c., and through which runs Fleet Ditch, suffered most severely; and in consequence of my Report, the General Board issued a special order, dated July 17th, for the appointment of six extra medical officers to institute a systematic house-to-house visitation: these visitors, according to the plan I had arranged, were to have acted under the direction of the ordinary medical officers. Instead of complying with this order, the guardians appointed, on July 24th, three gentlemen in practice, Mr. Ross, Mr. Munday, and Mr. Kelly, who were paid each one guinea a day: some other medical men were subsequently appointed. In the letter of instructions sent by the clerk of the guardians to the three extra surgeons a wish is expressed that a daily household visitation should take place; but on Mr. Ross making, on his own behalf and that of his colleagues, Mr. Munday and Mr. Kelly, an application to the chairman and clerk to know whether it was a part of their duty to make a house-to-house visitation, he was informed that such visitation was not included in their duties; and consequently none was made. On the date when I took this evidence, August 7th, Mr. Ross stated he "had seen thirteen cases of cholera since his appointment (fourteen days), all of them either in collapse or approaching it: some of these cases had had diarrhoa previously, but had not applied; all cases of bowel complaint, if seen early, have yielded to treatment." Mr. Kelly stated, "Has had three cases of cholera, all fatal; they were first seen in a stage approaching collapse; each of them had had diarrhoa for two or three days that had not been attended to." Mr. Munday stated he had seen fourteen cases of developed cholera, "all of which, when the patients were first seen, were in a state of collapse, the people having neglected to apply; in all these cases he was applied to to visit the patients: has lost no case from diarrhœa." The ordinary medical officers, on their part, made no regular house visitation, "not having been called upon by the guardians." One of these gentlemen adds, "Has had some cases of cholera since the above appointment (that of the extra officers): all these cases were seen first in the state of collapse; believes all of them had had premonitory diarrheea." Thus in this union, comprising in the neighbourhood of Fleet-street, Ludgate-hill, &c., some of the most severely visited parts of London, although 21 guineas a week were paid by the

guardians, no efficient preventive measures were put into operation. If, on the contrary, the order of the General Board had been adopted at the time in question, the parishioners would have had the entire services of six medical visitors, who would have gone into the affected localities, house by house, and at an expense of 24 guineas per week.\*

After carefully investigating the two systems, that of engaging gentlemen in practice and that of medical visitors, I feel myself justified in stating my conviction, that not only is the latter infinitely more effectual in securing the great object of all these efforts, the diminution of mortality and the consequent saving of life, but that it is also much more economical. The remuneration to the surgeons appointed by the guardians varied so much in different parishes that no very accurate estimate of the expense can be made; but when it is recollected that private practitioners could give up only a portion of their time, and that consequently a larger number was required if anything effectual was to be accomplished, whilst the medical visitors, who were ordinarily paid four guineas a week, devoted their whole time to the discharge of their duties, it may fairly be assumed that, even on the grounds of economy alone, it would have been wise to have accepted a plan the efficacy of which had been tested by an ample experience.

In several populous parishes and unions, and that, too, in districts where, from the dreadful ravages of the disease, the public safety demanded that all parties should have zealously and harmoniously co-operated together, another error was committed by the guardians in making their appointments: they omitted, in a matter so immediately connected with their department, to consult the medical officers; the necessary and direct consequence of which false step was, that the arrangements, not being based on sufficient knowledge, were usually most defective, so that when it was attempted to put them into operation the utmost confusion arose. To such an extent did this pernicious principle extend, that no definite plan of procedure was agreed upon: sometimes, for example, the newly-appointed medical officers, supposing they were only to attend cases of developed cholera, declined to give advice and medicines for premonitory diarrhoa, referring the applicants to the ordinary surgeons, already greatly overtaxed with a multitude of patients; and thus the poor often experience considerable trouble in obtaining assistance; in other instances, where the object was to establish systematic house visitation, the ordinary and the extra officers not having been assembled to discuss with the guardians their respective duties, no effective operations could be carried out.

But by far the most mischievous result of the entire want of confidence, so often evinced by the local authorities towards their legally appointed medical officers, was the deep dissatisfaction generated in the minds of the latter—a feeling which, although it did not induce any abatement of zeal, reacted most prejudicially in various ways, especially when, in consequence of the interposition of the Board of Health, the medical officers could no longer be excluded from their legitimate influence.

I cannot quit this subject without a passing allusion to a matter personal to myself. In the discharge of the duties intrusted to me by the General Board, it frequently happened that I was placed in the painful position, as regarded my professional brethren, of objecting to appointments already made by the local authorities; and in some few instances, but in almost all on the part of guardians, who either were much displeased to have their own arrangements disturbed or their personal friends displaced, it was asserted that, by thus acting, I impugned the qualifications of the gentlemen whom I found in office.

I am desirous, therefore, of publicly stating, what at the time I invariably and fully explained, that in urging the appointment of medical visitors I in no single instance questioned the professional acquirements of the gentlemen already engaged, or indicated by any, the slightest expression, a suspicion that they were not fully competent

to discharge the arduous duties they had undertaken.

I would also avail myself of this opportunity to record the unqualified admiration with which I have been inspired, by the unexampled exertions made by the medical officers of the metropolis during the late visitation. With a courage only equalled by their patience these gentlemen rendered at all hours, night and day, inestimable services to the victims of the epidemic; at a time when all who were able quitted even the healthiest parts of London, the medical officers, often debilitated by their incessant labours, and even suffering under unmistakeable symptoms of the disease, never quitted their post, though that was of necessity in the very focus of the pestilence. Many among their number were, after the exhausting fatigues of the day, disturbed in their rest at night for weeks and weeks together: one surgeon did not change his clothes for eight or nine days, sleeping at intervals on a sofa; another for 18 days had not two hours' consecutive sleep; and all these great services it should be recollected were, for the most part, performed amidst the obscurity of dark alleys and pestilential dwellings, unseen by the public eye, frequently undervalued even where known, and always miserably underpaid. Examples are not wanting of surgeons who, after a year of such labours and such services, have received for their recompence actually less than would defray the additional outlay caused by the large amount of expensive medicines, and by the provision of an extra assistant. In other instances no extra remuneration whatever was granted. The following statement is extracted from an official communication addressed to the General Board of Health by Mr. Bayfield and Mr. Leadam, the out-door medical officers of St. Olave's union. Mr. Leadam states that "at the commencement of the epidemic, an order was issued directing the medical officers to attend all cases of cholera and diarrhoa immediately, without waiting for the usual legal order; and handbills were published to convey this information to the poor at large." The consequence was, that in a district "teeming with cholera" these medical officers "were day and night assailed by applications for medical relief;" they attended and prescribed for 219 cases of developed cholera, and 2927 cases of choleraic diarrhea; they applied to the guardians for remuneration, and received in reply the following resolution :- "That the application of the outdoor medical officers for remuneration for their extra services during

<sup>\*</sup> See a letter on this union from the Rev. Charles Marshall, vicar of St. Bride's, in the Appendix, No. 6.

the prevalence of the epidemic be not entertained." These gentlemen then applied to the Poor Law Board, and were informed that the Board were unable to interfere further in their behalf. They next applied to the General Board of Health, and received a reply, from which the following is an extract:-"I am to state in reply that the Board regret very much the decision of the Board of Guardians, being fully of opinion that those services were exceedingly laborious and of vast consequence; but the General Board have no power to oblige the Board of Guardians to make any allowance for those unusual duties." In one wealthy parish, where one of the surgeons had attended 42 cases of cholera and had supplied medicine in 620 cases of diarrhoa, the medical officers, on remonstrating, were told by the guardians that their baker or butcher might as well expect on the same ground an allowance whenever provisions rose in price. I have conceived it to be my duty to state these facts, first of all, because there is no one who has had a more favourable opportunity than myself of witnessing the meritorious conduct here feebly indicated; and secondly, because it is to be apprehended that in the event of a second visitation the interests of the poor might suffer; since, whatever may have been the amount of self-sacrifice evinced by the members of the profession during the late epidemic, it would be contrary to all experience to expect again such devotion from a body of men, who know and feel that their sacrifices to the public weal have gone almost unnoticed, and certainly, as a rule, unrewarded.

Want of Hospital Accommodation, Nurses, and Houses of Refuge.-Having said so much of the defective parochial arrangements respecting medical service, I can only briefly state that other and most serious omissions occurred during the late epidemic. In various quarters there was a great want of hospital accommodation, and I received repeated complaints from the medical officers that they were unable to remove patients lying in miserable, filthy, and overcrowded rooms, where any chance of recovery was destroyed by the total absence of all the appliances demanded in the advanced stage of the epidemic. In several parishes some provision was made for the reception of such cases; but for the most part it was altogether unequal to the requirements of the medical attendants. In speaking on this point I am aware that great difficulties were experienced by the guardians when attempts were made to procure suitable accommodation, the owners of property naturally enough objecting to let their premises for such a purpose. In Lambeth, for instance, I know that repeated efforts of the kind were made by the authorities, but unavailingly; in other cases, on the contrary, I feel assured that by proper exertions this important desideratum might have been secured.

There was during the prevalence of cholera another serious defect, which, there can be no doubt, might, by ordinary care, have been entirely obviated; I allude to the great want of nurses, both as regarded number and qualification. On this point I received repeated complaints from the medical officers; and yet, considering the absence of hospital accommodation, which prevented the removal of the sick when desirable, and the want of all the articles required to minister relief to the sufferers in the miserable dwellings of the poor, nothing would have con-

duced so much to second the efforts of the medical attendants as a staff of respectable and trustworthy nurses provided with the necessary requirements. In most parishes some few nurses, it is true, were supplied; but they were usually insufficient in number, and, being for the most part paupers, were often not qualified for their office.

It is one of the best established facts that in the management of cholera there is not, next to prompt medical aid, any measure susceptible of immediate application so effectual as the removal of those who are yet well, but threatened with the pestilence, out of the crowded and miserable abodes usually selected for attacks of the epidemic. There was therefore no provision more urgently demanded for controlling the force of the epidemic than houses of refuge; and yet I do not recall more than two or three instances in which any such places were opened by the authorities. I am again not unmindful of the difficulties which were met with in this respect, for there is no doubt that the objections which applied to the letting of premises for cholera hospitals, also operated, though in a much less degree, as regarded a house of refuge. The testimony of the medical officers was uniform as to the enormous evils that resulted from the impossibility they experienced of removing families living in single rooms when one or more of their members were attacked. In every part of the metropolis these instances were constantly recurring; members of the same family were again and again attacked in succession, as many as three, four, five, and six persons, succumbing one after another in the same house; in fact, the mortality tables in many localities were swollen by such catastrophes as these. Now it was the concurrent medical opinion, and it is in perfect keeping with all experience in India and Europe, that if, when a special locality was first seized, it had been possible to have taken out for a short time the inhabitants of the most crowded rooms, till these had been purified and cleansed, the happiest results would have followed. And it must be recollected that one of the marked peculiarities of cholera, namely, that it attacks in groups, seizing upon a certain cluster of houses, then ceasing and visiting another such restricted locality perhaps to return again to its first seat, would have particularly favoured this proceeding; since the few days required for the cleansing operations would also have given time for the force of the epidemic in the particular spot to have subsided, so that, when the people returned invigorated by breathing a purer air, they would have had a much better chance of escape; whilst, as group after group of houses was attacked, the same process might have been adopted in succession. As one of the principal impediments was the difficulty of procuring premises, it is obvious, if any other attack of cholera should unhappily occur, that one of the first measures to be adopted would be to erect some temporary buildings in open and central situations, to which families under the circumstances indicated might be temporarily re-

In terminating this sketch of the system so generally pursued by the local authorities, and on maturely considering the whole subject, I can arrive at no other than the following conclusions:-

1. That the proceedings of the guardians tended, in a great majority of instances, to defeat the benevolent designs of the Legislature for the improvement of the public health, especially in so far as they involved the neglect of the various and important sanitary precautions, contemplated by the Act of Parliament for guarding the community from destructive epidemic disease.

2. That the system adopted during the prevalence of cholera for affording medical aid to the poor was erroneous in principle; especially as it related to the neglect of the first and curable stage of the

3. That sufficient medical and other aid was not afforded.

4. That this course of procedure caused a large sacrifice of human

Views of the Medical Officers relative to the Measures required to meet the Epidemic.—In the preceding pages I have borne my humble testimony to the meritorious conduct of the medical officers of the metropolis during the late melancholy visitation; and I have especially pointed out the vast evils which, so far as I have been able to judge, have sprung from that shortsighted policy which deprived the parochial surgeons of those full powers with which, for the common safety, they ought to have been intrusted. But it is my duty, at the same time, to state I have sufficient reason to know that much mischief was caused in several districts by the views maintained by the medical officers themselves respecting the management of the epidemic.

It is matter of such primary importance, with reference to any subsequent attack of cholera, that no fallacy should exist upon this point, that it becomes essential to enter into some detail respecting it. The opinion entertained by many medical officers was to this effect—that as they and their assistants visited repeatedly the infected districts; that as they went through them, for instance, three or even more times daily; that as they made in these visits extensive inquiries among the people as to the existence of bowel complaints, no other plan could be adopted with advantage. This was the reason most commonly assigned for dissenting from the views of the General Board respecting house visitation. It was also frequently contended that ample means had been adopted to advertise the people of the necessity for making early application in all attacks of diarrhoea by handbills and placards; and, in proof of the correctness of this view, it was stated, and truly, that great multitudes of the poor did apply for and receive medicine, and that the surgeries of the medical officers were crowded with applicants day after day. Notwithstanding the confidence with which this opinion was advocated, it is certain, as was indeed made apparent by the evidence of these gentlemen themselves, that it was essentially erroneous. Thus in one parish on the south of the river, which suffered most severely, no less than 112 deaths having been registered in the week ending August 4th, the medical officers on the 8th, after several interviews with me, still contended that a house-to-house visitation was neither necessary nor practicable, although on the same day one of these gentlemen stated he had had a considerable number of cholera cases lately, the majority of which were seen for the first time in collapse; whilst the other had given it in evidence on July 27th that "the poor generally neglect to apply till

the attack becomes severe," that is, till it had by delay become wellnigh hopeless, so far as medical treatment is concerned.

In another parish, where the medical officers had been authorized by the guardians to provide extra medical aid when in their judgment it was required, one assistant had been so appointed; but I found on August 3rd that there was a considerable mortality from cholera (in the week ending August 4th, 15 deaths were registered); that, according to the medical officers' own evidence, the epidemic "had decidedly increased in the parish, and had spread to new localities;" that no systematic house visitation had taken place; and yet it was affirmed that "no further medical aid was required." This opinion was the more remarkable, since the evidence of the new assistant showed that his imperfect visits had been productive of the most important benefits. This gentleman stated that "the bowel complaints, if seen early, were in the great majority of cases curable. Had not had a single case of diarrhoa which, when he saw the patient early, went on into cholera."

Many instances of a similar nature came to my knowledge, but the two now adduced may suffice to show the serious difficulties which were opposed to the introduction of the only efficient method of dealing with a pestilence which was at the time striking down thousands of victims. In those districts where these views prevailed, it is my duty to point out that the evils extended beyond what concerned the precious time already lost; for, backed by such opinions, it was not a matter of surprise that, when an imperative order was sent by the General Board to the guardians to institute house-visitation, delays and even pertinacious opposition were interposed: in the former of the above instances the guardians, in fact, did not yield till legal proceedings were adopted.

Reports on the Metropolitan Workhouses.\*-Before concluding this section, it is proper, as connected with the subjects considered in the preceding pages, to call attention to the fact, that, in December, 1847, a special inquiry was, at the instance of Sir George Grey, instituted by the Poor Law Board, for the purpose of ascertaining what special arrangements might be necessary, in the metropolitan workhouses, for the reception and relief of destitute persons attacked with cholera. The inspectors appointed for this purpose-Dr. Arthur Farre, Mr. Martin, and Mr. Toynbee-in their Report, dated January 19th, 1848, state that-

"As it appears that in a large number of the workhouses no fitting reception can be afforded for the destitute and those deserted through groundless fear

2. Report of Dr. Arthur Farre and Mr. Grainger to the General Board of Health on Thirty-eight Metropolitan Workhouses, dated March 1848. Ordered by the House of Commons to be printed, March 1850.

<sup>\* 1.</sup> Report on the Capabilities of the Metropolitan Workhouses for the Reception and Treatment of Cholera Cases. Presented to both Houses of Parliament by command of Her Majesty, 1848.

of contagion, it becomes necessary that some other provision (out of the house) should be either immediately made, or at least kept in view, in every such instance."\*

The inspectors point out, further, the necessity of properly qualified nurses being provided; judiciously observing that, as cholera runs its course most rapidly,

"the loss of an hour may compromise life; and throughout the disease the most careful and attentive nursing of the sick is of the utmost importance to the cure; many lives are lost in cholera through the mere endeavour of the patient to sit or stand erect, so exhausted are the powers of life in the latter stages of this disease."

Very full and precise recommendations are also given, both in respect to each individual workhouse and generally, for effecting sanitary improvements, and for maintaining the health of the inmates, under the well-grounded apprehension of a visitation of cholera.

In the month of January, 1849, the General Board of Health instructed Dr. A. Farre and myself to visit the metropolitan workhouses for the purpose of ascertaining (1) the general state of their inmates, especially in reference to the existence of cholera and diarrhœa; (2) the general arrangements of these establishments in regard to sanitary measures and precautions; and (3) the extent to which the recommendations contained in the Report of 1848, above noticed, had been observed or neglected. At the period when this inquiry took place, cholera had been existing in London some months; several severe outbreaks had occurred, and many hundred deaths had taken place. But, notwithstanding this, it will appear by the following extracts from Dr. Farre's and my Report that the various measures recommended a year before had been very imperfectly realised:-

"The third point of inquiry upon which we have to report relates to the extent to which the recommendations of the inspectors appointed, at the desire of Sir George Grey, to examine and report on workhouses, have been regarded or neglected. Upon this particular, we find, that, with a few exceptions, which we shall here notice, these recommendations have either not been attended to, or have only recently been brought under consideration, and are so partially carried out as to extend to one or two particulars only, whilst others, and often the principal ones, have been neglected. But in no instance, with the solitary exception to be mentioned, does it appear that the authorities have originated those improvements which the apprehension of an epidemic invasion would have justified, and which the recommendations of the Report, whilst they were intended to be suggestive in matters of detail, were also calculated to put forward for general consideration."

After enumerating those workhouses in which improvements had been more or less completely effected, it is stated that in the remaining

"either the improvements are so slight as not to justify any mention of them here, or else in every other instance no change whatever has taken place; so that for these, the Report of 1848 appears to have remained a dead letter."

The subjects most generally neglected, as regarded the interior of the workhouses, were those most important with respect to the maintenance of health-namely, ventilation and defective arrangements as to privies and waterclosets: this is the more to be regretted, since inexpensive and efficient modes of improvement were fully described in the Report of 1848. With respect to the want of hospital accommodation. although, as stated in a preceding page, serious difficulties did exist in obtaining suitable premises, these might have been overcome in most instances by timely and zealous exertions. It is much to be regretted that properly qualified nurses were not, as recommended by the inspectors, provided on the very first appearance of the epidemic.

House-to-house Visitation.

## SECTION IX.

Measures adopted by the General Board of Health, and on the System of House Visitation.

Ir has been shown in the preceding section that the measures prescribed by the Board of Health for mitigating, as far as that might be possible in the present sanitary state of the metropolis, the ravages of cholera, were of a most comprehensive character; due provision being made, on the one hand, for the removal of all causes known to be prejudicial to the public health; and on the other, for securing to the poor all the appliances of medical science for the relief of persons actually suffering from the pestilence (see Appendix, No. 7).

After the statements contained in the previous part of this Report, it need only be remarked in this place, that up till the last moment in which the preventive measures were left to the Boards of Guardians most serious errors were committed, of which no more striking confirmation can be adduced than that afforded by the City of London Unions; in which, with the exception of the East London Union, where my recommendation for the appointment of medical visitors was promptly carried into effect, the arrangements were so unsatisfactory as to lead to the interposition of the Lord Mayor and the City Committee of Health. to whom, on September 13th, 1849, I had the honour of submitting a plan for meeting the epidemic in the City, in which was included systematic house-visitation, the admirable operation of which in controlling the ravages of the disease had already been amply proved in other districts of the metropolis. Visitors were appointed, and, in combination with the highly efficient ordinary medical staff, and under the able superintendence of the distinguished officer of Health for the City of London, Mr. Simon, the most happy results were obtained.

On the System of House-to-house Medical Visitation.

The Metropolitan Sanitary Commission, to which body the members of the Board of Health were attached, had prior to the arrival of cholera in this country collected some most important evidence, showing the great success that had attended the early treatment of the premonitory diarrhea at Bilston, in 1832, under the direction of the late Dr. M'Cann, an individual to whose memory the public gratitude is due [B.]

<sup>†</sup> Report on Metropolitan Workhouses, p. 28. \* L. c., p. 45.