TO THE RIGHT WORSHIPFUL THE MAYOR OF NEWCASTLE-UPON-TYNE.

SIR,

I offer no apology for addressing the Chief Magistrate of Newcastle on the subject of a disease now spreading destruction and alarm among its inhabitants. For the general anxiety attending the presence of Cholera will, I am sure, be held to justify any attempt to elucidate its origin, or to suggest measures for arresting its further progress.

I am the more impelled to offer a few remarks for the consideration of the local authorities from entertaining a strong conviction that to them we must chiefly look for the authorization and practical execution of those preventive and remedial steps which the exigency of the crisis so imperatively demands. At one time I confess that the General Board of Health, appointed for the express purpose of protecting the health of the country, and towards the establishment of which, in common with other sanitary reformers, I contributed my humble efforts, would, under similar circumstances, have occupied the first place in my
confidence. But, from the utter inefficiency of that board, from their gross neglect of the very evils to remedy which they were installed in office, and from their recent indifference in the first instance to the danger threatening this important town and district, I am reluctantly compelled to abandon all hope of beneficial action on their part. Had the intimation of an impending outbreak which I communicated to the General Board of Health, on the 2nd inst. and to the correctness of which I pledged my professional reputation, been at once acted upon, measures of precaution and of preparation could have been completed before the general diffusion of the pestilence, and many valuable lives would, doubtless, have been saved.

It certainly reflects no credit upon the department of government to which the care of the public health is entrusted, that in the face of daily accounts of the malignity and steady approach of the continental epidemic, and with direct evidence of the manifestation of the disease in this the most exposed part of England, the General Board of Health could render no other assistance or encouragement to the medical profession than a solemn assurance that they were “anxiously watching the progress of the Cholera on "the Continent." And, whatever minor differences may prevail among us, it is, I think, the general opinion of all intelligent men, that for the government of a great country to attempt to avert national danger, whether foreign or domestic, by affecting to ignore its existence, is a course not less detrimental to its own dignity than injurious to the best interests of the people whom it professes to serve.

In order to determine more clearly the effective causes of the present visitation of Cholera in Newcastle, it will be necessary to glance for a moment at some of the physical conditions accompanying former epidemics. In 1831 and 1832, Newcastle suffered severely from Cholera; in 1849 it escaped with comparative impunity: a few imported cases proved fatal, but the disease never assumed in this town the character of a pestilence. Whence then arose this difference in the mortality? For, be it remembered, that the epidemic of 1848-9 in London and other places proved as destructive as the former visitations. The causes of the escape of Newcastle from the last epidemic were twofold. In the first place, as I had occasion incidentally to remark in a letter in one of the local papers in 1852, (Newcastle Chronicle, Sept. 17th, 1852,) “the work of cleansing and
“purifying the houses of the poor was not attended to in
the first and fatal epidemic of Cholera until after the
disease had presented itself here in a virulent and
destructive form; whereas in 1849 the work of sanitary
defence was relatively completed before the visitation of
the pestilence, which, with other measures, doubtless led
to the remarkable exemption of Newcastle from its
ravages.”

The other circumstance to which the greatest impor­tance was attached in connection with the salubrity of the
town in 1849 was the abundant supply of good water, the
Whittle Dean Company having recently completed their
arrangements for diffusing that important necessary of life
throughout the community in a purer form than had pre­viously been enjoyed. But in 1853 we find that Newcastle
has actually so far retrograded in a sanitary point of view,
as to present the physical conditions of 1831 rather than
those of 1849. Accumulations of decomposing refuse,
poisonous exhalations from the untrapped gratings of sewers,
offensive effluvia, the results of defective accommodation,
overcrowding, and insufficient drainage, were never more
destructive of health and comfort than they are at present.
And to complete the resemblance to the state of things
which prevailed in 1831-2, the water supplied to the inha­bitants of Newcastle is as impure and unwholesome as can
well be imagined. It is not a pleasant task to have to
express an opinion opposed to the interests of a powerful
and wealthy company, and I know too well that the advocacy
of the public good in such cases is productive of anything
but benefit or comfort to the individual who may rashly
interfere. But, having undertaken a certain duty, I shall
not shrink from expressing my opinion that, in the ar­rangements for extending their supply of water to the
manufacturing villages below Newcastle and Gateshead,
the Whittle Dean Company have to a certain extent for­gotten their primary obligation to attend to the wants and
welfare of the inhabitants of these towns. It might have
been very proper for the Company to have undertaken to
supply the enormous quantities of water required for various
manufactories, had corresponding provision been made for
increasing the contents of their reservoirs at Whittle
Dean. But when it is borne in mind that those very
reservoirs were on one occasion exhausted and unable to
supply the ordinary demands of Newcastle and Gateshead,
we cannot be very much astonished, however much we may regret, that the directors should have recently been compelled again to resort to the polluted waters of the Tyne to enable them to meet the wants of their widely-spread customers. I have the authority of gentlemen of the highest respectability for stating that the water with which these towns have recently been supplied, was drawn from the river Tyne immediately above Newcastle, and at a point where it always contains a large quantity of decomposing animal and vegetable matter, arising from the putrid carcases of dead dogs, cabbages, weeds, &c.

Now, if any one fact is well-established in the pathology of Cholera, it is the influence of impure water in predisposing to its ravages. The fatality of the disease in London in 1848–9 was almost wholly referred to the impurity of the water, and, above all things, to the presence in it of decaying animal and vegetable matters.

From the recorded experience of former visitations of Cholera in Newcastle, I therefore feel justified in concluding that the circumstances which have chiefly contributed to the present fatal outbreak are, first, the general defective sanitary condition of the town; and, secondly, the impurity of the water supplied to the inhabitants.

It is now generally admitted that Cholera will not prevail as an epidemic, it will not decimate a population, nor simultaneously develop itself at a hundred different points in the same town, unless the local sources of atmospheric pollution and bodily disorder be abundantly rife. So long as these deteriorating conditions continue to depress the vital powers, the pestilence will haunt the locality: with their removal the predisposition disappears. But have any steps been taken in Newcastle to purify the atmosphere in the districts inhabited by the poor? I fear that the greater part of this all-important work has yet to be accomplished. In carrying it into effect, there is one precaution which I may be excused for offering, viz., the employment of some chemical substances to prevent the extrication of the large quantities of poisonous gases which abound in all collections of decomposing refuse. This object can very readily be obtained by using various metallic salts, such as green or blue copperas, chloride of zinc, nitrate of lead, &c., or best of all, chloride of lime, or chlorine itself, formed by the addition of oil of vitriol and water to common salt, previously mixed with black oxide
of manganese, and pouring them in a state of dilution upon the offensive mass. By these simple precautions the dangers incident to the removal of such accumulations may be effectually prevented. And with regard to the water now used in Newcastle, it may be a question worthy of the consideration of the highly respectable company having charge of that important element of public health whether, under existing circumstances, it would not be prudent to restrict themselves altogether to their legitimate sources of supply, even at the risk of causing temporary inconvenience to their more recent customers down the river.

Having thus briefly indicated the most important means of preventing the continuance of a local predisposition to epidemic Cholera, I may, in the next place, proceed to examine the existing remedial provisions, with the view of testing their efficiency and completeness. I am here happy to bear testimony to the energy and promptitude with which the Board of Guardians, through their Chairman and Vice-Chairman, have acted, both in communicating the fact of the outbreak to the Poor Law Board in London, and in at once facilitating the medical treatment of the poor by suspending the ordinary forms. They have since continued to extend their medical resources until, at the present time, a tolerably complete system of house to house visitation is in full operation, and with the best results in checking the disease in its earliest and most controllable forms. I can only hope that the extraordinary services of their excellent medical officers will be adequately recompensed, and that they will not have reason to regret their zeal in the cause of humanity. But it must, Sir, appear to many of the public, as it does to myself, a most singular circumstance that the wealthy medical charity, which was founded in the midst of Newcastle chiefly for the prevention and repression of epidemic diseases, has not offered the least assistance towards the mitigation and removal of the pestilence now raging. During the past year I have frequently been maligned for having dared to question the efficiency of the administration of the Newcastle Dispensary; and my efforts to check its abuses and remedy its mismanagement have exposed me to much indiscriminate censure and some private injury. But I now confidently ask whether any verbal condemnation of the system of management there adopted can be so decided and overwhelming as the mere fact of its very existence
almost being forgotten during all the anxieties and urgent medical demands of the last few days. I have before shown from the early statutes of the institution, that it was intended by its founders to discharge many of the duties of a board of health, by cleansing and purifying the habitations of the poor; by distributing rules of prevention; by furnishing to the indigent poor necessary articles of diet; and indeed in general terms the early statutes direct that "when a fever, flux, or other infectious distemper appear in a poor family, the apothecary shall take every possible care to suppress the contagion, and distribute the rules of precaution." Has a single step been taken at this crisis to carry these excellent designs into effect?

Moreover, by adhering to the original plan of connecting all the Physicians resident in Newcastle with the Dispensary, a large medical staff would have been ready promptly to encounter epidemics; and would not this have been of some advantage in an emergency like that now existing, when the public demand for medical services is so great that the students in our schools are eagerly sought and gladly remunerated for their assistance? I have felt it due to myself, not less than an act of duty to the poor and to the public generally, to vindicate the correctness of the opinions which I advanced at a time when many excellent persons were unable to appreciate the importance of maintaining public charities in a state of efficiency. At the Eastern Dispensary, an institution of infinitely less means and fewer pretensions, an ample supply of proper medicines is now open at all hours to the poor, who by public notices distributed throughout the most infected districts have been invited and urged to avail themselves of the means thus offered. But I do not know that even this cheap and simple aid has been furnished by the Newcastle Dispensary. As very large subscribers to this latter institution, it certainly appears to me to be almost obligatory upon the Corporation of Newcastle to request the Committee to render it of greater public utility during the prevalence of Cholera in this country; and by so doing, they will deserve and obtain the gratitude of many of the afflicted poor.

In the strictures passed upon the General Board of Health, I by no means wish to include their excellent officer Mr. R. D. Grainger, to whom, were it merely from his distinguished private and professional reputation
the utmost respect is due from, and I am happy to say has been rendered by, the medical profession of the district. For myself I lost no time in placing at his disposal the information which I possessed relative to the origin and character of the epidemic; and were it for no other purpose than to secure the preservation of an ample and correct record of the disease, it is incumbent upon every individual practitioner to supply him with the fullest particulars. With one slight exception I fully concur in the recommendations officially issued to the captains of ships. In my own practice the administration of liquids has been found frequently to induce and maintain vomiting; I have therefore preferred to administer opium in the premonitory diarrhoea in the form of pills, instead of giving laudanum with spirit and water as recommended in those instructions. The following is the combination which, slightly varied, is, I believe, most generally relied upon for the treatment of the sickness and purging preceding the more advanced stage of Cholera, viz.—solid opium half a grain, calomel half a grain, powdered capsicum a grain, made into a pill, with aromatic confection; one to be taken every half hour while pain, sickness, or cramps continue—of course the above is the dose for an adult; and with young children great care should be taken in administering any preparation of opium. Many of the medicines advertised for the cure of Cholera are worse than useless, they are of themselves capable of producing many of the effects of that disease, and in all cases their employment creates a degree of irritation in the stomach and bowels, which greatly pre-disposes to the fatal form of the disease.

Though medical agency is, doubtless, of less efficiency in the latter stage when the body is cold, the voice altered, and the eyes rolled upwards, (a new symptom peculiar to this visitation), yet even then no time should be lost in obtaining competent assistance, as the timely application of proper extrinsic aid may often turn the scale in favour of life when the balance is vibrating between the two all-important issues. One circumstance which increases the fatality of the disease is the tendency of the ignorant and helpless to have recourse to ardent spirits under the mistaken idea that they thereby fortify themselves against an attack. And to remove this erroneous impression should, I think, be one of the earliest acts of the Health Committee of the Town Council, which will, doubtless, immediately be ap-
pointed. In towns severely visited by pestilence, it has too
often happened that dissipation and intemperance have
been sought as antidotes to fear; and there are not wanting
indications in Newcastle of a similar insane tendency. I
am compelled also to add that very many of the poor are
keenly sensible of the dependence of the present visitation
upon those sanitary evils which they themselves are
powerless to remove, and I hope that the knowledge of
this fact will lead the Municipal Council to press on the
more rapidly with the works which local experience has
shown to be so effective. It would, moreover, appear
desirable that regular returns of the cases of Diarrhea
and Cholera should be published for the information of
the inhabitants of the town. The first step towards
the suppression of danger is to look it in the face. An
authentic return of the cases treated, and their results,
would be infinitely less alarming than the whispered
intimation of additional deaths, and the exaggerated state­
ments of the ignorant and panic-struck.

In conclusion, I can only regret that other more urgent
demands do not enable me to deal with the subject in a
manner more commensurate with its importance. That
the hastily written remarks now offered may not be of any
great service to the public bodies of Newcastle is very
probable, but if they succeed in directing attention to some
of the circumstances which exercise the most powerful
influence in maintaining the epidemic constitution of the
atmosphere of this town, they will not be altogether useless.
No person either in Newcastle or in the surrounding
district can feel certain that a very few hours may not find
him a victim to this fearful disease. But whatever may
be the will of the Almighty towards us individually, it is
not less an act of Christian, than of social, duty, to do all
in our power to protect from an untimely death those whom
the unequal distribution of wealth and intelligence renders
more peculiarly prone to the ravages of pestilence.

I have the honor to be, Sir,

Your most obedient servant,

GEORGE ROBINSON, M.D.

26, Eldon Square, Sept. 13th, 1853.