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## EXTRACTS FROM A REPORT

ON THE SANITARY COMMISSION, THE BOARD OF HEALTH, AND THE ASIATIC CHOLERA.

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[Read before the Dorchester Medical Society, Oct 12, 1848.]

At this time of the world's history, when steam-vessels and railways have rendered the communication between all parts of the world so rapid and so multiplied, it becomes us all to take sound views respecting the communicable character of various important diseases. The cupidity of merchants aims at nothing less than the annihilation of all quarantine. We are now within ten days' sail of Malta, which suffered from plague in 1813. Malta is now within six days' sail of Alexandria, the capital of Egypt, which has ever been the faithful mother of *pestilential disease*. The plague of Athens, of which Thucydides gives us so vivid a description, was imported from Egypt in vessels which laided at the Piræus, and from thence depopulated Greece. The mortality from yellow fever on board the *Eclair*, in one of our own roadsteads, clearly proves that the scourge of Africa can propagate itself in the temperate climate of Britain, and while we keep up at an enormous expense of human life and treasure, a blockading squadron along the African coast, in the vain hope of exterminating slavery by such means, it is very possible at some future period, the fever of the Niger may locate itself for a while on the banks of the Thames. The oscillations of human opinion when blind self-interest dictates the conclusions, are remarkable. The wisdom of modern times deduced from ancient experience dictated those laws of quarantine which have long protected Europe; but the mercantile world, in its lust for rapid accumulation, has employed medical talent to disprove the logic of history and human experience. The frequent irruption of pestilence in the Roman dominions, the contagious epidemics of the middle ages, the importation of the plague in 1728, at Marseilles, with the fearful mortality which accompanied it, are lessons which, for modern writers on contagion seem to have been written in vain. The "Asiatic Cholera" at the present time seems the cloud which is lowering in the distance and ready to burst upon us. With so many sources of infection from all parts of the northern hemisphere, from Alexandria to Siberia, it appears too imminent for our feeble quarantine resources to keep from our shores. It has already

reached our out-ports. Are we to act as if no danger from contagion existed? I would ask—not in how many instances has an imperfect quarantine\* allowed it to slip between its fingers, but in how many instances has its spread been arrested?

But some may perhaps be ready to say have we not a "Board of Health;" and have they not begun by an order of Council putting the whole country under the "Nuisances Act?" It is a very good beginning certainly, but I must confess that I have not much confidence in this "Board of Health." My Lord Morpeth, (now Earl of Carlisle,) and my Lord Ashley, may be very good politicians, and yet very unfit from their education as statesmen, to constitute such an important and peculiar body as a "Board of Health," *without a much larger number of medical men than they have hitherto thought proper to associate with them*. They may be amiable and accomplished gentlemen, of business-like habits, and of most excellent private character, but on that very account they are more likely to be led by the nose into the commission of many medical errors. The men they have chosen to make medical members of their Board of Health, are not in sufficient number, nor are they perhaps the men whom the profession would have chosen and have put confidence in. They appear to be all non-contagionists. It was the morbid idea of the late Duke of Bridgewater, I believe, that our rivers were only adapted to feed navigable canals; our "Sanitary Commissioners" seems to be of opinion that they ought all to be converted into main-sewer drains. No wonder the Serpentine is poisoned so that men are afraid to bathe in it. In a short time, if all the foul matters from two millions of people are poured into the Thames, that too will become a pestilential ditch; besides involving the annual loss to the community of many millions of pounds of human guano. The two volumes on the table are called the "Report of the Sanitary Commissioners," and this report is signed by Lord Grosvenor, a very respectable nobleman, not unknown to our county; and by Mr. Owen, a fellow

\* Since this was written, quarantine regulations have been suspended. The cholera had been raging at Hamburgh nearly five weeks before any vessels from that port were put under quarantine. After several cases had occurred at Hull quarantine restrictions were begun. They have, since the cases have become more numerous, been entirely removed. The door was locked when the steed had been stolen; and I suppose the wisdom of our Board suggests they may as well be hung for a sheep as a lamb.

student when I was at Bartholomews', who has since occupied his days and nights in the dissection of dead animals of all kinds, and the reconstruction of fossil skeletons, in which he has shewn a remarkable genius for accurate description, careful generalization, and original discovery, only surpassed by his predecessor in palæontology, the illustrious Cuvier.

Epidemic diseases and city-draining are subjects, however, in which Mr. Owen cannot pretend to stand as any authority; and it was certainly cruel to deprive the College of Surgeons of so valuable a professor during the period in which this Sanitary Commission was concocting its two volumes. Odontography and comparative anatomy must have suffered for it amazingly; but what between the time he lost in tracing out the potato disease in Ireland, from which Commission I imagine the public had the felicity of learning nothing, and the time this year sacrificed in architectural studies respecting the best shape of drain pipes and effluvia traps, as well as the laws of epidemics, I fear pure surgery, for which the College professes itself to be instituted, will reap but little advantage from the lucubrations of their peripatetic philosopher. We think the adage, "ne sutor ultra crepidam," would have been a good maxim; yet it seems, notwithstanding the pure surgery of the College, Mr. Owen appears to have been a very "general practitioner" in the "general Commission" line. But it may be said, in addition to my Lord Grosvenor and Professor Owen, there were Dr. Southwood Smith and Mr. Commissioner Chadwick. The latter is a barrister, very active and talented, no doubt, but knowing practically about as much of fever and cholera, as Mr. Owen does of engineering. Whatever respect we may have for the authority of Dr. Southwood Smith, we must confess that he has always had a favourite hobby, and has been somewhat too speculative and crotchety\* to be implicitly followed.

The venerated names of Dr. Copland, Dr. Paris, Dr. Latham, Dr. Watson, and many others easy to name, would have given such a document considerable weight,—why were not at least such men examined? The witnesses of whom inquiries appear to have been made, were all selected with a *one-sided object*, which gives the whole document not *the aspect of a search after the truth*, but the evident appearance of *making out a case*.

When we consider the efficient organization which a county society like our own is capable of evolving,—that by means of its members distributed in every part of our county, how easily we may communicate through the secretary a monthly report of the rise and progress of epidemic diseases within a given space, (which the secretary may, without much difficulty, tabulate and

\* Among the crotchets of Dr. Southwood Smith we may notice the following extract from the fifth Annual Report of the Poor-Law Commissioners Appendix.—(c. No ii.) Dr. Smith says, "Although scarlatina is usually arranged by medical authors under another class of diseases, namely, that termed exanthemata, or the febrile rashes, yet I have included it under continued fever, because from a long study of the phenomena of the disease during life, and an extended examination after death, of the morbid changes produced by it in the internal organs, I am satisfied that it *differs in no essential character from continued fever*."

arrange,) I think it must be allowed that we have an opportunity afforded us of throwing light on the course and character of epidemics, which the crowded population of our large towns does not afford. If, for example, we could track a given epidemic from family to family, and from village to village, carefully noting its progress, and reporting the results at definite short periods, not by the mortality, which is the only criterion of the Registrar-General, but by the *numerical lists of cases*, with *the treatment annexed*, I am sure we should do much to throw light on important points now involved in much obscurity.

It was a valuable suggestion thrown out by Dr. Conolly, in the first year of the existence of the Provincial Association, which the broad basis and extensive character of that body has hitherto prevented from being carried out, but which your county Society gives a fair opportunity of realizing. The Asiatic cholera will afford us an instance in point. Suppose it be found that on a certain day a case of suspicious choleric diarrhœa and fever appears on board a vessel in Poole, lately arrived from Hull or Sunderland, followed a few days after by several fatal cases, but that ventilation, cleanliness, and quarantine, arrest its further progress. Suppose in another town a man arrives just sent out of a cholera hospital from London, that he has a relapse of diarrhœa, attended with the choleric fever, and that he, as well as two inmates of the same house, are carried off without extending the disease further, may we not learn something from such a narration, as well as from the fact of its having appeared in Aleppo, and carried off 20,000 victims, or at Bilston, and swept away 900? Yet such facts as these did occur, and were unrecorded in the last invasion of cholera, in 1832. Should we not be able to deduce some important practical conclusions, first as to the length of time necessary to form a sufficient quarantine, and, secondly, should we not be able to lay our fingers on certain localities, and be able to say, here cholera appeared and was arrested by certain *preventive measures*, arising from the suggestions of a cautious belief in its *communicable character*. I must confess that the doctrine of the non-contagionists appears to be equally rash and mischievous, as regards the arrest of the cholera, as the doctrine of fatalism among the Mahomedans is with regard to its cure.

But I am not now arguing the question of the contagious or non-contagious nature of cholera, which I will reserve for your consideration by and bye; I am alluding to the importance of employing the organization of county Associations of medical men, for the purpose of throwing further light on questions upon which differences of opinion are entertained, and in which a dangerous kind of uncertainty is often the result. I may mention the course and progress of typhus fever, as another instance in which there are many delusions which might be cleared up by local observations over a carefully-watched area like Dorsetshire. With regard to typhus fever, I may just mention a few facts which may, perhaps, be of some interest now Sanitary Commissioners appear to have lost sight altogether of the spread of diseases by contagion, and attribute all

epidemics to cess-pools and defective drainage. About two years ago a man died of fever; his wife and family soon after his funeral were removed to their parish. They then fell ill of "low typhus;" those who nursed them took the disease, and communicated it to their families. Upwards of fifty cases fell to my share of attendance between February and November, when the disease appeared to burn itself out for want of more subjects susceptible of taking it. Men, women, and children of all ages, took it, some severely, some mildly. A few had symptoms of "typhus gravior," proving them both to be the same disease, modified by the subject. To my certain knowledge typhus fever had never visited this parish epidemically for twenty years, the drainage had been equally bad for twenty years previous, and yet no wet season had produced fever during the whole of that period. The disease was *then evidently imported*; it extended to all who had constant communication with the sick, except those who were protected by natural insusceptibility, or by having had the disease before.

If we could accumulate a body of such facts as these, which may be fairly hunted out in our own county, we might throw some light upon the laws of contagion, which from the virus being more or less diffusible in the atmosphere, may vary in different epidemics. I think we should find that fever in the country takes up its residence in new quarters, and travels, like the fungi in the fairy rings, always over new ground, or else dies out for want of victims within its reach; that though it may be more rife than usual in some unwholesome seasons, yet that it lurks in almost every month of the year, through spring, summer, autumn, and winter; that like small pox and scarlet fever, though now and then more violent than usual, it still follows the same laws of contagion, and requires the same system of separation and quarantine; and that we can generally expose with impunity those who have gone through the disease fairly before. Our scattered members may track their fever trails with the greatest ease, and while our brethren in crowded cities, like the huntsman in a rabbit warren, are only puzzled by a variety of cross scents, we may, by comparing notes with different parts of the county, have the same knowledge of the track of epidemics as the detective police obtain of those who transgress the laws.

The Sanitary Commissioners pretend to say, that in certain localities of a low and filthy character, fever is always prevalent. They should have added the fact, that in those localities the population must be dense and ever-changing, *an important element in the question*, for I am quite sure your village experience must teach you that fever enters a locality, rages for a while, and perhaps decimates the population, and does not return for twenty or thirty years as an epidemic, until another population has grown up who have not been protected in some degree by having previously suffered from the disease. The pestilential cholera, which has been with a few variations pursuing the same course through the north of Europe that it took in the year 1831, has for some weeks raged at the same seats of commerce, Riga and Hamburg, from which it was imported into this

country, *vid* Sunderland, in November, 1831. It now appears to have reached England; Hull, Sunderland, and Edinburgh, have reported a few cases to the Board of Health. How far it may extend it is of course impossible for us to foresee, but the same laws which regulated its march in 1831 and 1832, are still in action. The disease is identically the same in its features and its fatality, and the experience of the last inroad gives a pretty clear view of the probabilities of its future course. It then, as now, broke through the *imperfect and too late* quarantine regulations. It appears this year that no quarantine was established till after the occurrence of several cases. Introduced into this country among so dense a population in constant intercourse, it seems impossible for human efforts to prevent its dissemination. In preparation for its approach, certain Acts of Parliament have passed the Legislature, which may become valuable. Although men's minds have been directed to the study of the public health with increased zeal for the last few years, public hygiene must, I fear, be considered quite in its infancy; men are suffered to congregate in our large towns in filthy, narrow, and ill-ventilated streets; the proper drainage of few towns has been completed, and the poor are crowded together, not only in the cellars of large towns, but even in many of our villages, in a state of beastly proximity, to which the well-informed agriculturist would not subject his prize cattle or his well-fattened pigs.

I must confess, gentlemen, I have read with some surprise, the hasty assertions of the Board of Health, published on Friday last in the *Gazette*, and since copied into all the journals. It states:—"The extent, uniform tenor, and undoubted authority of the evidence obtained from observers of all classes, in different countries and climates, and amidst all varieties of the physical, political, and social conditions of the people, appear to discredit the once prevalent opinion that the cholera is in *itself* contagious,—an opinion which if fallacious must be mischievous, since it diverts attention from the true source of danger and the real means of protection, and fixes it on those which are imaginary, creates panic, leads to the neglect and abandonment of the sick, occasions great expense for what is worse than useless, and withdraws attention from that brief but important interval between the commencement and the development of the disease, during which remedial measures are most effective in its cure." The question of the contagion of cholera, "in itself" or "out of itself," we cannot deem quite settled by a statement made in this *ex cathedra* fashion; neither can we bow to the infallibility of this newly-constituted secular authority, which disposes so summarily of the conclusions of the Board of Health of 1832.

Is it not, gentlemen, a very strange anomaly, that this "Board of Health" of 1848, should thus boldly proclaim that the Asiatic cholera is not a *contagious disease*, and should have thought proper at the same time to put the whole country under, what has been called, the "contagious diseases" Act! It may be said, perhaps, that to prevent alarm, and to accure to the sick the

ready assistance of zealous nurses, they have thought proper to declare the cholera to be non-contagious. In this country such a declaration is not necessary to procure ample attention to the suffering patient; neither do we think it will lessen the terror in the popular mind. In Russia, where similar declarations have been made by the public authorities, it has not prevented a panic among the inhabitants of St. Petersburg, from which place thousands have fled into the surrounding country, and many have perished from famine, who ran away from the pestilence. In India, notwithstanding the general opinion which existed of its non-contagious character, it has been, and is, the common practice, for the poor people to fly in all directions into the adjacent jungles, and oftentimes to leave their sick, uncared for, to perish by the way. We contend, then, that such a declaration, even if it be true, does not lessen panic, and does not facilitate the care of the sick, but is likely to prevent due measures of quarantine and separation from being taken; and by throwing people off their guard on its first importation, may disseminate the disease more widely than even on the last occasion in which it visited this country. We cannot, on the bare assertion of a Board of Health, unlearn the experience of the past, and falsify the conclusions at which the highest authorities in the profession had arrived, after a careful examination of the rise and progress of this disease since it first entered Europe in 1830.

Mr. Orton, an Indian practitioner, of the most extensive knowledge of this disease, after first holding the opinion of its non-contagion, has published in his valuable work on the cholera, the indisputable facts on which he bases his decision of its infectious character; Dr. Watson, in his able lectures on medicine, taught the same doctrine; and Dr. Copland, in his gigantic work, the "Dictionary of Practical Medicine," has gone through this enquiry with the most patient research, and has produced the most ample and irrefragable evidence of the contagion of pestilential cholera. The careful perusal of his article "On Cholera-Pestilence," will amply repay the most patient attention. This article has hitherto been unanswered, and is, in fact, unanswerable.

It would have been much wiser, we think, had the Board of Health, (notwithstanding the authorities upon which it has based a contrary conclusion,) abstained altogether from expressing an opinion on the subject, and had imitated the cautious advice of Sir Thomas Munro, who, when dying of this disease in India, found his bed surrounded by a crowd of anxious friends who were of no service to him. They said they had no fear, as the disease was not contagious. "Ah!" said he, "that is an unsettled question; you had better be on the safe side, and leave me."

While some persons, who have thought proper to deny the infectious character of the "Asiatic Cholera," disseminate all sorts of absurd though ingenious theories to account for its spread over the globe, and whether it be electrical action or defective drainage, amuse the community with all sorts of wild speculations, we confess ourselves to be simple-minded enough, to be satisfied with the philosophical logic which contents itself with

one efficient cause, *modified of course by local circumstances, and atmospheric conditions.* We observe the analogy of other pestilential epidemics, and witness in the small-pox an animal poison, capable of a certain definite diffusion in the atmosphere, and a certain absorption and retention in the garments and bed-clothing of the infected. This we consider quite enough to account for its dissemination in all the four quarters of the globe, without troubling ourselves about electro-magnetic phenomena, or any other of those atmospheric vagaries, with which *post hoc, ergo, propter hoc* reasoners, may choose to inundate the press.

If it be said that in small-pox you can take up the infectious particle on the point of your lancet from the skin of the sick man, I would point to another animal poison of an analogous, though in some respects dissimilar, character, which does not less exist, though you cannot seize it between your fingers,—I allude to the poison of scarlatina. Although we are well aware that crowded and ill-ventilated dwellings, and the absence of cleanliness among the poor, aggravate the intensity, and increase the fatality, of these animal poisons, would it not be absurd in us to put down these as the efficient causes of the diseases in question, when they have existed for ages without producing any such effects? It is quite within the memory of man, when the measles first appeared at the Cape of Good Hope. In 1517 the small-pox was first imported into St. Domingo; yet Rhages, the great Arabian physician, who gives the earliest account of small-pox now extant, imagines it to be a disease which arises from the spontaneous fermentation of young blood, and that it was a necessary disease for all mankind to pass through, produced spontaneously in the system during certain unhealthy seasons. He must have observed its course and progress for many years, and yet he says not a word of its being communicated from one person to another. Even Sydenham himself says nothing of the contagious nature of small-pox; and it seems rather questionable whether the partisans of non-contagion would not have denied infection in small-pox, had not the practice of inoculation originated, which Dr. Mead appears to have first practised in England upon some criminals condemned to death in one of our gaols.

It is thus very apparent that medical men may be blind to the contagious property of a disease, when they are unable to produce it by inoculation; no wonder, then, the earlier practitioners in India, in the thickest of the storm, could not see their way, and generally denied the contagion of the cholera. Their slow and reluctant assent to such an opinion was forced upon them by the calm observation of facts. The individual experience of each was insufficient, but when generalized and investigated, such men as Kennedy, and Orton, and Copland, were led to re-examine the question, and reverse their earlier decision. Who could have been more patient investigators of the disease than Sir David Barry and Dr. Russell, who watched its progress in St. Petersburg, and were the principal medical members of the Board of Health of 1831? Is the *ipse dixit* of Dr. Sutherland and Dr.



Southwood Smith, or Mr. Grainger, to upset the close investigations of such men?

We are not able to discover that any new facts have arisen respecting cholera, either with regard to its course, progress, character, or treatment. The duration of the disease when it has attacked any place has been similar, and its advance in the same lines of commerce and human intercourse, taking about the same period to travel, in spite of opposing winds, and every variety of atmospheric conditions. The only difference has been in a somewhat more rapid march from place to place, corresponding with the increased facilities of locomotion, and in some degree, perhaps, to be accounted for, from the abolition of all attempt at forming a "cordon sanitaire."

We do not think that the avowal of the truth, either with regard to this disease, or the plague itself, is likely to be productive of mischief, but on the contrary, may induce wholesome measures of precaution, which in thousands of instances have been employed with success in preventing the spread of these maladies. We know, gentlemen, (for we saw some of the cases,) that in the little village of Bere, in this county, there were, in 1832, twelve cases of genuine Asiatic cholera, of which six proved fatal; that the first case was that of a person who came from London. It did not extend into any adjacent village. What general cause could have acted on the little village of Bere, which was not at the same time acting on the district by which it was surrounded? When the cholera was at its height in the city of Exeter, I took the opportunity of visiting it for the purpose of observing the disease, and with some of the medical men there, for several days, I saw patients in every stage, in the worst parts of the city. I saw no want of attention to the sick on the part of medical men or nurses, and the cases were attended to most promptly and efficiently, notwithstanding the general impression of the infectious character of the disease. I must, however, state that the worst cases I saw in the fatal collapse, were those who neglected sending for medical assistance till some hours or days after diarrhoea had commenced. It was a curious circumstance related by Dr. Shapter, in the "Transactions of the Provincial Medical and Surgical Association," that the two first cases which occurred in Exeter, came from two infected places, London and Plymouth, after which it spread to such an extent that 400 of the population died, and yet he says that none of the adjacent villages were visited by the epidemic, Topsham, Dawlish, and Crediton, having only a case or two, which did not extend further. We would ask how often have small-pox and scarlatina raged in Exeter without extending to Topsham and Dawlish? Do you doubt their contagious property on that account?

A few cases occurred at Poole and at Bridport in this county, but strict attention to cleanliness, ventilation, and those cautions suggested by a general belief in its contagious properties, contributed very much to arrest the further progress of the disease.

And now, gentlemen, in conclusion, I would briefly allude to the practical advice we would give our towns and villages on this important question. We say, then,

let Boards of Health or Committees be constituted in every town and village, and let them at once commence a careful investigation of all nuisances, with a view to their removal, by the means afforded by Vict. 11 and 12, cap. 123. To the owners and occupiers of cottages we would advise an examination into their internal state of cleanliness, whitewashing and cleansing where necessary, removing dung-heaps, and attending carefully to the proper ventilation of the sleeping apartments. To the poor themselves, the various medical officers will no doubt make known the necessity of warm flannel clothing during the winter, and the earliest possible application for medicine in case of any loose state of the bowels. It will suggest itself to each one of you, that cordial opiate mixtures, or some pills of calomel and opium, might be left with some confidential party in every village, to which resort may be at once had in cases of diarrhoea. We do not think any further tampering or quackery is desirable. The constant employment of the resident poor, at a rate of wages sufficient to afford their families ample clothing and substantial nourishment, in which animal food shall form a fair proportion, is one of the best prophylactics for an agricultural county like Dorsetshire. The careful superintendence of tramp lodging-houses, and the strict enforcement of the laws against vagrancy form an important feature in the duties of Boards of Guardians and Justices of Peace.

We would add, also, the propriety of establishing in connection with every union workhouse, some separate ward or building, which should be appropriated for the reception of all tramps and others who may be affected with cholera, typhus, or any other contagious disease. Our general immunity from cholera at the period of its last invasion arose probably from the fear of contagion inducing strict measures of separation and cleanliness, as well as from the comparatively small population of our towns and the scattered character of our villages, and the "cordon sanitaire" of our cultivated fields and belts of downs. We are disposed to add, that the water of our chalk districts, impregnated as it is with the carbonate of lime, in all probability rendered our population less susceptible of diarrhoea—the great premonitory symptom. The localities of chalybeate springs appear both in this country and in Germany, to have had in some degree a similar prophylactic influence.

We do not anticipate that any very formidable irruption of the disease in this county will attend the present epidemic, for the same sources of protection still exist. Should, however, a more general invasion of cholera await us than in 1832, the activity and zeal, and medical knowledge of the practitioners of the county may, I am sure, be relied on, to obtain all those ameliorations of its severity which human skill and attention are capable of affording.

Although medical aid appears to be so fruitless in the last stage of the Asiatic cholera, nothing is better ascertained than its value in the earlier symptoms. In India the Medical Board of Bombay report,—“There is reason to believe, that of 1294 cases which received no medical assistance, every individual perished.”

The sooner the premonitory diarrhoea is stopped, and the earlier our resources can be brought to bear, the less everywhere becomes the mortality. We believe the fact to be indubitable, not only from Indian, but from European statistics; and the more men's minds are enlightened as to the necessity of sanitary measures, and the removal of nuisances, the better chance we have in arresting the progress of the formidable epidemic. It is not only thus with cholera, but with all other epidemic diseases. Filth of all kinds appear to be the appropriate soil or nidus of contagion. Fresh air, ventilation, and cleanliness, moderate the virulence of every febrile disease; so that we could almost pardon the exclusive attention which even our sanitary commissioners appear to have given to this element of the question, if truth did not demand a more candid avowal. The facts proving the cholera to be contagious or communicable from infected sources we deem to be irrefragable, but the rapid dissemination of that contagion which appears sometimes to have extended a very considerable distance from the primary source, and carried on the wings of the wind and along the banks of rivers, often baffles quarantine regulations, and has often leaped the barriers of the "*cordon sanitaire*." We do not imagine the infection exists in a great degree in the stage of collapse, but the consecutive fever, and the *fecal* evacuations, seem to be sources of the poison. The mouths of sewers, the low swamps bordering rivers, and the long occupied ground of camps, are always dangerous positions to inhabit, but when the disease has already made its appearance, are tenfold more hazardous. In the belief of its contagion, care should be taken to destroy or otherwise purify, by chlorine and afterwards boiling water, the bed-clothes and under garments of those who have been affected with the disease. The history of cholera shews us, for our comfort, that it cannot permanently take up its abode with us as it has done in India. It will die out after a short time; it is not like the small-pox and typhus fever, one of the indigenous or naturalized diseases of our climate. It is a foreign exotic, and the great majority of our northern constitutions are not susceptible of the disease in its most malignant form. It is, then, a *transient* epidemic; it now re-appears after an absence of nearly sixteen years. By a careful study of its laws of propagation, as well as the best means of alleviating its sufferings, we shall be fulfilling our high duty. The mercantile world may hug its delusions, which "*Boards of Health*" and leading articles in the *Times* may please to foster, but the medical profession will not sacrifice the truth of any well-established conclusion on the mere *ipse dixit* of a few zealous partisans. We know the infection of small-pox was not noticed by *ancient observers*, and the contagion of the plague has been *denied by modern writers*; we are prepared, therefore, for the most *broad assertions* with regard to cholera. Facts, however, are stubborn things, and there is a force in truth which at length overcomes all fallacies.

ON THE

TREATMENT OF RHEUMATIC PARALYSIS  
BY ELECTRO-MAGNETISM.By WILLIAM DAVIES, M.D., Physician to the Bath  
United Hospital.(Read at the Bath and Bristol Branch of the Provincial  
Medical and Surgical Association.)

Mr. PRESIDENT,—

I purpose, on the present occasion, to bring under your notice the case of an individual who had suffered for many months under rheumatic paralysis of the hands and lower extremities, and in whom power over her limbs became restored under the use of electro-galvanism.

I will, in the first place, detail the case, and, secondly, offer a few fragmentary remarks on the agent employed in the cure,—namely, electricity, in its relation to living beings.

CASE.

Jane Farley, aged 25, had always enjoyed good health; had been accustomed to work in a laundry, in which occupation she was much exposed to cold and damp. Previously to the illness of which I am about to speak, she had never suffered from rheumatism. In December, 1845, her hands began to swell, and she gradually lost the power of using them, but suffered very little pain. The swelling and weakness continued to increase until February, at which time she was admitted into the United Hospital, under the care of Dr. Bealy. She remained under treatment eight weeks, when she was discharged greatly relieved, the swelling of the hands being much diminished, and the power almost restored. She returned to her occupation of laundress. The improvement was only of three weeks' duration, when the affection of the hands returned, accompanied at this time with swelling, pain, and weakness of the feet and knees.

In August, 1846, she first came under my care as an out-patient of the United Hospital. At this time she was in the following condition:—The joints of the hands, feet, and knees, much swollen, and exquisitely painful to pressure. She was unable to walk across a room without assistance, and she had so little use of her hands, as to be unable to dress and undress herself without aid. Her skin was covered with a cold clammy moisture, of a sour odour, and a strongly acid reaction on litmus paper. She suffered much from irritability of the stomach and bowels, in the form of acid eructations and diarrhoea; there was considerable epigastric pain and tenderness, especially after taking food; the tongue was red and pointed, the papillæ at the point being large and prominent; the organ was also covered here and there with thin patches of creamy exudation, through which the red raw-looking mucous surface could be distinctly seen. The pulse was quick, and of small volume; menstruation was rather profuse.

The treatment at this time consisted chiefly of sedatives and antacids. She seemed to derive more benefit from a mixture of hydrocyanic acid and bicarbonate of potass in water, than from any other remedy tried; she took four minims of the one, and