pathy, and useful as references, and sum up in a few words the whole gist of the matter, as far as his opinions go. We confidently recommend the examination of these opinions to our readers, as those of a talented practical surgeon, and we think that few authors of late years have come before the medical public with such claims to an attentive perusal of the result of their labours.

INQUIRY ON CHOLERA.

(No. III.)

By THOMAS HUNT, Esq.

VERY few replies have been received since the last report was issued; it is, therefore, necessary again respectfully to remind the members of the Association that the inquiry has not yet closed, and that further communications are earnestly solicited. The following points of interest are especially noted as requiring the elucidation of multiplied facts:—

1. *Premonitory diarrhoea* as it has been very generally termed. The very term expresses a theory, the truth of which appears to have been as generally taken for granted, viz., that the diarrhoea which has frequently prevailed, when and where the cholera has raged, is a mild form of that disease; and that when it exists it betrays a special liability in the affected person to an attack of the malignant cholera. This theory may be altogether true, or true to some extent only, or altogether false, and even fatally delusive. No evidence at all commensurate with the importance of the question has as yet been published in a pure, unqualified form. The reports published by the Board of Health, and, as Dr. Bell justly observes, the queries propounded by the College of Physicians, show a leaning to the opinion that diarrhoea and cholera are identical in nature if not in degree. Thinking men who have studied the history of epidemics at various periods, have observed in many kinds of illness raging at the epidemic period and in its locality, a type expressive of the leading disease; and it was very natural to conclude, that the diarrhoea and even the dysentery of cholera times and places, should be choleraic in nature. And all this may be perfectly true, or partially true, or fallacious and faulty altogether. The letters already published in this *Journal*, and certain bold propositions advanced in the *Lancet* by Mr. Waddington, are sufficient to show that an opinion now exists in the profession that the diarrhoea of cholera times is not cholera, and may even be preventive of that disease rather than premonitory. The idea being once broached, it will probably find support in the very facts which would be adduced in favour of the opposite hypothesis. For instance, the house-to-house visitation scheme was supposed by many to have accomplished the arrest of cholera in London, by taking the disease at its commencement, in its premonitory stage, and submitting it to successful treat-

ment, *very few thus treated* being observed to become victims of the dreaded disease, and this it may have actually effected. But supposing that this very general diarrhoea was in fact naturally preventive of cholera (but few thus seized under this visitation scheme becoming collapsed, and the disorder yielding often to all kinds of treatment, and as often to no treatment at all,) then all the facts are equally available on the other side; for, admitting that under the house-to-house visitation in London, but a small proportion of cases of diarrhoea were observed to run into cholera, and admitting also that the cholera itself rapidly declined when this happy and humane scheme was brought into operation, yet all this *might* have happened without its agency, inasmuch as the disease appeared to be on its decline previously, and its further retreat was not more rapid or extraordinary than frequently had been observed to occur under other circumstances. The arguments in favour of this theory are therefore worthy of attention; facts are yet wanting either to overthrow or to establish it, and it is possible that it may remain an enigma at last. Better so than to be decided without good reason. It is far more safe to believe nothing on such a question than to believe that which may turn out to be false. The question is as momentous as it is difficult, for it lies at the foundation of all our practice in cholera. It is probable that we can save but few of those who are in a state of collapse, or who are suffering severely from cholera in its profusious form. The end and aim of our inquiry is, *how shall we, in case of any future visitation, save the jeopardized?*

The following report, from a most intelligent and observant practitioner, is full of interest as regards the above question, as well as other practical points. The "overloaded bowels," after the previous diarrhoea had been stopped by astringents, the "febrile excitement" accompanying the constipation, the cases of "cholera sicca," and other facts of the same character, are the more valuable, as not being placed in a prominent position for the purpose of supporting a theory. And the very successful treatment, although acknowledged to be empirical, is instructive and encouraging.

Mr. T. HECKSTALL SMITH, of St. Mary Cray, Kent, reports as follows:—

"I have not an *exact* record of the number of cases presenting the premonitory symptoms of cholera in my practice during the recent epidemic, but they were about 200. The bulk of them differed, in no material symptoms, from that of 1832; and the whole, with one exception, when treated before the stage of absolute collapse—*id est*, virtual death—recovered. The treatment of this stage consisted, uniformly, with the exception I will presently mention, in peremptorily stopping the diarrhoea; and when, subsequently, symptoms indicating overloaded bowels presented themselves, accompanied not unfrequently with febrile excitement, purgatives of rhubarb and calomel relieved those symptoms, without their being followed, in any instance, by any of a choleraic character. This treatment is confessedly empirical, but it was successful.

"When the cases were running into collapse, the features becoming shrunken, the voice losing its power,

and the animal heat diminishing, I resorted, as in 1832, to long bags, applied to the whole length of the spinal column, filled with very hot salt, to which I added this time "packing" in blankets, but without the wet sheet. The astringents employed were those in ordinary use—chalk, kino, catechu, and, in the earlier stage, opium; but when the case was more advanced, I found opium injurious, and I think brandy almost uniformly so.

"The case I lost, when seen in the early stage, was that of a girl who had very recently recovered from dropsy after scarlet fever, and whose vital powers remained at a low ebb. All means failed to arrest the rice-water diarrhoea, and she sank. The exceptions to the treatment by astringents were in six cases with symptoms such as *I had not met with in the former epidemic*—the '*cholera sicca*.' They were seized suddenly (without previous diarrhoea,) with giddiness, faintness, cramps of the extremities, blueness and peculiar clamminess of skin, loss of voice, feeble pulse, great coldness, and signs of rapidly approaching dissolution. For these I employed a strictly horizontal position, the head quite low; heat to the spine, blanket packing, and *frequently repeated doses of the Sp. Ammon. Succinat.*, which seemed quite specific. Several of the cases remained in an alarming state for two or three hours, but all ultimately recovered.

"Four cases were admitted into the Union House under my care in a state of confirmed collapse, and no means that I could devise seemed to produce the least effect, except in one in which I gave five drops of the camphorated spirits of wine, on sugar, every five, and afterwards every fifteen minutes. Of this case, which presented when admitted the most urgent symptoms, I had for some hours hope, for not only was death suspended, but a considerable amount of warmth returned to the extremities, the voice partially recovered, the pulse a little improved, and some of the blueness disappeared; but the remedy failed. The camphor, however, certainly had a potent effect on the symptoms.

"After twenty years attendance on the poor in the district, I have become acquainted with the "fever spots," and have, indeed, taken pains to mark them. After the former epidemic several of these pest spots (to which I before referred in my replies to the Government inquiries conducted by Mr. Chadwick, extracts from which were published at the time in his report,) were effectually cleansed, drained, and permanently improved. The cholera in 1832 was the most rife in those spots, but on this occasion, although still occupied by the same class of poor, they have been comparatively exempt; the uncleansed localities have, however, again furnished the greater number of cases.

"What I then wrote still holds good:—"Where fever is found, there is the chosen seat of cholera." But this epidemic has not been so exclusive in its localities as that of 1832. The cases of severe premonitory symptoms were more spread over the population. And this leads me to remark that, although malaria serves in no small degree to *endematize cholera*, its cause seems to me to be atmospheric. For five months before cholera appeared this time, the whole type or constitution of disease, at least in this district, underwent a change. Engaged in an extensive practice,

which includes all classes, but very largely the poorer, in a rural district, a very short time elapses during ordinary seasons, without my seeing cases of an acute and inflammatory type; but for five months, before cholera appeared and during its existence in this district, *not one case of acute disease requiring the lancet* occurred, but immediately on the epidemic leaving us, the type of disease again changed, and many cases of an inflammatory character, requiring active depletion, presented themselves. I do not attempt to explain in what this peculiar atmospheric condition consists, but may mention one fact which seems to point to its electrical state. On the 12th of August, we had a remarkably negative state of electricity in this district. I found in the morning of that day, all my own household—previously in good health—complaining of symptoms threatening cholera, and on that and several subsequent days very many cases presented; and from inquiry, I satisfied myself that although many were not sufficiently ill to seek medical aid, the bulk of the population was affected.

"The cases of "*cholera sicca*," under my care, presented features strongly resembling those from the poison of reptiles, and it is curious that the specific for the cobra poison is, I am informed the *eau de luce*."

The question of the *contagious nature* of the cholera is one of great interest. Such facts as those contained in the following reports are much wanted:—

Mr. SHURLOCK, of Ensham, near Oxford, reports that ten cases of cholera have occurred at Handborough (a village in the Ensham district of the Witney Union, to which district Mr. Shurlock is medical officer,) under peculiar circumstances, seven out of the ten proving fatal, no other cases occurring in *any other parish of the district*.

"Sarah Painter, a servant, residing in Shoe Lane, Fleet Street, came on a visit to Handborough to see her illegitimate child, which was kept by her sister. She was attacked with diarrhoea on the road, and died in a state of collapse, having had all the symptoms of cholera, sixteen hours after reaching Handborough, on August 12th, 1849. Two cases occurred in the same house on the 16th; another case occurred on the 21st; another on the 26th; another on the 28th; two on September 1st; one on September 4th; the last on September 6th.

"The origin of every case was clearly traceable to personal approach to an infected person. All the cases occurred in a *detached row of six houses*, in one of which the first person died, with the exception of one, who lived fifty yards off, and was the nurse to the first case.

"I had no cases of diarrhoea before the woman came from London; but during the time of the prevalence of cholera, six cases of bilious cholera, and thirteen of diarrhoea, occurred in the infected district.

"Handborough is most healthily situated on a hill overlooking Blenheim Park, with a gravelly soil. Continued fever frequently prevails, but generally arises from want of proper nourishment. The ravages of cholera were indiscriminate. All the inmates (four) of one house, were one after another attacked, and died. The old man (aged 71,) a razor-grinder; his son, (33,) a cake-seller at fairs, a sad drunkard; his wife (30, eight months advanced in pregnancy; and their child (3).

"Premonitory symptoms occurred in most cases. The drunkard was attacked suddenly at ten, A.M., with violent cramps, vomiting, and rice-water purging, and was dead before six, P.M.

"Wrapping a child, aged 6, in a blanket wrung out of hot water, and well sprinkled with salt, brought it from a state of collapse in half an hour. The child struggled for ten days with fearful congestion of brain, but recovered perfectly, and continues well.

"The diarrhoea was treated by me with, in the first place, a dose of rhubarb and calomel, five grains of each for adults; then in two hours to commence taking cardiac mixture, composed of chalk, aromatic confection, spirits of ammonia, and laudanum, ten minims for a dose.

"I hope my report will be sufficiently intelligible to you. The cases appear to prove the contagious nature of cholera, though I am inclined to doubt its contagiousness.

"In case you wish any further information, and I am able to supply it, I shall be pleased to do so."

At my request to be favoured with some account of the drainage, &c., of these habitations, Mr. SHURLOCK was kind enough to reply as follows :—

"I send you a diagram of the cottages and premises attached, where the cholera cases occurred at Handborough. Each of the cottages consists of three floors, one large room in each floor. They are well ventilated, having windows both behind and in front. The drainage is good, but one drain runs under No. 2, where the cholera first occurred. The privies are good, situated at the bottom of the garden, about five-and-twenty yards from the houses; beyond the privies are open fields. About seven feet from the houses in front is a separate dust-hole or cesspool for each house, about two feet wide and sixteen inches deep, into which all the slops and refuse of the cottage is thrown, and all the discharges of the first cholera patient were also thrown here, but I had them covered with lime and filled up. There is no stagnant ditch near. There was a filthy pigstye at the back of No 4, and in this cottage every inmate had cholera, and died. The situation of the well is shown in the diagram, and is quite unexceptionable. The water is excellent. Two-thirds of the cases of diarrhoea, and all the cases of bilious cholera, occurred in the cottages where the cholera was or had been, and I looked upon all three as one disease."

D I A G R A M .