

lemaic disease. Upon this declaration of inability on the part of Dr. Browne to comply with the request of the vestry, not only is that gentleman held up to public indignation as a person who refuses to lend his aid in repressing the prevailing disease, but the usual threat is held out, that the vestry must consider whether he ought not to be dismissed from his office of district vaccinator.

Now, we have not the slightest doubt that, although, from private and personal considerations, Dr. Browne is compelled to decline rendering his services as an assistant to the parish Surgeons, many other gentlemen would be found to come forward, if the vestry would pay them; and as to the threat of dismissal from the post of district vaccinator, it can only excite derision and contempt from all those who are aware of the lucrative character of such a valuable appointment.

We understand that Dr. Browne, in conversation with some of the authorities, represented the expediency of treating Medical men like gentlemen, to which the reply was, "Oh, we have nothing to do with gentlemen in our Board,"—a truism which is applicable to other parochial conclaves besides the vestry of St. Pancras, and one to which innumerable parochial Surgeons can bear painful testimony.

THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

WE have devoted so much space to-day to the report of the Anniversary Meeting of the Association, at Manchester, that we are compelled to defer all comment upon the principal questions discussed. Those questions, relating to the *Journal*, the removal of the Secretary's residence from Worcester to London, the change in the name of the Association, the publication of the Transactions, the proffered resignation of Sir Charles Hastings, and the increasing influence of the Metropolitan Counties Branch, are all matters which may require notice from us. This week, however, we would simply refer our readers to the report we have given of the discussions at the meeting.

REVIEWS.

Sulphur as a Remedy in Cholera and Diarrhoea. By JOHN GROVE, M.R.C.S.E., Fellow of the Royal Medical and Chirurgical Society, etc., etc. Second Edition. 8vo. Pp. 35. London. 1854.

Observations on the Nature and Treatment of the Asiatic Cholera. By JAMES TUCKER, M.D., M.R.C.S. 8vo. Pp. 49. London. 1854.

On the Use of Vegetable and Mineral Acids in the Treatment, Preventive and Remedial, of Cholera, and other Epidemic Disorders of the Bowels. By J. H. TUCKER, Surgeon, etc.; Honorary Secretary of the Epidemiological Society. 8vo. Pp. 32. London. 1854.

MR. GROVE believes that "sulphur is an antidote to the cholera poison." Three cases are given, to show the value of the remedy in the stage of collapse. Mr. Grove does not state how many cases, in the stage of collapse, he treated, and what was the mortality in his practice. He praises sulphur in the strongest general terms.

The following is Mr. Grove's method of preparing and exhibiting sulphur:—

"℞ Sulph. præcip. pur. ℥iv., sodæ bicarb. ℥iv., sp. lavand. co. ℥xv., aq. destil. ℥lxxij."

Of this compound the patient takes two teaspoonsful, in a little water, every two, three, or four hours, in simple diarrhoea; but, if the case is urgent, every ten minutes or quarter of an hour.

"In sudden attacks, or if the patient is suffering severely, I commonly add from 10 to 30 minims of liq. opii sed., or tincture of opium, to the first dose of the mixture." P. 19.

Dr. Tucker affirms, in the plainest terms, that there is a cure for the developed or collapsed stage of cholera. Dr. Tucker

sneers, however, at Mr. Grove's panacea. "Even," he says "such means as charcoal, sulphur, and creosote have been recommended."

The subjoined is a specimen of Dr. Tucker's style:—

"After the reading of Dr. Snow's paper, 'a Mr. Richardson approved of astringents and creosote, believing them to act by glazing the mucous membrane.' But, after this specimen of vitrification for what must be considered human crockery by a Medical authority, we may expect, on the same principle, to hear of soft solder, Roman cement, and French polish prescribed to stop the leakage from the material bodies of the sinking sick."—Pp. 12, 13.

Dr. Tucker is the advocate of Dr. Stevens' views and salines. He argues thus: More persons died of cholera in London in 1849 than in 1832; there must have been a cause for the difference. As salines were much talked about in 1832, it is probable (he says) that they were more extensively given in 1832 than in 1849; consequently, the excess of deaths in 1849 was due to the Salines having abstained from the extensive employment of salines in that year.

At page 19, we find the following condensed account of Dr. Tucker's master, Dr. Stevens', views:—

"Dr. Stevens' views are, that cholera manifests itself in three stages: the first consists of vomiting and diarrhoea—symptoms which are nature's efforts to expel the morbid poison from the tainted blood by means of the gastric organs; the addition of cramps or spasms, and a sinking pulse, form the second stage; the collapsed, or third stage, consists of lividity and coldness, stagnant circulation, and universal congestion."

Dr. Tucker repeats the oft-repeated statement of Dr. Stevens, namely, that, of 465 cases of cholera treated by salines under his own immediate superintendence, the mortality was only about one per cent.

Dr. Tucker's own experience is this—

"During the six weeks that I had an opportunity of observing the cholera, I had recourse to the saline treatment in near 100 cases; the result was successful in every case where I had commenced the treatment before the collapse stage set in,—while many other patients even in the last stage, who appeared beyond all hope, recovered under the use of the electric salts. I found that small bleedings, blisters sprinkled with turpentine, applied over the heart, and sinapisms to other parts, together with the steady internal use of the electric non-purgative salts, were very successful."—P. 17.

Dr. Tucker does not state how many cases of cholera in the stage of collapse he saw, nor the mortality of the cases that were first seen in that stage.

Mr. Tucker adduces certain facts to prove that cider is useful as a preventive of cholera. Vegetable acids generally, Mr. Tucker thinks, have a similar property. Cider districts are, he thinks, exempt, or nearly so, from cholera.

Of the mineral acids Mr. Tucker writes—

"That sulphuric acid alone, or in conjunction with nitric, will prove of service in the premonitory stage of cholera, I have no doubt; and I have reason to think the time will come when they will be considered prophylactics."—P. 23.

GENERAL CORRESPONDENCE.

THE CHOLERA NEAR GOLDEN-SQUARE, AND AT DEPTFORD.

[To the Editor of the Medical Times and Gazette.]

SIR,—As soon as I became acquainted with the situation and extent of the late outbreak of cholera in Broad-street, Golden-square, and the adjoining street, I suspected some contamination of the water of the much-frequented street-pump in Broad-street, near the end of Cambridge-street: but on examining the water, on the evening of the 3rd inst., I found so little impurity in it of an organic nature, that I hesitated to come to a conclusion. Further inquiry, however, showed me that there was no other circumstance or thing common to the circumscribed locality in which this sudden increase of cholera occurred, and not extending beyond this locality, except the water of the above pump. I found, moreover, that the water varied, during the next two days, in the amount of organic impurity it contained; and I concluded that, at the commencement of the outbreak, it might have been still more impure. I requested permission, therefore, to take a list at the General Register Office of the deaths from

cholera registered during the week ending September 2, in the sub-districts of Golden-square, Berwick-street, and St. Ann's, Soho. Eighty-nine deaths from cholera were registered during the week, in the three sub-districts. Of these, only six occurred in the four first days of the week, four occurred on Thursday, the 31st ult., and the remaining seventy-nine on Friday and Saturday. I considered, therefore, that the outbreak commenced on the Thursday; and I made an inquiry, in detail, respecting the eighty-three deaths registered as having taken place during the last three days of the week. On proceeding to the spot, I found that nearly all the deaths had taken place within a short distance of the pump. There were only ten deaths in houses situated decidedly nearer to another street pump. In five of these cases the families of the deceased persons informed me that they always sent to the pump in Broad-street, as they preferred the water to that of the pumps which were nearer. In three other cases the deceased were children who went to school near the pump in Broad-street. Two of them were known to drink the water, and the parents of the third think it probable that it did so. The other two deaths, beyond the district which this pump supplies, represent only the amount of mortality from cholera that was occurring before the eruption took place. With regard to the deaths occurring in the locality belonging to the pump, there were 61 instances in which I was informed that the deceased persons used to drink the pump water from Broad-street, either constantly or occasionally. In 6 instances I could get no information, owing to the death or departure of every one connected with the deceased individuals; and in 6 cases I was informed that the deceased persons did not drink the pump water before their illness.

The result of this inquiry, then, is, that there has been no particular outbreak or prevalence of cholera in this part of London except among the persons who were in the habit of drinking the water of the above-mentioned pump-well.

I had an interview with the Board of Guardians of St. James's parish, on the evening of the 7th inst., and represented the above circumstances to them. In consequence of what I said, the handle of the pump was removed on the following day. The number of attacks of cholera had been diminished before this measure was adopted, but whether they had diminished in a greater proportion than might be accounted for by the flight of the great bulk of the population I am unable to say. In two or three days after the use of the water was discontinued the number of fresh attacks became very few.

I have not thought it necessary to inquire into the very large number of deaths that occurred in the week ending Sept. 9, as I deem the above inquiry sufficient to establish the cause of the outbreak. I have, however, inquired respecting a few deaths in that week, which took place a little further from the pump than the others; and I found that, in all the cases but one, the persons had been drinking water from that pump. A great number of work-people who were employed in and near Broad-street died of cholera at their own homes in other parts of London. Mr. Marshall, surgeon, of Greek-street, was kind enough to inquire respecting seven workmen, who had been employed in the manufacture of dentists' materials at Nos. 8 and 9, Broad-street, and who died at their own homes. He learned that they were all in the habit of drinking water from the pump, generally drinking about half a pint once or twice a-day, while two persons who reside constantly on the premises, but do not drink the pump-water, have only had diarrhoea.

The pump-well in Broad Street is from 28 to 30 feet in depth, and the sewer, which passes a few yards from it, is 22 feet below the surface. This sewer proceeds from Marshall-street, where some cases of cholera had occurred before the great outbreak.

I am of opinion that the contamination of the water of the pump-wells of large towns is a matter of vital importance. Most of the pumps in this neighbourhood yield water that is very impure; and I believe that it is merely to the accident of the cholera evacuations not having passed along the sewers nearest to the wells that many localities in London near a favourite pump have escaped a catastrophe similar to that which has just occurred in this parish.

In the autumn of 1848, when cholera had just commenced in London, a number of cases occurred about Bridge Street, Blackfriars; and it was found by Mr. Hutchinson, Surgeon, of Farringdon Street, that the well of St. Bride's pump had a communication with the Fleet ditch, up which the tide flows. I have a strong impression that many a case of typhoid fever occurring in a respectable neighbourhood has its origin in the water of the neighbouring pump.

On the 12th instant, I went to Deptford, to make inquiries respecting a most fatal outbreak of cholera which had taken

place there, being confined to two streets, called New Street and French's Fields. I found that this outbreak of cholera was caused by an accidental contamination of the drinking water, occurring in an unusual manner. The people in these two streets, in which about ninety deaths from cholera occurred in a few days, have the water of the Kent Water-works; but for three or four weeks before my inquiry, they told me that the water, when it first came in, had generally smelt highly offensive, and frothed like soap-suds. They had been in the habit of throwing away a few pailsful of what first came in, and retaining that which came afterwards, and was pretty clear. On inquiring in all the surrounding streets, viz., Wellington Street, Old King Street, and Hughes' Fields, I found that there had been no alteration in the water. I conclude, therefore, that some leakage had taken place into the pipes supplying these two streets, during the intervals when the water was not turned on. There are no sewers in these streets, and the refuse of all kinds, consequently, saturates the ground in which the pipes are laid. There were a few cases of cholera in and near New Street just before the great outbreak.

I have very nearly concluded the inquiry respecting the comparative influence of the water of the Lambeth Water Company and that of the Southwark and Vauxhall Company, of which I gave some account in the Number of the *Medical Times and Gazette* of the 2nd inst. The result, which I shall communicate when completed, will show that among the population having the impure water of the Thames, from Battersea Fields, the mortality from cholera has been ten times as great as among the population having the improved water from Thames Ditton.

I am, Sir, &c.

JOHN SNOW, M.D.

18, Sackville Street, September, 1854.

THE TREATMENT OF CHOLERA.

[To the Editor of the *Medical Times and Gazette*.]

SIR,—I am desirous to correct some misapprehensions which appear to prevail with regard to the influence of castor oil in the treatment of cholera. I have not proposed castor oil as a remedy possessing any specific powers for the cure of cholera, but I have used it merely as a very mild, and therefore, as I think, a very safe emetic and purgative. I believe that it is chiefly, if not entirely, by its emetic and purgative action, that it has influence; and I am, therefore, at no loss to understand the reported ill-success of those who, believing that vomiting is injurious, combine the oil with opium or other drugs, to check this most beneficial eliminative effort, or who, not considering that it is desirable to favour the escape of the choleraic discharges from the bowels, do not adopt the necessary means to insure the purgative action of the oil. I wish to offer a few remarks upon each of these points.

The act of vomiting is so manifestly beneficial in all cases of cholera, that our practice now is to commence the treatment with an emetic; for which purpose, we give either ipecacuanha and tartar-emetic,—a scruple of the former with a grain of the latter to an adult,—or mustard and salt, a dessert spoonful of each in warm water. We have a double motive for this practice: one being to clear the stomach of any choleraic discharges which it may contain; and the other, to cast out such narcotic drugs as may have been previously given. I regret to have to state, that most of the patients who come into the Hospital have taken either opium or brandy, and sometimes both, before their admission, and that the choleraic collapse is thus rendered more profound and unmanageable. After the action of the emetic, we order the castor oil, in doses of half an ounce every half-hour, and we forbid every drink except cold water. The nurse has a slate, on which is written the name of the patient, and by the side of the name are three ruled columns, in one of which is written the exact time when each dose of oil is given; in another, the time of each act of vomiting; and in the third, the time of each evacuation by stool. A glance at these tables enables us to see the quantity of oil which each patient has taken, and also its emetic and purgative action. These tables are all copied into our note-books, and when they are published, as they probably will be hereafter, they will perhaps assist in determining the question,—Whether patients suffering from cholera are benefited, or otherwise, by frequent vomiting and purging.

If the patient rejects some doses of oil, but retains others, and if the bowels are freely acted on, we continue the oil, in the same doses, and at the same intervals, carefully observing the character of the stools. In a period, generally varying from six to twelve hours, bile appears in the motions and in the vomited