

remained for at least fifteen days. On the 9th of April, dead in domiciles and hospitals 1020; on 10th, 985 dead; 11th, 850 dead; 12th, 863; 13th, 785. From this time it daily and rapidly decreased. The severity mitigated up to this. They seemed devoted before to certain death. On the 15th, the sources of life seemed less compromised; pulse more perceptible. On the 23d only 105 attacked; on the 24th 81 attacked; 25th 62; 27th 71; and then on, gradually lessening. Galvanism, protoxyde of azote, oxygenated water, powdered charcoal, calomel and opium, arteriotomy, general bleeding, counter-irritation, produced little or no happy effect.

Post mortems.—The inductions from this source have not established any decided fact. The leading characters are the same as lately described by Dr. Green in *THE LANCET*. Equivocal appearances presented in one case, have not been found in another, and their absence or presence, backed by ingenious conjectures and plausible reasonings, have caused the broaching of many fanciful theories, and the physical cause of the disease rests in the same impenetrable obscurity. I will only notice a few appearances at variance with those generally found. Serous effusion in brain; generally healthy spleen, small, without blood; generally gorged intestines; dark appearance of inflammation, generally congested, without redness; mesenteric ramifications enlarged, in general much smaller. Semilunar ganglia in two or three instances, traces of inflammation; generally natural; glands of Peyer, unenlarged, uninfamed; vascular patches in general developed as in typhus fever about the 10th day. Kidneys natural, in general congested; bladder always contracted.

APPEARANCE OF THE
CHOLERA IN LIVERPOOL.

To the Editor of THE LANCET.

SIR,—The cholera, the malignant, the Asiatic cholera, has now beyond all dispute made its appearance in Liverpool, and our Board of Health, in spite of some misgivings, no longer doubt it; but the evincing of, and the perverse adherence to, a sceptical spirit in the belief of its existence, seems to be inseparable from its presence everywhere; at least such has been the case in all places which have been visited by this pestilence in England. It was not to be supposed that Liverpool would be singular in this; hence, the cry of "*No cholera*," "*We have no cholera*," was to be

heard everywhere, from the rising of the sun to the setting thereof; it was raised by the *faculty* and echoed by the populace, and up to the present moment this false, preposterous, absurd, dangerous report, is perseveringly propagated and encouraged.

The following account of five cases of cholera which have occurred in my own practice since Monday last, 14th instant, is condensed from my note-book. The evidence they afford is to the point, and very convincing, and establishes pretty clearly two things, 1st, That the cholera of Asia has commenced its ravages in Liverpool, and, 2dly, That this disease is contagious, relatively considered.

CASE 1.—*Samuel Prince*, iron-founder, aged 30 years, rather stout and robust, residing in Union Place, Lower Chisenhale Street, Liverpool, was seized with cramps, vomiting, and purging, at eleven o'clock on Sunday evening, 13th instant, but had been troubled with a diarrhoea the whole of that and the preceding day. Did not see him before nine o'clock next morning; vomiting and purging were then severe and almost incessant; great prostration of strength; countenance fallen, intensely anxious and dejected—a true picture of horror and dismay; pulse slow, and almost imperceptible; skin without the least moisture, but not harsh, soft, cold, conveying to the touch that peculiar feel which is given from a human body some two or three hours after life has become extinct, or in that state when the animal heat is almost entirely confined to the heart and internal parts. Face, neck, and the upper and lower extremities, of a distinct blue colour. Respiration laborious and hurried; tongue covered with a dense white coat, and the breath nearly as cold as the skin; the matter vomited was exactly similar in consistence and colour to that which had passed through the intestinal canal, very thin, and of a palish white, not the least offensive, and nearly inodorous, and on standing a few minutes, deposited a flakey sediment, closely resembling the grounds of white wine posset. Urine suppressed. Complained of acute pain over the region of the liver, and along the margin of the ribs—a feeling of stricture; stomach and bowels slightly tender, and not particularly painful on moderate pressure. Head not materially affected, but he frequently called out for some cotton-wool to be put into his ears; this being done, he observed his hearing was more distinct; the whizzing and clashing sounds subsided immediately; thirst intolerable; preferred cold water as a drink to any other fluid. With such prognosis before me I could not mistake the nature of the disease.

If the treatment of a solitary instance in any disease can be brought forward with recommendations of sufficient moment to entitle it to general adoption, that which was exclusively followed in the above case of cholera, claims no small share of attention. Subm. hydr. gr. x, opii gr. j, and carb. sodæ gr. xx, were administered to him immediately; the dose to be repeated every third hour. The whole body was fomented and well rubbed with hot water, very hot water, saturated with common table salt. Thus treated for a few hours, the patient became sensibly better, and at six o'clock, same evening, nineteen hours from the attack, he was so far recovered as to be apparently out of danger. To-day he is down-stairs, and wishes much to walk into the open air.

CASE 2.—*Mary Rennard*, 53 years old, a strong, jolly-looking woman, had been one night and two days in attendance upon Prince; was seized suddenly with severe cramps in her extremities at three p.m. on the 16th inst., attended with vomiting and purging, &c. I saw her at five same afternoon, and had no difficulty in identifying in her the same looks and symptoms which were so peculiar and striking in Prince, only, if possible, in a more aggravated form. She was treated in a similar manner, and with the same doses of medicine, except that in addition she was given brandy and other spirituous liquors in tolerably large quantities; all, however, proved of little or no effect, and this poor woman fell a victim to the disease at four o'clock next morning, having been ill just thirteen hours. Her pulse was imperceptible from the first, and she died without any signs of reaction.

CASE 3.—*George Prince*, a fine straight athletic youth of nineteen, son of Samuel Prince, also an iron-founder, and living with his father, was attacked with all the common symptoms of cholera at four o'clock a.m. on the 17th inst., and died at one o'clock next morning, 21 hours from the attack. Much difficulty was experienced in giving this patient his medicine, and, as a necessary consequence, therefore, it was administered at irregular and too long intervals.

CASE 4.—*Thomas Prince*, a strong well-made young man, 21 years old, brother of George Prince, worked at the same foundery, and lived also with his father Samuel Prince, was attacked with the cholera at 11 o'clock a.m. on the same day, and only ten hours from the time his brother was taken. The same kind of treatment was adopted in him as in the other cases, and in 28 hours the nature of his complaint had entirely changed. He has quite recovered. This patient took 100

grains of calomel and 10 grains of opium in about 20 hours. His mouth is not the least affected with the mercury; nor was the in any of the other cases.

CASE 5.—*Mary Moore*, aged 60, thin, and of emaciated appearance, a char-woman, was hired to clean the house of Rennard, and came from a distance for that purpose on the morning of the 18th, but at 12 o'clock, noon of next day, was attacked with the cholera, and was removed to her own house soon after. The treatment of this case, at my request, was intrusted to other hands. The woman died, however, at four next morning, 16 hours from the attack.

It may be as well to state, that the iron-foundry at which the Princes worked, adjoins the Prince's Dock, and about 150 yards from the river Mersey. The house in which they live is in a dirty low neighbourhood, close to the Liverpool and Leeds canal.

I was much surprised to learn that the two young Princes *only* out of the first four of the above-mentioned cases, were reported as instances of cholera to the Metropolitan Board of Health, and yet it is quite evident that the disease of which they died, was communicated to them from the father. I had this information from our worthy mayor, who is chairman of the Liverpool Medical Board.

I am, Sir, yours,

THOMAS WEATHERILL, M.D.

Liverpool, May 20th, 1832.

P.S. I have just come from seeing another case of cholera. It has occurred in a house adjoining that in which the aforementioned Mary Rennard died of this complaint on the 17th instant.

EFFICIENCY OF CALOMEL

IN THE TREATMENT OF

MALIGNANT CHOLERA.

By JOSEPH AYRE, M.D., Hull.

At the close of my last letter, published in THE LANCET of the 23th ult., I declared my belief that the method of treating cholera by small and frequently-renewed doses of calomel, which I recommended, required no auxiliary means to render it efficient; but that, on the contrary, I had reason to fear that the use of them had frequently compromised its success. This view of the subject was only consonant with that which I had taken of the pathology of cholera, and which I was willing to have considered as the test of its correctness. For if the use