piratory murmur was very audible over the chest; no rhonchus. The child was not insensible, but seemed dying from exhaustion; all means were ineffectual, and she died in about half an hour after my arrival. In answer to my inquiries, the mother informed me that she first perceived an alteration for the worse in the night; the child was unable to take the breast, not insensible nor unwilling, but apparently unable from weakness; about 7 A.M. she first perceived the breath to become hurried, but she was not alive to the danger till shortly before she sent for me, when she found the feet cold. She then observed the alteration in the appearance of the eruption, and her friend, in answer to my question, said, she was sure it had not this flaccid appearance the day before.

Post-mortem Examination, forty-eight hours after death.

The pustules were very flaccid and empty; the child generally fat; some serum effused beneath the dura mater and in the ventricles of the brain, the vessels of which were congested, but not to any great degree. Dark fluid blood with clots and polypus on the right side of the heart, the left side empty; some slight emphysema of the left lung, but the structure and tubes otherwise healthy, neither congested nor loaded with mucus; no effusion of serum in the cavity of the pleura, the large intestines distended with flatus, the small contracted; the different viscera healthy. On dividing the right kidney, about a drachm of purulent fluid escaped from the pelvis; this was not the case in the left; neither kidney had any appearance of disorganization or inflammation; the bladder contained about one ounce of urine, having a purulent appearance, and the peculiar odour attending a patient in small-pox. I examined the aorta, the venæ iliacæ, externa and interna, and the vena cava, but could find no appearance of disease nor any pus on their inner coats; they were very empty; there was no pus in the coagula or polypi of the heart.

In this case, the only bad symptom was the tardiness with which the pustules turned; with this exception, there did not appear anything to warrant apprehension, but rather the contrary. It is to be observed, that in this case the flaccid state of the pustules took place about the same date in the disease as in the first case, i. e. about the 10th day of the eruption. In the first case there followed a train of typhoid symptoms, against which nature struggles for a few days, but without success; in the second case, rapid and extreme exhaustion, and the patient suddenly sinks. The rapid transition from one state to another, so observable in the diseases of childhood, perhaps the high power of absorption connected with early life, causing in this instance the morbid matter to be rapidly and consequently more destructively thrown back on the system, will, I think, explain this difference between the symptoms of the two cases.

The last case I have to mention is that of a girl æt. 4 years, whom I first saw on the 5th day of the eruption of small-pox. There was moderate pyrexia with slight chest affection; the pustules were tolerably filled, and but slightly confluent. The treatment was gently aperient, refrigerant and expectorant. Till the 8th day of the eruption there was no marked change in the symptoms; their general tendency was rather towards depression than excite-

ment, but not so much so as to make me think stimulants allowable. Now, however, a decided change for the worse took place; she became restless, the pulse weak and quick; there was rather a want of animal heat; diarrhoea, the evacuations being pale and watery; tongue moist; some dyspnoea, but it seemed to arise more from debility than obstruction; slight rhonchus mucosus, but the respiratory murmur feeble; the pustules showed no disposition, but became flaccid and whitish. She had bark, ammonia, catechu, opium, wine, &c., but no improvement took place, and she died on the following morning, that is, on the 9th day of the eruption. I regretted that I could not prevail on the parents to allow a post-mortem examination, for there was similarity enough between the symptoms of this and the last-mentioned case to induce me to expect I should have found the same appearances.

What shall we say, then, was the cause of death in these cases? In neither of these was there such a confluent and severe state of the disease as to have warranted apprehension from the first that the patient's strength would be unable to bear up against it, nor was there that bad state of the general health which might have justified the same apprehension; still, when scabbing ought to have taken place, the vital powers became rapidly depressed, and at the same time the pustules were emptied of their contents by absorption, for that absorption of pus did take place, I cannot doubt; the cuticle had not allowed the contents to escape by rupture, for it was perfect, nor had the surface of the body that appearance which the oozing of pus from numerous pustules would of course give it, and the existence of pus in two cases in a healthy kidney and bladder, seems only to be explicable by absorption. Is it not, then, fair to suppose that the circulation, loaded with the contents of the pustules, which absorption had introduced into its current, was incapable of affording that stimulus and support to the different vital functions, without which death sooner or later must supervene? But whether this explanation be allowed or not, one point of practice at least has been strongly impressed on my mind by these cases, viz. the necessity of paying close attention to the appearance of the eruption, (a point I do not think sufficiently insisted on by authors,) and of forming a most unfavourable prognosis when such a change as that I have mentioned occurs.

I am, gentlemen,

Your obedient servant,

JOHN BARRETT.

17, Westgate Buildings, Bath, 8th Nov. 1841.

RECOVERY

FROM

TAKING A LARGE QUANTITY OF TINCTURE OF OPIUM.

BY JONATHAN TOOGOOD, ESQ.

SENIOR SURGEON TO THE BRIDGEWATER INFIRMARY.

THE wife of a seafaring man obtained possession of a medicine chest, which had been just fitted up for him to take to sea, and drank from a bottle ten drachms of laudanum, for the purpose

of self-destruction, at five o'clock in the afternoon. It was not discovered until past eleven at night, when she was found in a state of complete stupor, with slow stertorous breathing, hands and feet quite cold, and a feeble irregular pulse. All the muscles were in a state of extreme relaxation. She was removed immediately from her bed, and the stomach-pump used, by which means a large quantity of fluid, smelling strongly of laudanum, was brought from the stomach, which was repeatedly and thoroughly washed out. The bowels were then completely evacuated by large injections of warm water, and vomiting kept up by sulphate of copper. Notwithstanding these means were promptly and energetically applied, the insensibility increased, the limbs became more lifeless, the pupils were widely dilated, the eyes were closed, the countenance assumed a livid appearance, and she was dragged about the room more like a corpse than a living person. She could, however, be roused for a moment by a sudden loud call in her ear, by dashing a wet towel in the face, and by a smart slap on the back, but instantly closed her eyes again, and relapsed into the same torpid state. The usual means of recovery were most assiduously employed during the whole night, and until the next afternoon, before she spoke. She was dragged about the room by two strong men for seventeen hours before she sufficiently roused to make her recovery certain, and even when she was allowed to rest, she slept soundly for many hours. She did not entirely get the better of its effects for a week.

This case shows that no lapse of time or quantity of the poison should deter one from the diligent and unremitting use and repetition of remedies. Cases have occurred in which much larger quantities of opium have been swallowed, but I have never seen or read of one in which the effects were more alarming, or continued for so long a time, with so doubtful a prospect of recovery. A case is recorded where six ounces were taken, and the patient recovered, notwithstanding a delay of some hours took place before any remedies were employed.

But a very small dose will sometimes produce fatal consequences. I remember an instance in which twelve drops of Battley's sedative were given at bed-time, and the patient never awoke afterwards. She was a feeble woman, about fifty-five, and had been suffering from a cold and cough for some days. She took the draught at nine o'clock, and an hour or two afterwards a glass of almond emulsion, with a small quantity of compound tincture of camphor. At noon the next day she was found in a profound sleep, from which she could not be roused, perspiring profusely, and with a ghastly countenance. She died at two o'clock P.M. It was ascertained most clearly that no mistake had happened in preparing the medicine. The stomach was cautiously removed, and its contents analysed with the greatest care and accuracy by a celebrated chemist, in the habit of conducting such examinations, perfectly unacquainted with the history of the case, but nothing of a deleterious nature could be detected. The suspected cause of death was then explained, when a second examination was made, but no trace of opium could be discovered. Two berries were found in the stomach, the nature of which was not known.

Another case occurred in my practice in a lady

of eighty, who had been suffering from cough, for the relief of which she had for some time been taking at night small doses of poppy syrup, and occasionally a little compound tincture of camphor, but not having either of these medicines by her, her servant gave her a draught containing seven drops of the solution of acetate of morphia, which a relation in the same house, who was in a consumption, was in the habit of taking. I was summoned to her the next morning, and found her in a deep sleep, from which she could not be roused, and covered with a profuse clammy perspiration, and she died in a few hours.

It is probable that these fatal consequences may have resulted from some peculiar idiosyncrasy in the constitution, but I am not aware of any mode of discovering it beforehand.

Bridgewater, Nov. 1841.

PROVINCIAL MEDICAL & SURGICAL JOURNAL.

SATURDAY, NOVEMBER 13, 1841.

A SERIES of papers was published some years back by Dr. Walker of Huddersfield, giving an account of the provincial hospitals and infirmaries, and making known several interesting particulars concerning their internal regulations and general management. These papers, which will be found in the first and second volumes of the *Midland Reporter*, were followed by *Statistical Observations on the Medical Charities of England and Ireland*, communicated to the Provincial Association, and published in the fourth volume of the *Provincial Medical Transactions*. In the last-mentioned essay, a table is given of the numbers of in-patients and out-patients received into twenty-one county hospitals, from which we learn that in these institutions, containing 2,670 beds, 20,653 in-patients and 57,581 out-patients were under treatment in the course of one year. From a statistical report, drawn up by the Rev. Mr. Oxenden, which is founded upon returns from twenty-seven county hospitals, it appears that the aggregate number of beds in these institutions amounts to 2,917, the number of out-patients in one year to 58,159, the number of medical officers to 165, giving to each medical officer the care of seventeen beds and 352 out-patients during the year. Several questions of interest arise out of these data: 1st, allowing the beds to be generally occupied, and the average duration of the out-cases to be about 30 days, we shall have on the average 17 in-patients and 29 out-patients, 46 in all under treatment at the same time by each medical officer