

standing, almost stationary condition and meaningless etiological classifications.

With regard to the drugs given in the preceding cases I have no idea, except that *cocculus indicus* might have been procured; but with this it is highly probable there was some irritant mixed.

Park-lane-terrace, N.

ON A CASE OF PROLONGED ENDURANCE; AMPUTATION AT SHOULDER; RECOVERY.

By JAMES ARTHUR, L.R.C.P. & L.R.C.S.E.

ON May 3rd, 1881, I was summoned to attend S. B—, aged forty, who had sustained an accident in a coal mine. Learning that the injury was serious, and that the man could not be got out, I descended the shaft, about a thousand feet in depth, and after travelling more than a mile into the mine, the last fifteen yards crawling over fallen *débris* in a space twenty-two inches in height, I found the man sitting in a crouching position with the thighs flexed on the body and the legs flexed on the thighs, by the side of a "tub," an iron box about three feet square and eighteen inches deep mounted on four small wheels. A huge stone in the roof about twelve feet square had come down and caught his right arm while resting it over the edge of the tub close to the shoulder, at the same time his hand was resting over the tub in front. In this position he was held fast by the hand and near to the shoulder, the arm being inside the tub and his head bent forward on to his chest. My first effort was to stop the hæmorrhage, and for this purpose I tied a piece of tarred rope (the only thing in the shape of an antiseptic ligature I could lay my hands on) round the arm, compressing the artery against the head of the humerus. The accident occurred at 8 A.M., and at 11 A.M., notwithstanding the utmost exertions of the workmen under the personal superintendence of the manager, the prospect of extrication seemed more remote than ever. This is not to be wondered at when it is remembered that the unfortunate man was hemmed in on both sides and behind, and that only two men could take part in the work at a time, in a narrow space, twenty-two inches in height, with the probability of a further fall of stone crushing all present. I then advised the man to allow me to amputate then and there, which would permit his immediate removal and end his suffering, which was becoming more acute as he was recovering from the state of shock. To this he agreed on condition that I would give him chloroform; but that I considered could not be risked in his doubled-up position. Even without chloroform the risk of operating was great in such a small space, lying as I was on my stomach, in a hot and stifling atmosphere, with only the light of a few "Davy" lamps, each equal to about a wax vesta; I therefore gave him some brandy-and-water and the work was proceeded with. At 4 P.M. I was joined by Dr. Wilson, who agreed with me that a rough amputation at first was freer from danger than the delay. At 5 P.M. he was liberated, after enduring nine hours of agony in an immovable position. Beyond seeing to the security of the ligature, nothing was done until the man was taken out of the pit and conveyed to his own house. The hand at the middle of the metacarpus was hanging by a few shreds; there was a compound fracture at the surgical neck of the humerus; the floor of the axilla was opened, and there was fracture of the third, fourth, and fifth ribs. The attention of Dr. Wilson was wholly engaged with the administration of chloroform, rendered more difficult by the disturbed respiration and increasing dyspnoea; there was then no professional assistance to whom the controlling of the hæmorrhage might be entrusted. I therefore first performed the ordinary operation of ligature of the axillary artery and vein, and then amputated at the shoulder-joint by an outer semilunar flap. The head of the humerus was disarticulated with some difficulty, owing to the shortness of the fragment. There was not sufficient skin to form the lower flap perfectly, and the edges were brought into apposition with slight stretching, and maintained by wire sutures. The after-treatment was complicated by the supervention of broncho-pneumonia with hæmoptysis from the damage done to the lung by the fractured ribs. On the sixth day the temperature reached 103°, on the twelfth it was normal and the sutures were removed;

union had taken place at the anterior and posterior fourths of the wound, while at the middle and lower part the flap had retracted, leaving a granulating surface, which very much lengthened the period of convalescence. Antiseptic precautions were observed throughout; two grains of quinine given thrice daily for the first week, opiates and expectorants for the lung affection, the most nutritious foods, but no stimulants until the end of the first month, when a glass of beer to dinner was allowed. Excepting a surface the size of a sixpence, which is rapidly cicatrising, the patient is now (July 30th) quite well.

Wingate, Co. Durham.

CASE OF ACCIDENTAL POISONING BY SULPHATE OF ATROPIA; RECOVERY.

By THOMAS FITZMAURICE, L.R.C.S.I., &c.

AT 7 P.M. on Wednesday, August 3rd, I was called to Minsterley to see a female child, E. J—, aged two years, who had been on a visit with friends at the above village, and who was taken suddenly ill two hours previously. On the road I was met by a second messenger, telling me to ride as quickly as possible, that the child had taken poison and was dying. On my arrival I found the little sufferer in a very grave state. It seems the child's aunt, with whom she lived, had been suffering from iritis, and on the day in question emptied her eye-drops (although marked "poison") into a tea-cup, the contents of which the child drank, with the following results: Violent clonic spasms, recurring at intervals of five minutes; pupils dilated till the iris had almost disappeared; skin hot and dry, but I could not observe the eruption supposed to be present in poisoning by this drug. One symptom which was most painful to witness was the mirthful delirium; in the intervals of repose she laughed, called at imaginary objects, and at times for her mother, whom she could not recognise on presenting herself.

Although this was the first case of the sort I had seen, it was not difficult of diagnosis. I administered an emetic of one teaspoonful of mustard in a cup of tepid water; this having no effect was repeated in ten minutes, but with the same result; then two teaspoonfuls of castor oil. I heard afterwards she was given the same quantity of oil before I saw her. Having sent for other emetics, a stomach-pump, &c., and seeing the case becoming more serious, I gave another teaspoonful of mustard in water without avail. I may mention the child swallowed each cupful ravenously, which plainly showed the parched state of the mouth and fauces. In a quarter of an hour after the last emetic she was given thirty minims of ipecacuanha wine, which was repeated in ten minutes, when she showed signs of nausea, and soon afterwards, to the delight of her friends and myself, vomiting commenced, when the stomach was emptied of a pint of fluid mixed with undigested food. Then the temperature fell. A copious perspiration broke out on the skin, which before was hot and dry, the spasms became less frequent and of shorter duration, but the pupils still remained dilated. At 10 P.M., in consultation with Mr. Elmslie, I gave her solution of potash and tincture of opium, of each two minims, to be repeated every hour till morning, with soda-water and milk to drink.

On calling next day most of the symptoms had disappeared, except one, which I did not discover before—viz., a peculiar dragging of the left lower extremity, resembling that of paraplegia. Whether this will remain permanent I cannot say, as mother and child left for their home at Birkenhead on the 7th inst.

On inquiring from the chemist who compounded the drops, I found that they consisted of liq. atropia sulph. (B.P.); and as the child's friends were confident that she took at least a teaspoonful of the fluid, it would represent a half-grain of the alkaloid, which I believe is an unusually large quantity to recover from.

The points I consider important in this case are—(1) The persistence of the stomach, skin, or bowels to act, and how the first being emptied the other two in the order named were called into action. (2) The difficulty to use a stomach-pump with safety from the frequent recurrence of spasms. (3) The affection remaining in the lower extremity.

Pontesbury, Shrewsbury.