

ARTICLE VI.—*Case of Fracture of the Cranium.* By J. BOYD, M.D., Slamannan.

ON the 21st of April 1859, I was sent for to see Marion M'Intyre, aged 10, who had fallen from a coal-waggon going down a steep incline on the Limerigg Branch Railway. About eleven A.M., she had climbed on the rear-waggon of the train, and it appeared that, having become frightened by the accelerated motion, she had jumped off and struck her head against a rail-chair. A playmate who was with her had also leaped off and run away, leaving her to her fate. At twelve, she was discovered lying on the ground, stiff and insensible; a heavy shower of hail had fallen before she was observed.

At four P.M., when I first saw her, she was cold, rigid, and unconscious. There was a considerable swelling over the back of the neck, and the right temple presented a marked depression, extending from the temporal ridge to the external angle of the orbit. The pupils were dilated, and the irides insensible to light; the pulse was slow and feeble; the respiration slow and intermitting. I directed hot-water bottles to be applied to the feet, thighs, and trunk, and ordered the head to be shaved. At nine P.M., I found the temperature of the body natural: the pulse was 110, weak; the respirations were irregular, 15 in the minute; the teeth were clenched; the body was still rigid: insensibility was complete.

On the 22d, reaction was fully established; the countenance was somewhat flushed; pulse 102, stronger and harder; respiration slightly stertorous; the body was stiff and motionless; the jaws were rigid. A tentative venesection was made at the arm; when two ounces of blood had been withdrawn, the stream stopped. The teeth having been separated, a purgative powder, containing three grains of calomel and six of rhubarb, was put on the tongue, and, by the aid of a little water, was slowly swallowed, and acted copiously in the course of the evening.

23d.—Having at length obtained the consent of the parents, I arranged to operate this afternoon. At four P.M., assisted by two of the workmen, who steadied the patient, I proceeded to make an incision from a point three inches above the orbit down to the superciliary ridge, and another from the starting point to near the centre of the zygomatic arch. On dissecting back the triangular flap thus formed, I found a fracture of the frontal bone, $2\frac{1}{2}$ inches in length, extending into the orbit—the posterior portion driven half an inch downwards and beneath the anterior edge of the bone, and a circular hole at the lower third of the fracture, filled with comminuted osseous particles, into which I could freely introduce the point of the finger. I picked out the fragments, and removed the subjacent clot, which was followed by several ounces of blood in a fluid state: the meninges appeared intact. Having scraped off the spicula from the margins with a strong scalpel, I next raised the depressed portion

of bone with a large curved elevator, bringing the edges into accurate contact. The flap was replaced and secured by a single stitch at the apex; cold-water dressing was applied to the wound, and the patient replaced in bed. All this time the insensibility continued. While the depressed portion was being raised, a twitch passed over the features. Two hours subsequently a feeble moan commenced, accompanied by a regular to-and-fro movement of the left arm, which was flexed and extended from thirty to forty times a minute in uninterrupted succession.

24th.—The girl's countenance appears rather more natural in expression, and is slightly flushed. The moaning continues and is louder. Pulse 90, and full; the head feels warmer, and slight shivering occurs when the dressing is wetted. The bowels have been spontaneously opened. When fluids are put into the mouth (the jaws being separated by moderate lever force), she swallows somewhat more freely. The pupils are dilated and insensible to light, the eyelids always remaining closed. The urinary secretion comes away in normal quantity as far as can be judged.

25th.—To-day, not much change is perceptible in her condition; the movement of the left arm continues with rare intermissions, and the left foot twitches about rhythmically at times. The tongue is covered with a brown crust, and somewhat swollen; pulse 96. To promote suppuration, a bread poultice was directed to be applied to the wound every two hours; and as the bowels had not been moved, another calomel and rhubarb powder was administered, which operated during the night, bringing away a quantity of dark, offensive feculent matter.

26th.—A tablespoonful of pus was observed coming from the wound on the first poultice to-day. In other respects there was little change apparent till the 30th, she being supported by beef-tea with a little bread-crumbs in it. On the day in question, on being loudly named by her father, she faintly answered "What?" The eyelids remaining closed, he raised them, brought a light close to them, and on being asked if she saw it, answered "Yes."

1st May.—To-day, on elevating the eyelids, she was able to recognise me and distinguish the colour of my dress, and said that a sixpence held about a foot from her eyes was a pan-drop (lozenge). The discharge of pus is free and of good colour and consistence; pulse 90, and soft. The movement of the left arm and foot continue at times almost convulsively. The moaning has subsided. She still requires to be fed by depressing the lower jaw.

By the end of the second week the discharge of pus had abated; the upper part of the flap being a good deal separated, I put in two points of suture, which had the effect of finally closing the wound in two or three days. During the course of the third week she recovered the power of elevating the eyelids, the irides contracted naturally, and she could move the maxilla, and began to take food in moderate quantity. By this time she was able to sit up in bed, and to notice what passed,

but spoke little,—gradually increasing in strength, till in the fifth week she was able to walk about.

From this time convalescence advanced rapidly, but the left arm remained weak and shaky. In twelve months after the accident she was able to take a situation as country servant, and continues fit to discharge her duties satisfactorily.

On the 21st October last, I saw her; she was stout, rosy, and well developed for her age, but some shakiness of the left arm was noticeable, and she was unable to grasp small objects perfectly.

The spot where she received the injury (covered to the depth of nine feet in the summer of 1861 by the *floating moss* which attracted so many thousands to Slamannan) became the scene of another accident which gave rise to much litigation. G. F., aged 53, when passing down the Limerigg Railway between three and four P.M., on the 27th February 1860, was overtaken by a train of loaded coal-waggons, the noise of which and the cries of the conductor he did not hear, being partially deaf, and a severe storm raging at the time. He was knocked down and the entire train passed over his left arm. As soon as possible he was put into a cart and conveyed to his home, a hut on the margin of the Black Loch. On reaching him I found a compound fracture of the left humerus, two inches above the condyles; the tissues were so much lacerated that I found it necessary to amputate by circular incision at the junction of the upper and middle third of the limb. The execution of the operation was attended with some odd difficulties from defective space, accommodation, improvised assistants, etc.

On the 28th, the patient appeared wonderfully well; pulse 80, and firm. In the evening a slight blush of erysipelas was perceptible on the upper part of the wound, which on the following day extended to the pectoral region. It abated under the use of tepid saturnine lotions and alterative laxatives. About an inch of the integument sloughed, but suppuration and granulation followed in a satisfactory manner; the ligatures came away on the seventeenth day, and the stump became a good one. The patient, having experienced no untoward symptom, was fully restored within a month. It was then observed that his hearing had become much more acute, and the chronic rheumatism, from which he had been incapacitated for regular employment for nearly twelve years, had entirely disappeared.

The latter circumstance seems to me to throw some light on a point in the treatment of rheumatism whether chronic or acute, particularly on the sthenic form, which we are most accustomed to meet with in country practice. In the case of G. F., apart from the general antiphlogistic regimen rendered necessary by the injury, no agency which could have influenced the rheumatism was in operation, except the diminution of the blood mass occasioned by the hæmorrhage, consequent on the accident and the amputation. Rheumatism is of frequent occurrence in this district, and in at

least nine cases out of ten I have found that free venesection as a preliminary measure, not only causes immediate abatement of the fever and pain, but materially abbreviates the duration of the disease; while the other remedial measures, whether depurants or specifics, act with markedly greater certainty and celerity after its use.

ARTICLE VII.—*Case of Ovariotomy.* By THOMAS KEITH, M.D.,
F.R.C.S.E.

MRS R., aged forty-nine, applied to me, last August, on account of a large ovarian tumour filling up the whole abdomen, to which her attention had been first directed about six months before. Previous to this her health had been good, she had married when thirty-six years of age, and had born two children. The catamenia, after some irregularity, finally ceased in December 1861. For some time the tumour gave rise to no inconvenience, and her general health did not suffer, but, by the time it had attained the size of the uterus at the full period of gestation, her health began to give way: the respiration became impeded, locomotion was a labour to her, she suffered much from abdominal pain, and shortly before I saw her, weary of life, she had taken to her bed, with little prospect of again leaving it.

From the nature of the tumour, which was evidently multilocular, from the extreme rapidity of its growth, from the numerous unmistakable signs that had already appeared of a rapid breaking up of the patient's health, it was most probable that, if let alone, the disease, with its accompanying suffering, would run its natural course and destroy life in a few weeks or months; and as nothing was to be hoped for, either from tapping or the injection of iodine—both dangerous, and but half measures at the best—I had no hesitation in recommending ovariotomy. To this, after due consideration, she willingly gave her consent, and it would have been proceeded with without delay, had not a smart attack of pleurisy with considerable effusion supervened. This yielded to the usual remedies, but a month elapsed before she was again in a favourable condition for operation. In the meantime the abdomen had much increased in size, from the presence of a large accumulation of fluid in the general cavity of the peritoneum, none of which existed at the time of my first examination of the tumour.

With the assistance of Dr Craig of Ratho, Dr Howden, Dr Sidey, and my brother, I removed the tumour on the 18th of September last. Before opening into the peritoneal cavity, thinking I had come down upon the surface of the tumour, I separated the peritoneum from its loose cellular attachments, to the extent of two fingers-breadth on either side of the incision. This mistake happened very easily, but was quickly discovered, and, on opening the peritoneum,