CASE OF COMPOUND COMMINUTED FRACTURE OF THE SKULL TREATED SUCCESSFULLY.

By CHARLES GAFFNEY, Esq., Buntingford.

ON March 9, 1859, I was summoned to a distance of six miles, to attend a boy of twelve years of age, who had received an injury to the head from a ploughshare. Whilst leading his horses at plough, they had run away, and knocked him down, the ploughshare taking his head in its course. As he was standing up, and answered any questions that were put to him, when I entered the house, and as, moreover, I learned that he had walked nearly half a mile from the scene of the accident, I trusted there was not much the matter. But my astonishment was great, on removing the handkerchief which he had tied round his head, to find that a considerable portion of the skull had been literally carried away, exposing the brain to view, so that the cerebral impulse was visible to the eye. As there was a very awkwardly projecting piece of bone extending into the wound, and I feared that the trephine might be found necessary, I secured the services of a professional friend to render any assistance that might be required. On examination, I found a scalp-wound four inches in length, by two in breadth; and a loss of bone, corresponding to an aperture one inch and a half in length, by an inch in breadth, parallel to the coronal suture, into which the wound extended. The edges of the bone were bevelled off down to the wound, and part of the falx cerebri was torn away, exposing to view the superior longitudinal sinus. Several spicula of bone were lying in the wound, some being imbedded in the brain-substance. After carefully sponging the wound with lukewarm water, I removed most of these, together with the aforementioned jagged spiculum, which I took away with a little saw. I then cut off all his hair, and, having laid a piece of wet lint on the wound, had him removed carefully to bed. A bladder of pounded ice was now put on the back of the head, and the boy expressed himself unspeakably comforted. The pulse was 84, good. He was ordered to have a grain of calomel every three hours, and the following mixture:—

R. Liquoris ammoniæ acetatis ʒij; potassæ nitratis ʒi; aquæ Oi. M. Sumat cochlearia ij ampla 4tis horis.

March 10th. He had passed a pretty comfortable night, was quite sensible, and answered quite coherently. He complained a good deal of the light to his eyes. The pupils contracted readily under the influence of light. Pulse 100, regular, not hard or bounding, nor incompressible. The bowels had not been relieved. He was ordered to have half an ounce of castor-oil, and to continue the mixture and powders. The room was directed to be kept dark, and perfect quiet was enjoined.

March 11th. He was not so well; he had been roaming a good deal in the night; the head feels hot; pulse more full and bounding, 110; the bowels had been freely relieved; he still answered rationally; the pupils contracted well; he complained of great pain at the seat of the wound, which looked dry and glassy. Twelve leeches were ordered to be applied to the forehead.

March 12th. He felt all the better for the leeches, which had sucked freely; the wound had discharged freely on the wet lint; he said he should like something better than toast and gruel; pulse 100, softer; the bowels had been relieved naturally. From this date to the 24th he continued daily to improve, the wound daily discharging more and more. But, on the 24th, he complained of considerable pain at the seat of the wound, which I found to be nearly closed in by a false cicatrix. On removing this, out burst the matter, as fresh as ever, to his great relief. I ordered a blister to be applied to the back of the head.

April 5th. He had continued steadily improving; he now sat up; he ate well, drank well, and slept well; but the wound being not yet closed, I expressed my opinion that there was dead bone, which was confirmed, after a day or two, by several good-sized pieces coming away. After this, the wound healed readily.

June 10th. The cicatrix over the wound being now quite solid, but the bony framework of the brain not being restored, it was necessary that the brain should be protected from further injury, and the boy feeling strong enough, I accordingly took him to Mr. F. Walters, of Moorgate Street, who fitted a silver plate, covered with thin cloth, to the seat of the wound with elastic straps under the chin and behind the head. After this, the boy returned to his work, which he was able to go through to his own satisfaction.

I attribute a great part of the success of the foregoing case to the constant application of ice, which I was able to procure in great abundance, through the kindness of a friend in the neighbourhood.

Reviews and Notices.

EXPOSITION OF A METHOD OF PRESERVING VACCINE LYMPH FLUID AND ACTIVE: with Hints for the More Efficient Performance of Public Vaccination. By WILLIAM HUSBAND, M.D., Fellow of the Royal College of Surgeons of Edinburgh, and one of the Medical Officers of the Royal Public Dispensary and Vaccine Institution, Edinburgh. Pp. 45. London: Churchill. 1860.

At the meeting of the South Midland Branch in October last, Mr. Ceely of Aylesbury, one of our highest authorities on vaccination, exhibited some capillary tubes charged with vaccine matter, and explained the method of employing them, and their advantages. This method of preserving vaccine lymph appears to have been derived by Mr. Ceely from the author of the treatise before us. We are informed in the preface, that

"In the month of August last, her Majesty's Privy Council deputed Mr. Ceely of Aylesbury to proceed to Edinburgh, for the purpose of inquiring into the mode of vaccination practised there—and more especially with reference to a particular method of preserving vaccine lymph in capillary glass tubes, to which the attention of the Council had been directed a short while before. The result of Mr. Ceely's inquiry was to satisfy him that this method was eminently adapted to its purpose; and his report has been followed by a circular from the Privy Council recommending its general adoption by public vaccinators throughout the kingdom."

Dr. HUSBAND now lays in detail before the profession his account of the method; and as the subject, though simple, is one of very great importance, we shall offer no apology for transcribing from his work a very full description.

Besides the plan here especially described, there have been two other methods of preserving vaccine matter in glass tubes. One was invented in France, more than a quarter of a century ago, by M. Bretonneau of Tours; the tubes being from half an inch to three-quarters of an inch long, fusiform, and ending in a very minute point at each end. The process, from the difficulties attending it, seems to have proved a failure. The other method was invented in 1803, by Mr. Giraud of Faversham: it consisted in the use of tubes with a terminal bulb. Tubes of this form were used, but only to a limited extent, from their liability to fracture, and other circumstances.

The form of tube advocated by Dr. Husband is thus described:—

"It is a simple straight tube, cylindrical, open at both ends, and of such dimensions as to fulfil the following conditions, upon which its peculiar value as a means of preserving lymph for future everyday use essentially depends. It must be—1, of such tenuity that it can be sealed instantaneously at the flame of a candle; 2, large enough to contain as much lymph as is sufficient for one vaccination; 3, long enough to admit of both ends being sealed hermetically, without subjecting the charge to the heat of the flame; and, 4, strong enough not to break easily in the mere handling.

"There need be no difficulty in procuring tubes which perfectly answer this description; only they must be made according to certain standard, which obviously, from the very nature of the case, is not an arbitrary one, admitting of being altered to suit the notions of different individuals, but one concerning which, within certain limits, there can be no dispute nor difference of opinion.

"The following is the mean of several measurements which I have made of tubes differing somewhat in size, but all of them capable of containing a sufficient charge of lymph, and of being sealed instantaneously at the flame of a candle, without subjecting the charge to the heat, and also strong enough to bear all necessary manipulations without breaking:—Average length, 2½ to 3 inches; diameter, 1-28th of an inch; thickness of wall, 1-200th of an inch.