

shied so suddenly and with such force that Mrs. M— was dragged out of the van, alighting on her head.

On admission into the hospital, it was found that the patient had received an abrasion of the scalp, and that three fingers of her right hand were torn off. The articular surface of the proximal phalanx of the index finger was exposed, and projected beyond the integument and soft tissues, which had retracted so as to form a circle with an even edge. The portion of the index finger which was torn off consisted of the two distal phalanges, along with ten inches and a half of the flexor longus digitorum tendon. This tendon, at its proximal end, had a little tuft of muscular fibres attached to it. The two distal phalanges of the middle finger were also avulsed; but the deep flexor tendon, instead of being attached to them, was drawn out from the hand to the extent of four inches. The ring finger was wrenched off on a level with the middle of the second phalanx, exposing a transverse fracture of the bone, and the edges of the soft tissues were ragged. In addition, there was a dorsal dislocation of the fragment of the second phalanx on the proximal phalanx. The latter had received a comminuted fracture at its base, which disorganised the metacarpo-phalangeal joint. To the part of the ring finger which was torn off there was attached a slender portion of the deep flexor tendon three-quarters of an inch long. Also a small piece of the skin and pulp of the little finger, parallel and coextensive with the nail, was nipped out, and there was a slightly oblique fracture through the second phalanx of the little finger, with dorsal displacement. The condition of the handkerchief which enveloped the hand showed that very little blood had been lost, and the injury to the head was slight.

Chloroform having been administered, I amputated the second, third, and fourth digits at the metacarpo-phalangeal joints, and then reduced the fracture of the fifth digit and applied a splint. The arm was supported and fixed in a sling. Carbolic spray was used on this occasion and at the subsequent dressings. The course of the case was favourable. The temperature only on one occasion rose to 99·8° F., owing to the tension of a suture. There was great tenderness in the forearm during the first week, and pain in the shoulder for three weeks. She was discharged on Oct. 1st, 1886. When last seen, in the middle of December, 1886, the cicatrix looked well, and she could use and approximate the thumb and little finger, but she could not raise her arm to the level of the shoulder, probably owing to paralysis of the deltoid muscle from injury to its branch of the circumflex nerve. No atrophy of the muscle, however, was at that time apparent.

Remarks.—1. In each of the three fingers a portion of a single tendon only remained pulled out. The deep flexor tendon of the index finger was uprooted in its whole length, and left attached to the avulsed part of the finger. The deep flexor tendon of the middle finger was pulled out to the extent of four inches, but was hanging from the hand, having snapped through at the first phalangeal joint. A slim filament of the deep flexor tendon of the ring finger was left attached to the avulsed portion, the rest of the tendon being retracted into the hand. 2. The other tendons—e.g., common extensor, extensor indicis, and flexor sublimis—were not left drawn out. All the extensor tendons were retracted, having snapped off short at the proximal joints, which must have been acutely flexed in grasping the rope. 3. The deep flexor tendon of the index finger was torn away at its junction with the muscular belly—its weakest point. Mr. Holmes, in his *System of Surgery*, writes: "In the living body, muscle offers a greater resistance to a force tending to rend it than either tendon or bone; and when it does give way, it is for the most part at its point of junction with the tendon. With the loss of its vital contractile power, muscle loses its advantage over tendon, and the experiments of Richerand and others fully establish the fact that after death muscle is more easily ruptured than tendon." Billroth² mentions and figures a very interesting case in which the middle finger was completely torn off, and attached to it were its extensor and two flexor tendons in their entirety. Professor Erichsen³ refers to "this peculiar tearing away of the tendon from its attachment to the muscle, and not across the line of laceration of the limb," and gives figures of a "ring finger torn off with deep flexor tendon," and "thumb torn off with tendon attached," both taken from Morand's paper in the *Memoirs of the Academy*

of Surgery of Paris. 4. Whether the fractures of the second phalanges of the ring and little fingers were due to the traction of the rope, to knocking against the side of the cart or on the road, or to a crush under the horse's hoof, it is difficult to say. The dorsal dislocation of the proximal fragment of the ring finger and the comminuted fracture of the first phalanx, combined with no trace of crushing on any part of the skin of the ring finger, seem against the idea of the horse's hoof being the cause, and points rather to a combination of rope traction and a blow against some hard object. 5. In addition to there being slight external hæmorrhage, owing to the torsion of the vessels, there was very little extravasation of blood in the forearm, as evidenced by the slight amount of discolouration, which appeared soon and disappeared rapidly. 6. There was no inflammation along the course of the injured tendons, the case being aseptic. 7. There was pain in the region of the shoulder joint from the first, and this pain lasted for some time. Associated with this was the inability to raise the arm to the level of the shoulder. But why, out of the whole brachial plexus, should the branch of the circumflex nerve to the deltoid be alone implicated? for there was no paralysis of the muscles of the thumb and little finger, and the movements at both the wrist and elbow joints were perfectly free; neither was there any anaesthesia of the skin. 8. The dairy van was moving in one direction forwards, and the led horse behind the van pulled the women in the opposite direction backwards. Thus, a greater amount of force (by the horse) and of resistance (by the woman's tissues) must have been exerted than if she had been sitting in a stationary vehicle. Also the momentum of her fall must have been greatly increased. 9. In the cases published in THE LANCET of Oct. 2nd, 1886, vol. ii., p. 641, and of Oct. 16th, 1886, p. 757, in Billroth's case, and in this case, sudden and violent traction, combined with severe pressure in most of them, have been the causes of the lesions, and a rope is mentioned in all the cases. But the axis of traction has varied (being horizontal, oblique, or vertical) with the active force and circumstances of each case.

ON VERY RARE PRESENTATIONS IN MIDWIFERY.

BY W. H. BORHAM, L.R.C.P., M.R.C.S., &c.

At the time I reported in THE LANCET (last October) my case of "Very Rare Presentation in Midwifery," I was under the impression that it was almost unique in its character. It is remarkable that the three cases, almost similar to mine, narrated in the same journal—viz., one from Mr. Buchanan of Glasgow (Dec. 3rd), one from Dr. Tulloch of Tobago (Dec. 17th), and another from Mr. Devlin of Carlisle (Dec. 24th)—should follow in succession, and that these cases should have occurred so recently, two of them having taken place within the short space of a few weeks after the one I attended. When a student over forty years ago, contesting in a prize examination in midwifery in Lane's School, I well remember that one of the written questions was, "Which is the most rare presentation known of a child's position when the mother is in labour?" At that time the recognised obstetrical authorities on such matters were comparatively limited to a very few. I well digested Denman, Merriman, Ramsbotham, and other lesser stars a few weeks before sitting down to the table. Upon facing the question, I carefully thought over the various presentations I had read of, as well as those our lecturer taught us. After dotting down several rare presentations on the paper, I stated that the most rare, in my opinion, was one "where the two hands came down with the head, one hand palmed on each side," and this was the opinion of one or two of the most recognised authorities, of which Samuel Merriman was one. When my case was published last October I thought I had gained a point, but the subsequent narrated cases threw me overboard, and compelled me to retire to my old student-day view, especially as I have never, after an extensive experience in midwifery for fifty years, met a case, or read of one since, where both hands were presenting on each side of the head, as in the case referred to by Dr. S. Merriman. The fact of four recorded cases of these unusual presentations, I have stated, having been published in THE LANCET within six weeks,

² Lectures on Surgical Pathology and Therapeutics, vol. i., p. 236 (Sydenham Society.)

³ Science and Art of Surgery, vol. i., pp. 316, 317.

from various quarters, shows the value of the hebdomadal medical press, of which the late Coroner Wakley was the founder and pioneer. In my apprenticeship days, fifty years ago, with an apothecary for seven years, under the old *régime*, I remember reading some early numbers of THE LANCET. If I recollect rightly, there were only about sixteen small pages issued with each number. I remember the great obstacles that were thrown in the founder's way to the publication of hospital reports, &c., and the jealousy caused by the criticisms of the treatment adopted by the hospital staffs, &c.; but the indomitable spirit and perseverance of Mr. Wakley for the well-being of the profession at length conquered every obstacle, and THE LANCET, instead of being issued at sixteen pages, now numbers from ninety-six to one hundred and forty-four. The successors of the *obstructive* medical hospital staffs are now only too pleased to get a niche in THE LANCET, and either themselves report their own cases, or delegate it to their assistants. This is the medical spirit of the age. *Tempora mutantur!* Annuals and books of reference on all medical subjects are now freely culled from the pages of THE LANCET, and not only the student, but every medical practitioner, as well as the public, are under a deep debt of gratitude to the late Coroner Wakley and his successors.

It is not always safe for an accoucheur to allow his time or even the excuse of mitigating the sufferings of the pains of women in labour to dictate to Nature her rights. The gradually preparing of the soft parts for the full expulsion of the normal grown foetus is a physiological fact. I have seen more injury and mischief done to women by early instrumental interference in a few years in the present day, than scores of years of non-meddlesome practice in labour in past times. In a natural labour it is wrong to hasten it by instrumental interference. A young practitioner ambling about with a midwifery bag may look very telling and imposing to the public in his neighbourhood, but in my humble opinion the best instruments he could use is the well-directed and tutored hand; and I have found by long experience, the less the bag is opened the better it is both for the patient and practitioner. The late kind and gentle Arthur Farre was my examiner in midwifery at the College of Surgeons in 1852, and the examination referred to the mechanism of turning in labour, and the cases requiring such help. Amongst others, I mentioned funis presentations. Where it was found impracticable to return the pulsating funis with the fingers, I stated I should turn the child to a footling case and deliver. To preserve the child's life there is not much difference whether you deliver with the forceps or turn, the pressure on the cord being equally great either way. Deliver that way which will appear the speediest and with the least chance of injury to the mother. Of funis presentations with cord and head alone I have had scores. Whenever I have been in time at the labour to diagnose this presentation (before the pulsation in the funis has ceased, or before the liquor amnii has been expelled), I have adopted a mode of treatment which I have never known resorted to by others. It is that of introducing the hand into the uterus and *rotating* (not turning) the child in utero. By this means the cord is wound round the child's body and is gradually drawn from the os. The presenting part of the funis then gets wound up beyond the boundary of any projecting part that might produce pressure on it. One or two rotations of the child, according to the length of the cord, will suffice, and then the labour (the child's head being in the same position it was before rotating *sine funis*) is left to its natural mechanism. By this means I have been very successful in saving children. If now asked the same question in funis prævia by any examiner, my practical experience teaches me "to rotate the child in utero," as I have stated above, and give Nature her chance.

In my long experience in midwifery, for the last forty years, I have never given a drop of ergot during labour. About the year 1847, when assisting a gentleman in the Forest of Dean, I was at a labour where the child's head was closely impacted at the outlet of the pelvis. The labour was of considerable duration, and I sent for my principal. He administered a stiff dose of ergot. The pains in half an hour became so violent as to cause rupture of the uterus with a bang, and death ensued in twenty minutes. I have never given ergot since. This case I published in THE LANCET about that time. I have never used chloroform or any other anæsthesia during a long and successful career in midwifery practice.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

A CASE OF ACUTE TETANUS.

BY FRANK STURGES, L.R.C.P. LOND.

MR. ANDERSON'S most interesting article on a case of acute tetanus, with his *résumé* of recent pathological work in connexion with the subject, published in THE LANCET of Feb. 4th, has called to my mind a somewhat similar case occurring in my own practice.

Maria A—, widow, aged sixty-four, while walking in her slippers in the yard of a farmhouse where she lodged, trod on a dirty nail fastened in a piece of wood lying on the ground. The nail penetrated the sole of the foot on the outer side of the ball of the great toe. She complained for a few days that her foot hurt her, and applied several poultices. I was summoned urgently to see her in the early morning of Nov. 3rd, 1887, nearly a week after the injury. I found her in a somewhat excited condition, when she told me she had lockjaw and was going to die. On questioning her I obtained the above history. She complained of stiff neck and inability to open her mouth. There was contraction of the masseters and the muscles at the back of the neck; also "risus sardonicus." The tongue and breath were very foul, pulse full and quick, and temperature then and throughout her brief illness above 100° F. There was a slight mark on the foot where the nail had entered, but around it was a zone of redness two inches in diameter. Pressure seemed to give no pain. She had spasms at varying intervals throughout that day and night, gradually increasing in severity, and the following morning they had become intense. It was from the exhaustion consequent on one of these that she died, about thirty-two hours from the commencement of the symptoms. I observed in her case, as in that reported by Mr. Anderson, a seemingly complete absence of spasm in the lower extremities. My treatment consisted of a calomel purge and bromide of potassium and chloral. The latter seemed to give some relief, and even procured a few hours' sleep in the night.

I have nothing to add. Unfortunately in general practice one gets few opportunities of post-mortem examination, and probably not many are competent to undertake difficult microscopical observation or extensive experimental research. I would merely suggest that, as the farmyard where the wood and nail were lying is the habitation of pigs, poultry, and cows, the surface earth can hardly be antiseptic, and it might be a suitable dwelling-place for the bacillus of Nicolaier. Perhaps someone would like to search for the minute murderer.

CASE OF EXTRA-UTERINE GESTATION.

BY A. G. POCKOCK, L.R.C.P., M.R.C.S.

MRS. O—, age thirty-one, with three children, the youngest fourteen months old, had been suckling up to the time of the present attack, and had not been "unwell" since the birth of the last child. She complained of pain in the abdomen about a month previously to being seen, and had latterly been failing in health, partly owing to her husband having been out of work for nine weeks. She was noticed by the neighbours to have been recently increasing in size. On Sept. 19th, when at a meeting, she complained of severe abdominal pain, and fainted, but, reviving, walked home with assistance, a distance of two or three hundred yards. Shortly afterwards she was seen by a medical man, who pronounced the case hopeless. When I saw her on Sept. 20th she was perfectly pallid and pulseless, lying on one side, complaining of severe pain in the abdomen, and refusing to be moved. Surmising the nature of the case, I decided that nothing could be done. She died about 2 P.M.

At the necropsy the condition of the body was that of a well-nourished woman. Rigor mortis well marked. Extreme pallor of surface. Abdomen not distended. On opening the abdomen, a blood clot was seen stretching upwards from the pelvis towards the umbilicus in front of the