genital lesion actually ascertained to be the cause of it. But if the reader will trouble himself, he will, by referring to the authorities under mentioned, find cases *in extenso*, at which, for want of space, I can only glance cursorily. In the *Medical Press and Circular*, Sept. 9th, 1868, will be found a paper by Dr. Waring-Curran, relating a case in which jaundice was caused by the recognised presence of a congenital lesion—spasmodic stricture,—though not causing death, which resulted from a head injury. In the *Medical Times and Gazette*, vol. iv., 1876, p. 292, will be found the summary of a case reported by Dr. Konrad Lotze in the *Berliner Klinische Wochenschrift*, No. 30: diagnosis—congenital malformation of liver-ducts, verified by necropsy. The author seems to think the lesion to have arisen from “some arrest in the hollowing-out of the primitively solid cylinders from which the ducts are developed.” Murchison cites a case from the *Northern Journal of Medicine* in which the obstruction was caused by “an indurated cord-like plug of inspissated bile,” and also mentions a case reported by Lieutaud in which the obstruction was a gall-stone; while he himself, in the second edition of his *Lectures on Liver Diseases*, at p. 375, recites the particulars of a case in which jaundice was the cause of death, accompanied by *epistaxis* and extravasation of blood beneath the skin. The lesion found on necropsy was obliteration of the common duct, with evidences of peri-hepatitis. In the *Pathological Transactions*, vol. xiii., p. 119, Dr. Wilks gives particulars of a case in which there was total obliteration of ducts and gall-bladder. Dr. Binz, of Bonn, in Virchow's *Archiv*, vol. xxxv., 1866, p. 360, gives an account of some cases as follows:—The first two cases occurred in children of the same family, and the lesion was obliteration of the ducts, but in each case there was a gall-bladder. In the third case there was found peri-hepatitis with nearly complete obliteration of gall-ducts. These cases occurred in his own experience, and he knows of only three others similar: the first from Virchow's *Collected Works*, p. 858; the second from the *Clinical Observations of Romberg and Hennoch*, p. 138, in which there was rudimentary gall-bladder and no trace of *gallengange*; and the third from an old Berlin dissertation by J. Donop (*De Ictero Speciatim Neonatorum*, 1828), in which the common duct was obliterated in its whole length. In the *British and Foreign Medico-Chirurgical Review*, vol. i. 1867, p. 483, Dr. Sedgwick, in a paper on the Influence of Age on Hereditary Diseases, says that Dr. West knew of a family in which the mother lost three out of four children in succession through fatal icterus: the lesion in the first and third being malformation of biliary ducts; that in the second was not looked for. In the *Medical Times and Gazette*, vol. ii. 1862, p. 521, a Liverpool surgeon relates the particulars of another fatal case—lesion not ascertained; and in the *Glasgow Medical Journal* for January, 1866, Dr. Bell notes a similar case, accompanied by severe purpura, in which the child died, but in which no necropsy was made. I have also heard of two other fatal cases of this disease, in which the severity and early onset, progress and result, would point to a congenital liver lesion. These, then, constitute all the published cases on which I can lay my hands, and it will be noted that they are comparatively few, the lesion, by inference, being also somewhat rare.

(To be concluded.)

CASE OF MEASLES COMPLICATED WITH CROUP;

TRACHEOTOMY, FOLLOWED BY DEATH FIFTEEN DAYS
AFTER FROM HÆMORRHAGE.

By H. ROYES BELL, F.R.C.S.,
SURGEON TO KING'S COLLEGE HOSPITAL.

THE notes of this case were kindly given to me by Dr. Andrew Brown, of Kentish-town, under whose care the patient was, and who called me in to see the child. Dr. Brown says:—“On October 29th I was requested to see E. B—, a little boy aged seven years, and found him covered with measles on the second day of the eruption, the only thing unusual in the case being the croupiness of his cough. The measles went through their usual course, but the croupy symptoms did not abate with the decline of the disease. In the middle of the night of Nov. 2nd he

jumped out of bed, and rushed down stairs in his night-dress. The room next to his bedroom had been freshly papered and whitewashed, and both the windows as well as the door were wide open, so that the landing and stairs were very cold. From this time his paroxysms of cough and difficult breathing became more frequent and severe. On Sunday, Nov. 4th, six days after I had first seen him, his breathing was so difficult and the paroxysms of suffocation so frequent that I proposed a consultation, as I considered his life to be in such imminent peril that tracheotomy would alone give him any chance.”

Dr. Brown therefore requested me to see the patient with him without delay. Accordingly I visited the boy in the afternoon, and found him sitting up in his cot; his face was pale and anxious; lips very blue; his head thrown back; the veins of his neck distended; he was grasping the iron side railings of his cot with both his hands; the sterno-mastoid muscles were standing out prominently on either side of the trachea, which was moving backwards and forwards convulsively; he was breathing very rapidly, with a croupy noise, and the alæ of his nostrils rose and fell at each respiration. No false membrane was to be seen, and there was no difficulty in swallowing. His chest was working vigorously, his distress seemed to be most urgent, and it was evident that unless some aid to respiration were artificially afforded him he would soon succumb.

Having made our preparations, we had the boy placed on a suitable table, and, having arranged the light so that we could see as well as possible, Dr. Brown gave him a few whiffs of chloroform, just sufficient to quiet him. I then made an incision in the middle line over the trachea, and proceeded to open the trachea below the isthmus of the thyroid body. I dissected down, dividing the fascia covering the sterno-hyoid and thyroid muscles, scratched through that between the muscles, and, using the flat handle of my knife, rendered evident the rings of the trachea both to the sight and touch. The chloroform had been suspended since the first cut with the knife. At this stage of the proceeding the child ceased to breathe. I therefore passed the tenaculum into the upper part of the wound, well into the trachea, which I requested Dr. Brown to hold firmly forwards for me. This he did. I then plunged my knife into the trachea, and, having divided two or three rings, thrust my little finger, as I make a point of doing, into the opening so made. The finger judges of the size of the opening, prevents blood from entering, and serves as the best possible guide, in my opinion, on which to direct the tube. The split portion of the tube was then passed into the trachea, and the inner portion slipped within it. There had been remarkably little hæmorrhage from the first. Artificial respiration was now performed by Dr. Brown and myself, the father holding the child's legs and wiping away a quantity of thick and very viscid mucus which appeared in the tube as soon as we began the artificial respiration after Silvester's method. Our efforts were soon rewarded by the red colour returning to the patient's lips, and the muscles of respiration beginning to act. The boy began to cough, and was soon out of danger of immediate death. The tube was tied in securely, and instructions given to the person nursing him to keep the tube clear. There was some slight surgical emphysema round the wound, but of this we took no notice, and it had disappeared before the next visit.

When I saw the patient next day, twenty-four hours after the operation, his condition had much improved; he had had sleep, and had taken food. There was a good deal of cough, owing to the presence of the tube, and mucus, due to his bronchitis; and the respiration was still rapid.

I next saw him fourteen days later (on Nov. 18th), in consultation with Dr. Brown, when I removed the tube, and blocked the wound by holding a piece of sponge over it. We were obliged to replace the tube, as the distress of breathing returned, and became worse the longer the tube was kept out. Having washed the split portion of the instrument, I introduced it into the trachea without any trouble, Dr. Brown replaced the inner tube, and we left the boy in comfort. The tube used was that introduced to the profession by Dr. Fuller.

On Tuesday, Nov. 20th, I received the unwelcome intimation that the boy had died suddenly from hæmorrhage the evening before (Nov. 19th), at seven o'clock—viz., on the fifteenth day. I called the next day to obtain particulars, and from the account given it appears that the boy was doing remarkably well up to the time of his being seized with the bleeding, which came on suddenly and apparently

from some large artery, as from the description the bleeding was profuse and of a bright arterial colour. The only warning given was some mucus tinged with blood which had been coughed up an hour or two before the boy's death. I ought to add that all through his illness the bronchitis had continued, with free secretion from the bronchial tubes and rapidity of breathing. I am sorry to say that my best powers of persuasion were used in vain to obtain a post-mortem examination, so that the case is unavoidably incomplete; but my theory is that the bleeding was caused by ulceration of the trachea and innominate artery, due to the pressure and movement of the lower end of the tracheotomy tube. The movement of the tube was excessive in this case, owing to the bronchitis. The external wound was in a very satisfactory condition, being surrounded by a large quantity of healthy granulating material, and there was no sign of ulceration about it.

I regret my failure to obtain a post-mortem examination, but my case bears a strong resemblance to one under the care of Mr. John Wood many years ago. The specimen is in King's College Museum, and shows an ulcerated opening passing through the trachea into the innominate artery, caused by the end of the tracheotomy tube, which was of silver, and similar to the one used by myself.

In considering the best means of avoiding the accident which befel my case, we have to consider the nature and position of the operation, and the mode of keeping the artificial opening in the trachea patent. In children I am in the habit of performing the low operation; and as this boy's neck was long and thin, it seemed to be a case where bleeding need not have been anticipated. Mr. Marrant Baker has ably advocated the use of india-rubber tracheotomy tubes, and has frankly stated their advantages and disadvantages. If india-rubber tubes are to be used, it is as well not to defer their use too long; and, having seen Mr. Baker's recommendation of these tubes, I had thought of changing the silver for an india-rubber tube, but, finding the case apparently doing well, I was contented to leave it alone. I have thought the particulars of the case worthy of a place in THE LANCET, as it is instructive in pointing out an accident which possibly is more common than is generally supposed.

Harley-street.

POISONING FROM THE EXTERNAL APPLICATION OF TOBACCO.

By WILLIAM O'NEILL, M.D., M.R.C.P. LOND.,
HONORARY PHYSICIAN TO THE LINCOLN LUNATIC HOSPITAL.

ON the 18th November I was sent for to see Mrs. A—, an old patient of mine, aged about forty years, a farmer's wife, who it was represented was bleeding profusely from wounds in the leg caused by her accidentally hitting it against a sewing machine. The patient suffers from varicose veins, and as a support and protection wears elastic stockings; but on this morning she had omitted to put them on, consequently the knock took effect on the congested leg, and two or three slight wounds and some hæmorrhage were the result. When I reached the house, which is some distance from the city, the bleeding had been stopped about half an hour, but the symptoms the patient presented were most alarming, and apparently warranted the opinion expressed by some of those about her that she was dying. She had fainted, I was told, and had with difficulty been revived by draughts of brandy and water. She now seemed to be extremely prostrated, having a pulse scarcely to be felt, and a pale, cold skin, wet with profuse clammy perspiration. The pupils of the eyes were dilated, and in a faint whisper she complained of dimness of sight, of dizziness, and of confusion of thought. The patient suffered from severe pain in the abdomen, and from constant nausea and vomiting.

Believing that a slight loss of blood could not cause in a robust woman these formidable symptoms, I deemed it necessary, although at the risk of a fresh outbreak of bleeding, to remove the bandages, and examine the leg; and, having done this, I found what explained the symptoms—a handful of chopped wet tobacco firmly pressed on the wounds, which were deeply stained by it. The skin around the wounds was also stained by the tobacco, but in a slighter degree. I now learned that on a few previous

occasions, to stop slight bleeding, the patient had applied "pinches" of tobacco, but, although she had felt rather unwell after each application, she never connected the indisposition with the tobacco.

The tobacco was immediately removed, the limb well cleansed, stimulants were given, and a mixture containing strychnia, which, according to the Rev. Professor Haughton, is the true antidote for tobacco. Under this treatment Mrs. A— gradually improved, but several days had elapsed before she had quite recovered.

The symptoms of poisoning in this case were well marked, and are worthy of note when the mode of the introduction of the poison into the system and the rarity of such a mode of introduction are taken into consideration. So rare, indeed, is poisoning from the application of tobacco to a wound, or to the abraded or broken skin, that, in looking into the volumes of THE LANCET for the last seventeen years, I find only one or two instances of it. Indeed tobacco-poisoning, of sufficient intensity to come under medical observation, is of somewhat rare occurrence, and this is rather strange when the very general use of the plant in one way or another is considered. In this part of the country it appears that tobacco is occasionally used as a domestic remedy for stopping bleeding. In the case under consideration the hæmorrhage was arrested; but, as tobacco does not contain any astringent substance, the handful of chopped leaves acted, in all probability, merely as a compress, or as a means of entangling the blood, and thus allowing it to coagulate on escaping from the injured vessels.

The urgent symptoms in this case very soon set in, for I saw the patient about three-quarters of an hour after the application of the tobacco, and yet she had fainted in the interval. Absorption therefore must have been rapid, nearly as rapid as if the tobacco-juice had been subcutaneously injected. Doubtless the woman would have soon succumbed had not the cause of the poisoning been quickly discovered. As I stood by the patient, I could not help thinking that, had she died without medical assistance, her death, in all probability, would have been attributed to the loss of blood, and not to poison. In this instance, as in so many other cases, the saddle would not have been put on the right horse, for neither the patient herself, who applied the tobacco, nor those who were with her and assisted her, suspected for a moment that her death was being brought about by the remedy which in Mrs. A—'s case was worse than the disease.

Lincoln.

A CASE OF POTT'S FRACTURE;

FOLLOWED BY THROMBOSIS OF POSTERIOR TIBIAL VEIN, AND DEATH FROM EMBOLISM OF THE PULMONARY ARTERY.

By F. A. SOUTHAM, M.A., F.R.C.S.,
RESIDENT SURGICAL OFFICER, MANCHESTER ROYAL INFIRMARY.

WILLIAM S—, aged sixty years, a strong, well-built man of active habits, and who had always enjoyed good health, was admitted into the Manchester Royal Infirmary under the care of Mr. Heath, on December 6th, suffering from Pott's fracture of the left leg, which he had sustained in stepping out of a railway carriage. The fibula was broken about two inches and a half from its lower extremity; the foot was dislocated outwards; there was no fracture of the internal malleolus, which projected prominently beneath the skin, the tissues over it being very tense and much discoloured.

Under chloroform the dislocation was readily reduced, and a Dupuytren's splint, with a foot-piece for the sole of the foot, was applied to the inner side of the leg. On the morning of Dec. 23rd, seventeen days after the receipt of the injury, having up to this time progressed very favourably without a single bad symptom or complication of any kind, while engaged in writing a letter as he sat up in bed, he was seized, without any warning whatever, with sudden loss of consciousness, pallor of face, and extreme feebleness of pulse, the pen dropping from his hand and the head falling back. Stimulants were administered and heat applied over the region of the heart. Under this treatment there was a partial return of consciousness, and the pulse