out a precisely similar "crossed contraction." Ankle-clonus was faintly present, and there was not any crossing. Of the other reflexes, none of which showed any associated crossing, the interscapular, abdominal, and epigastric were absent; the gluteal brisk, cremasteric faint, and the pupillary sluggish. The patient became steadily worse. Towards the last the breathing frequently became of a Cheyne-Stokes character, though from time to time the respiration was regular and natural. The unilateral facial flushing was continually present. He died on June 5th, 1891. Unfortunately a post-mortem examination could not be obtained. Prevost found a similar case of crossed contraction. He regarded the crossing as "due to the physical diffusion of vibration," for he found that "section of all the nerves and posterior nerve roots of one limb of an animal does not abolish this crossed contraction." Luchsinger found in tritons and tortoises when decapitated that tickling one forelimb is frequently followed by a movement of the hind limb of the opposite side. In Landois and Stirling's "Text-book of Physiology," second edition, the following observation is also quoted: "If the region of the eye be irritated in a frog whose cerebrum is removed, there is frequently a reflex contraction in the hind limb of the opposite side." (Luchsinger, Langendorff.)

The point that occurs to me is this. There are two main theories regarding the *modus operandi* of the knee-jerk. In the one it is held to depend on a centre in the spinal cord; in the other it is maintained that the contraction of the quadriceps is due to local irritation of the muscle from sudden elongation. Now, the occurrence of "crossed reflexes" appears to me to be an additional argument in favour of the former opinion. For, if the contraction depends upon local muscular irritation, how are we to account for the contraction in the opposite limb? I think in this case that the possibility of any vibration need not be entertained, and that the only diffusion that occurred was from the one to the other side of the spinal cord itself.

Prestwich.

THE USE OF PURE BENZOLE IN WHOOPING-COUGH.

By W. ROBERTSON, M.D. GLASG.

AFTER some years' experience of the use of benzole in whooping-cough I can safely say that it effects better results than all the other remedies recognised as useful in this affection. In the adult and child it is of equal benefit. In an infant just now under treatment the attacks have been reduced from twenty or thirty in the night to two or three, and whereas when the treatment was begun evidences of bronchitis were present, now the chest is clear and the child able to be taken out of doors daily. All this improvement was brought about in less than ten days. I have administered benzole in whooping-cough, where convulsions and other complications were fast reducing all chances of recovery, with perfect success in a few days. In adults, where pertussis assumes often serious aspects, benzole has proved equally efficacious. Two minims in mucilage are sufficient for a child six months old, and five minims in mucilage on sugar or in capsule for adults. I am indebted to an article in the *Practitioner* of some years back for information regarding this treatment, and can heartily recommend a trial of it. Whenever the benzole odour is observed in the breath of the patient, then all anxiety as to the result may be allayed.

Newcastle-on-Tyne.

SUCCESSFUL CASE OF TAIT-PORRO'S OPERATION IN PRIVATE PRACTICE.

By COLIN G. CAMPBELL, M.R.C.S., &C.

IN the beginning of January this year Mrs. B. B— consulted me with reference to her confinement, which she expected about April 2nd. Her first child had been delivered at full term by craniotomy early in 1888. During her second pregnancy I made a careful examination of the parts, finding flattened pelvis with marked sacral prominence. However, I thought it would be possible to deliver a living child at the end of the seventh month, as there appeared to be a conjugate diameter of three inches. Accordingly I induced labour in February, 1889. As, after waiting some hours, the head did not make any progress, I endeavoured to apply the long forceps; but,

as in the first case, where it had been thoroughly tried by a medical neighbour as well as myself, I found it impossible to "lock" them. Eventually with the greatest difficulty I delivered a dead child by version. Each delivery was followed by a prolonged convalescence. Every alternative being placed before the patient and her husband, she decided to undergo the Tait-Porro's operation. She considered nothing could be worse than her previous experiences, and she was sincerely desirous of having a living child. Although in very humble circumstances (she lives in a three-room "back-to-back" cottage), she determinedly refused to go to any hospital. Being unable to see any advantage in waiting for the commencement of labour, but rather many disadvantages, I decided to attempt the operation a week before labour was due. Assisted by Mr. John Sutcliffe and Dr. Chamberlayne of Stalybridge, who administered methylene, I operated on March 25th. The incision was made from just below the umbilicus downwards for four inches. A difficulty was experienced in passing the soft rubber tube over the uterus (which reached the ensiform cartilage) through the small and low-down incision. This difficulty was, however, anticipated by Mr. Sutcliffe, at whose suggestion some electric light wire—to pass through the tube to stiffen it—was ready. This worked admirably, and at once the tube was passed down to the fundus. The uterus was then opened and the child, weighing 7 lb. 10 oz., delivered without difficulty. On tightening the tube round the fundus, previously to amputation, it unfortunately snapped. Another thicker one was, however, easily applied, cross-pins put through tube and pedicle, and all difficulty was over. Throughout, Mr. Lawson Tait's directions¹ were followed and no antiseptics were used. On the day after the operation the temperature rose to 103°, owing to flatulence, which caused painful dragging on the pins; this was promptly relieved by a dose of Epsom salts. On the eighth day a small abscess formed in the course of one of the sutures, which caused another rise. Beyond these there were no other bad symptoms, and the pedicle came away on the fifteenth day, leaving a ridiculously small wound. To prevent puckering, this was kept stretched and open three weeks longer, but practically all attendance ceased, and the patient was up and nursing her infant at the end of the fourth week. I believe this is the first case in which the operation has been attempted before the commencement of labour. If I had to do it again I would use a thick rubber tube with little lumen, as the entangling of air in the knots of the ordinary tubing leads to snapping. This tube, I think, should have the wire passed through it.

P.S.—Of course, the wire was withdrawn as soon as the tube was got into position.

Saddleworth, Yorks.

COLOTOMY FOR MALIGNANT DISEASE PERFORMED IN A COTTAGE; RECOVERY.

By S. ASHLEY SMITH, M.D. Q.U.I.,

AND

G. MARTIN FOX, L.R.C.P. LOND.

P. A—, aged forty-seven, collier, a pauper patient residing at Portobello, near Willenhall, was first seen by Mr. Fox on Monday, July 6th. The following is the history: The patient had been failing in health for eighteen months or more, and had been suffering from alternate constipation and diarrhoea, with a considerable amount of pain. For the twenty weeks immediately preceding the above date he had been treated at a large public institution for dyspepsia without the serious nature of his ailment having been discovered, although almost complete obstruction had set in for twelve or fourteen days. On examination the abdomen was found very much distended and exceedingly painful on pressure; pulse weak, anxious expression of countenance, and sickness. Aperients and enemata were tried without avail. On digital examination per rectum a hard scirrhus mass was discovered, completely blocking up the gut at a distance of about four inches from the anus. On the following day, the patient's general condition being much worse, and stercoraceous vomiting having set in, Dr. Ashley Smith was asked to see him. The patient being most anxious to have something done to relieve him, after consultation it was determined to perform colotomy, as giving him the only chance for prolonging life, and this

¹ Brit. Med. Jour., March 22nd, 1890.