get a view of the seat of injury. The colon, where it was in relation with the duodenum, was constricted for three or four inches and slightly bruised. Between it and the duodenum there was an oozing of bile-stained fluid through several small holes in the peritoneum, and on removing that membrane from the front of the bowel a large rent was revealed at the junction of the second and third portions on the right side of the second lumbar vertebra, involving fully two-thirds of its circumference. The edges of the rent were ragged and the bowel was bruised for about two inches above it.

The noteworthy points about the case seem to be the slight amount of shock in proportion to the gravity of the injury, and the delay in the setting up of severe general peritonitis. They are both explained by the fact of the rent being retro-peritoneal, the small holes in the peritoneum admitting only of a small and gradual extravasation of bowel contents. The absence of severe shock may have been also due to the escape from pressure of the great sympathetic ganglia. If the patient had been kept entirely at rest and supplied sooner with ice, I believe he might have survived the injury a good while longer, though the case was beyond the help of even present-day abdominal surgery.

Nottingham.

THE ADMINISTRATION OF CHLOROFORM.

BY ARTHUR COURT, M.B. CAMB.

IN view of the recent lamentable number of deaths from chloroform reported in the medical journals, I wish to bring forward this case of primary heart failure occurring during its administration, thinking it may possibly be of interest to the readers of THE LANCET.

The patient, H. B—, aged thirty, was the wife of a farmer. She had previously enjoyed good health. She had borne four children and was at the time of operation four months pregnant. On Nov. 6th, 1891, she pricked the index finger of her left hand with a rusty pin. This was followed by destructive inflammation of the tendon and metacarpo-phalangeal joint, the inflammation afterwards spreading into the palm of the hand; she had a sharp attack of septicæmia, and it was considered necessary to amputate the useless finger. The temperature having been normal for a week, on Dec. 22nd, at 10 A.M., I attended to give chloroform. She had had no solid food since the previous day, but was allowed some egg and brandy before my arrival. The heart was normal, with the exception of the sounds at the apex, which were remarkably sharp and clear. Pulse 80, small and easily compressible. The patient being placed in the supine position, I proceeded to administer chloroform on a Skinner's inhaler, commencing with half a drachm of chloroform, and after that a drachm of a mixture of equal parts of chloroform and ether. The breathing was regular and deep, and she came under the full influence of the anæsthetic in about three minutes. My father, who was operating, quickly amputated the finger. At the same time she suddenly became blanched, the pupils widely dilated, and the pulse ceased to be felt either at the temples or wrist. The breathing was, however, maintained. My father at the same instant saw that all was not right, for nothing but a little venous oozing escaped from the stump. I immediately hung her head over the edge of the table and pulled out the tongue, and then the breathing ceased. Fortunately I had at hand a hypodermic syringe filled with ether, which was quickly injected. We then took her by the waist and suspended her head downwards, and the colour gradually returned to her face, and the breathing became short and gasping. We replaced her on the table; but she at once relapsed into her former state, and the suspension had to be repeated. Again she rallied, and at last we succeeded in getting her round. The pulse remained very feeble, and she had several severe syncopal attacks during the day. She eventually got quite well.

I have no doubt that in this case the heart was primarily at fault, enfeebled by an attack of septicæmia in a pregnant woman, and that ether should have been the anæsthetic chosen in place of chloroform. I certainly believe that the suspension of the patient was the means of bringing about a satisfactory result.

Staveley, Chesterfield.

A CASE OF DOUBLE INTERNAL STRANGULATION BY THREE ADVENTITIOUS BANDS; ABDOMINAL SECTION; DEATH.

BY R. MUZIO WILLIAMS, M.D. LOND.,

AND

JOHN R. LUNN, F.R.C.S. EDIN.

THE curious condition found at the necropsy of the above case makes us venture to offer a brief *résumé* of it, especially as it illustrates to a remarkable degree the extreme difficulties to be contended against in the correct treatment of these formidable cases—difficulties principally arising from the impossibility of diagnosing correctly the exact anatomical lesions which have caused the strangulation, for they differ in almost every individual so affected.

T. B—, aged fifteen, came under our care on May 9th, 1891, with the following history:—He had always enjoyed good health until a fortnight ago, when he was attacked with severe diarrhoea, great abdominal pain, and frequent vomiting. He said that the attack commenced very soon after he had carried thirty-two rolls of paper (42 lb. weight) a distance of four miles. On first being seen the patient proved to be a well-nourished boy. The face showed great signs of suffering. Pulse small and rapid; temperature subnormal; pupils dilated; legs drawn up; abdomen much distended and tympanitic on percussion; some feeling of resistance in the right iliac fossa (the bowels had not been opened for two days); vomiting after all food. By May 12th the patient had become much worse in spite of treatment. Bowels still obstructed; vomited matters now dark brown. A distinct swelling could be felt in the right iliac region, which moved somewhat on change of position. It was decided that the patient's only chance of life was to make an abdominal exploration. On the abdomen being opened by a four-inch incision, and the much-distended gut being pushed to one side and covered by hot sponges, a broad inflammatory band was noticed passing to the right iliac fossa, all the parts in that region being much matted together; the band was an inch and a half broad and quarter of an inch thick, and was constricting the small gut beneath. On endeavouring with great difficulty to get it free some adhesions gave way, disclosing a collection of pus deep seated amongst the intestines and shut off by adhesions. Into this pus-containing cavity the gut had sloughed and was very black. The patient having become very collapsed, the ragged opening was hastily made into an artificial anus by being stitched to the abdominal wound. The peritoneum was washed out and the wound dressed in the usual antiseptic way. The patient died the following night. At the necropsy the band noticed during the operation was found to arise from the mesocolon; it was seven inches long and constricted the small gut at a point eight feet from the stomach. About two feet below this was a second band, arising from a portion of the small intestine and passing to the right iliac fossa. It constricted the bowel by causing a sharp bend, and thus helped to form the first strangulated loop, part of which was protruding into the abscess cavity, and was gangrenous. There was a second strangulated loop about a foot in length, situated six feet from the stomach—dark, congested, and slightly gangrenous, with a small sloughing ulcer on its internal surface. It had become pushed beneath a third band, four inches long, passing from the great omentum to the cæcum.

St. Mark's-road, North Kensington, W.

A CASE OF ANÆMIA, CONSEQUENT UPON LUNG DISEASE AND STARVATION, TREATED BY TRANSFUSION OF BLOOD AND SALINE FLUID.

BY JOHN R. PHILPOTS, L.R.C.P. & S. EDIN.

MRS. H—, aged sixty-six, but looking older, first came under my care on Aug. 31st, in a weak and emaciated condition, weighing about 7½ st., and with a history of antecedent lung mischief and hæmoptysis. Her appetite was bad, and became worse, although a variety of different