sinus, being only stretched, mechanically contracts again in a very short time.

I carried out this principle in this case of gastrostomy. On the fourth day after the attachment of the stomach to the parietes the viscus was opened only enough to admit a No. 10 catheter, and then this small opening was dilated with tents till a short piece of rubber tube, the thickness of the forefinger, could be introduced and tied *in situ*. The stomach walls—from mere physical reasons—contracted now firmly round the tube, and from the time of its introduction there has not been a vestige of leakage. The tube, which only just projects into the stomach and about 1 inch externally is kept corked, the cork being removed at meal times; and then with a funnel and a tube that will pass into the lumen of the permanent tube the patient easily feeds himself.

Around the tube, on the skin, boracic acid ointment, with a large proportion of chalk in it, was smeared to counteract any acidity should there be regurgitation at any time; but this has never occurred.

Had the opening into the stomach been made with a knife and then the large tube at once inserted the subsequent contraction, though it would have held the tube well gripped, would not, in my opinion, have prevented leakage, for in this case there would have been only the cicatricial contraction to have relied upon, but where the opening is made by dilatation the gastric musculature remains uninjured, and I believe around the tube acts the part of a sphincter, and thus there is an active as well as passive hold.

THE USE OF DEFIBRINATED SHEEP'S BLOOD FOR TRANSFUSION.

By W. A. F. BATEMAN, M.R.C.S.,
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THE following case may be worthy of publication, as suggesting a substitute for human blood, in cases demanding transfusion:

E. J., aged 72, was admitted to the Royal Hospital, Richmond, suffering from scirrhus of the head of the pancreas, involving the common duct. She was very emaciated, the skin and conjunctiva deeply stained with bile, and the whole surface of the body covered with patches of purpura.

At the time of operation (October 8th) she was almost in a moribund condition, and though the nature of the case did not admit of any measure of success beyond prolonging life for a few days, I thought it a good opportunity to try a method of transfusion I had long desired to employ. I arranged with a local butcher for a supply of defibrinated sheep's blood. This I procured immediately the animal was slaughtered, so that it was still quite warm when I used it. With the blood I mixed an equal quantity of water in which was dissolved table salt in the proportion of a drachm to the pint. This mixture I carefully strained through fine muslin to catch any chance atom of fibrin.

The temperature of the fluid when injected was as nearly as possible 98°. The instrument used was a common Higginson's enema apparatus, to which was attached an aspirator needle. The quantity of fluid injected was not quite 8 ounces. I should have used more, but I was afraid that a bubble of air had got into my rather imperfect apparatus, an accident I hope to avoid in the future.

The immediate result of the operation was an increase of pulse power. This, however, was followed by faintness, whether from the bubble of air, or from the effect of the slight cutting operation I am unable to say. A little whisky and water, however, soon revived her, and in a few hours she was very much in the same state as before the operation. On the following two or three days she was better and rather stronger, and could sit up in bed without help. This she had not accomplished for a considerably time previously. She died, however, eight days after, but judging from her condition when the operation was done, I think there is fair ground for supposing that life was somewhat prolonged. My motive, however, for publishing this case is to suggest the use of "sheep's blood" for cases where transfusion is deemed necessary.

This method is worthy of further trial. First, to determine whether it is as life-saving as the use of human blood;

secondly, because there are obvious advantages in its use, inasmuch as many cases have been reported of serious consequences following the abstraction of blood for transfusion; and, lastly, because it is easily obtained, and as sheep are constantly being slaughtered it is not even doing an injustice to that excellent domestic animal.

Allow me to say, in conclusion, that I have not searched the literature on transfusion as thoroughly as I could wish. If, therefore, this method has been already tried, I shall be glad if some of my professional friends will bring it forward.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

INGUINAL HERNIA INVOLVING THE OVARY.

A HINDU child, Kalloo, 3 to 4 years old, was admitted to the hospital early in August, 1895, with an ovoid swelling in the right groin extending well into the labium. It was due to a hernia of the intestine, together with a hernia of the ovary. The intestine was reducible, but the ovary could not be returned into the abdominal cavity by taxis. An incision was made, and the sac was dissected out. Through the thin walls the ovary could be seen, of a purplish hue. Some torsion of the pedicle may have been present, as in a case of Mr. Lockwood's, reported in the BRITISH MEDICAL JOURNAL of September 21st, 1895. The resulting congestion prevented its reduction until the ring had been enlarged by the knife. The sac was then given three twists on its long axis, and passed up behind the transversalis and internal oblique, from which the parietal peritoneum had been separated, and there fastened. The child has made an excellent recovery, and is now (three months after the operation) running about without a truss or any form of mechanical support. The result is perfect, there being no bulging or extrusion whatever, although she could not be kept recumbent after the second day.

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A CASE OF POISONING BY CYANIDE OF POTASSIUM: RECOVERY.

ON November 4th I received an urgent message to see Miss A. A few minutes afterwards I found the patient, a girl, aged 20, at the foot of the staircase, breathing stertorously, unconscious, convulsed, with widely-dilated pupils, no pulse at the wrist, and cold.

Her mother informed me that Miss A. had gone upstairs to change her dress, intending at the same time to do some photographic work. She shortly afterwards heard her rush out of her room calling "Mother!" immediately afterwards falling downstairs, convulsed and very sick. There was a strong odour of bitter almonds in her breath and vomit, and I came to the conclusion she had in some way poisoned herself with cyanide of potassium or prussic acid. She was perfectly well half an hour before the occurrence.

I removed her to bed, and at once injected $\frac{1}{15}$ gr. of digitalin and $\frac{1}{15}$ gr. of strychnine, followed by two syringefuls of brandy, and also commenced artificial respiration and general friction. Shortly afterwards there was some feeble pulsation at the wrist, and with the aid of a battery (which had by that time been obtained), fresh injections of brandy, hot bottles, and mustard over the heart, the patient gradually rallied, not, however, before she had several alarming relapses. She was several times sick and slightly convulsed. The pupils were widely dilated the whole time. She did not recover consciousness until fully three hours after the accident, but then rapidly rallied, and in the evening only felt faint and sick.

On searching her bedroom a large piece of cyanide of potassium, and a penknife with which she had been scraping it to a powder, was found. How she managed to convey a portion of this powder to her mouth she is quite unable to say, as she remembers nothing of the whole occurrence, although there must have been a momentary period of consciousness