Some of the specimens obtained may be seen in the museums of the Royal College of Surgeons of England and of St. Thomas's Hospital. When fresh they showed that the adhesions present in the earlier days after operation to a great extent disappear later.

With respect to human surgery we may here express our opinion that the difference in the thickness of the muscular coats in the intestines of dogs and men does not invalidate the conclusions above suggested. In man we recall three operations for the excision of malignant growth of the great intestine. In one case re-union was attempted (by one of us) by simple suturing and failed; in another re-union was attempted (by one of us) with Halsted's cylinders and succeeded; and in a third re-union attempted by Murphy's button with an external ring of sutures was followed by failure, but as a gauze plug had been carried down to the seat of junction only a fæcal fistula resulted which in a short time closed spontaneously.

References.—Halsted: Inflated Rubber Cylinders for Circular Suture of Intestine, Philadelphia Medical Journal, 1898. Laplace: A New Forceps for Intestinal Anastomosis, Annals of Surgery, March, 1899.

GUNSHOT WOUND OF THE HEAD; PERFORATION OF THE BRAIN; RECOVERY.

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ON March 2nd, 1897, I was called to the gun-room of the drill hall, where practice with the Morris tube was going on, to see a lad who was supposed to have been shot in the head. I was told that this lad, who had been incautiously bending forward to see the result of the shot and had thus got his head into the line of fire, had suddenly fallen down and was lying helpless. On arrival at the hall I found him on his right side, unconscious and breathing heavily. There was blood oozing from a wound on the head over the left parietal eminence. Brain matter was also observed on the edges of the wound. Examination with a probe revealed a small opening through the skull about three-eighths of an inch in diameter, the bony side being slightly irregular. The patient was conveyed on a stretcher to his house. By this time there was complete insensibility. The pupils were widely dilated and did not react to any stimulus. The pulse was 50 and the breathing was laboured. There was also an effusion under the occipito-frontalis. No exit wound could be discovered. About 36 hours after Dr. A. Asher, who was associated with me in the treatment of this case, discovered a small, hard object slightly moveable under the scalp about two inches above the right ear. It was cut down upon and when extracted was found to be the bullet crushed out of shape. There was a small opening through the skull of a triangular shape and situated about half an inch further up than the spot where the bullet lay. The bullet had penetrated the skull through the left parietal bone and passing through the brain had pierced the right parietal bone about two inches above and slightly behind the external auditory meatus, where, its force being almost spent, it was unable to make its exit through the scalp but lodged itself between the pericranium and the bone in the manner which I have described.

The history of the case is a history of gradually returning consciousness and complete recovery in two months. The symptom which persisted longest was blindness of both eyes with widely dilated pupils. There was very little rise in temperature, seldom over 100° F. The pulse was slow, ranging from 50 to 54 for the first fortnight when it rose to 60 and about a week after it reached 64. There were restlessness and sleeplessness for the first 10 days. The blindness persisted for three weeks with dilatation of the pupils. Light had so little effect on them that ophthalmoscopic examination could easily be carried out at all times. Little change was noticed in the retinal vessels. After the patient was able to move about it was remarked that in passing an object on the right hand he kept away over two feet from it, but if the object were on the left hand he invariably brushed against it in passing. The effusion under the occipito-frontalis which was very large became gradually absorbed. This effusion, which was slight at first, increased greatly

within 24 hours and no doubt lessened the pressure in the brain-vessels. The bullet had evidently passed through the ascending parietal convolution on the left side and through the angular gyrus on the right side.

At the present time, three years after the injury, the exit wound through the skull can easily be made out by a well-marked depression above the right ear but the entrance wound is not so easily found. The sight is as good as it was before the accident and there does not seem to be any permanent injury to the brain.

Thurso, N.B.

INTESTINAL OBSTRUCTION CAUSED BY MECKEL'S DIVERTICULUM AND RELIEVED BY OPERATION.

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A YOUNG woman of tuberculous family and with some consolidation of one apex was admitted into Devizes Hospital on Oct. 27th, 1897, complaining of severe abdominal pain and vomiting. The pain had commenced two days before, half an hour after dinner, and had continued with slight remissions up to the time of her reception. The pain was followed six hours later by vomiting, first of food, then of bile, and later and at the time of admission of a dark greenish-brown fluid, offensive in odour, but in which no actual fæcal matter could be detected. She had suffered from occasional bouts of pain for some months previously to the present attack and had attributed this to indigestion. There had been no epigastric tenderness and she had never brought up blood.

On admission the patient's temperature was 98·8° F.; the pulse was soft and regular and 126 in frequency; the breathing was 20, chiefly costal. The skin was warm and slightly moist. No collapse was present. There was no tenesmus and no blood was passed. Rectal examination was negative. The patient lay on her right side with the limbs semi-flexed. The pain was severe, but not absolutely constant, there being occasional remissions of 20 minutes' duration. Vomiting of the character already described was frequent and afforded her no relief. An enema brought away a few hard masses. The urine was diminished in quantity. It was found on examining the abdomen that there was some fulness in the umbilical region below and to the right of the navel. The flanks were relatively flat and there was no distension in the region of the colon. Vermicular movement could be seen passing across the lower part of the abdomen, and observation of this led to the opinion that it concerned a coil of small intestine. Palpation revealed deep tenderness in a spot to the right of the navel. The distended area was felt to consist of tense coils of small intestine. A diagnosis of complete obstruction of the small intestine was arrived at. Of the nature of the stoppage no opinion could be formed except that the physical signs of intussusception were absent. As to the locality of the obstacle, from the slight degree of shock present, the appearance of the abdomen, and the character of the vomit, the opinion was hazarded that the obstruction was probably in the lower half of the ileum. On making an exploratory incision on the following day several tense coils of small intestine presented. The caput cæcum coli was sought for and was found to be empty. So, too, was the adjoining lower end of the ileum. Tracing the latter upwards the gut led to a tight constriction. A cord-like structure lying deeply at the floor of the abdominal cavity bound down beneath it a knuckle of small intestine. The latter was situated roughly about 20 inches from the caput cæcum. The cord was followed upwards and was found to pass deeply and to the left to an attachment on the transverse meso-colon at a short distance from its spinal origin. This attachment was divided between ligatures and the bowel was released. The cord was then traced downwards and was found to originate from the wall of the ileum, a short distance above the ileo-cæcal valve. No appearance of patency could be made out in the diverticulum at a distance of an inch from its origin and accordingly it was divided here between ligatures. The cross-section of the removed portion showed no trace of a central tube. The distended coils of bowel