

sanitary arrangements anything but good—we decided to operate. By daylight next morning our preparations were completed; all antiseptic precautions, known to us, and possible under the circumstances, were taken.

Ether having been administered, the abdominal surface washed thoroughly, first with ether, and afterwards with Bichlor (1%) solution: an incision was made from the umbilicus to near the pubes through the linea-alba. On opening the cavity the congested omentum came into view: finding this adherent below, and on the left to the abdominal wall it was pulled over from the right and the fingers were introduced under it and passed to the lump which I ascertained consisted externally of omentum, coils of intestines, and mesentery, bound together and to the adjacent walls by firm adhesions. Unable to gain further information through this incision, another was made at right angles to the first, commencing about two inches below the umbilicus and extending to the anterior superior spine of the ilium. This incision passed immediately above where the omentum was adherent to the anterior wall. I could now with the hand reach the upper third of the descending colon: but the lower part became involved in the mass and could not be traced. At this time the prospect was exceedingly dark. After various attempts to gain some knowledge as to the true nature of the case I determined to reach the left internal abdominal ring with my finger. Commencing at the transverse incision above the ring, with some difficulty I forced a way down between the mass and the abdominal wall external to the omentum. On reaching the ring I found no coil of intestine engaged, but finding the adhesions less difficult I passed the finger downward and backward into the pelvis when it slipped into a pus cavity. Fortunately my finger acted as a stopper and prevented the pus from flowing upwards into the general abdominal cavity. With the other hand I cut down to the finger over the part where it dipped back into the pelvis, merely making an opening sufficient to allow the introduction of a short drainage tube through which flowed fully thirty ounces of offensive pus, and through which the cavity was repeatedly washed. In spite of all I could do a little pus oozed out along the side of the finger and reached the outer surface of the omentum above the adhesions. This was carefully sponged off and washed

repeatedly by irrigation. A rubber drainage tube was inserted into the outer angle of the transverse incision, extending into the track made by the finger and lying between the omentum and the abdominal wall. After carefully washing the peritoneal cavity the wound was closed in the usual manner, for the deep sutures prepared Silk-worm gut was used and for the superficial, fine iron-dyed silk. Notwithstanding the extent of wound and the fact that the epigastric artery was divided no ligature was applied. The glass tube was supplied with a rubber dam and a sponge to absorb any discharge and prevent it reaching the wound: and the parts were covered with wet Bichlor-dressing, over which absorbent cotton and a bandage were applied.

Two grs. of calomel were advised to be given, followed by small but repeated doses of magn. sulph. in hot water till the bowels moved.

The following day I again saw the boy, found the pulse much improved: the bowels had moved; temperature normal; no pain; and the boy crying for food which had been forbidden lest it should cause retching. Dr. Savage has informed me that after this, until the removal of the glass drainage tube, the cavity was washed out two or three times a day with carbolyzed water. On the third day the glass tube was removed and a rubber one inserted which was gradually withdrawn till at the end of three weeks it was entirely removed. The tube in transverse incision was accidentally removed on the second day. Excepting a small superficial abscess that formed at the junction of the wounds nothing marred the recovery in any way. Now, seven months after the operation, the boy is strong and well and has since the summer holidays attended the public school without a break.

PHYSICS OF HEARING.

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THE auditory nerve is unendowed with general sensibility, but it is not yet determined whether simple stimulation produces subjective sound sensations.

The external ear appears to play a part in collecting sound waves for transmission towards the external meatus. However great its use may be in this respect, its main function seems to be one of interception of waves, as of those from behind,