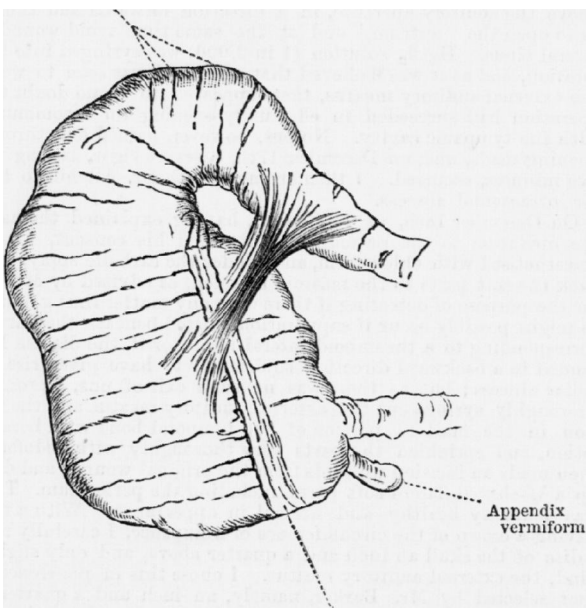
traced from the cæcum to the rectum. The small intestine, which was perfectly healthy, was removed, and it was then found that there were numerous thick and strong adhesions between the liver, the diaphragm, and the adjacent viscera. The hepatic flexure of the colon was also adherent. At this point the colon formed an acute bend, and for a short distance the adjoining parts of the ascending and transverse colon lay in close contact. A strong rounded band that joined the transverse to the ascending colon at a point where they began to diverge was evidently the cause of the acute bend. The colon below the hepatic flexure contained a fair amount of fæces and was of somewhat small calibre. Its mucous membrane was pale and healthy. The small intestine as far as the ileo-cæcal valve was also healthy; but the cæcum and ascending colon had evidently been subjected to great distension. The diameter was three or four times that of the transverse colon, and its mucous lining was thickened, injected, and covered with a layer of mucus, which had a very offensive smell. There was no ulceration. The inflamed faded gradually into healthy mucous membrane at the hepatic flexure. The liver was small and very flabby. On section it resembled somewhat the lobular appearance of a pancreas, and was of a brownish-red colour. It did not feel tough like a cirrhotic liver. The gall-bladder was healthy, but the adhesions affected it as well as the rest of the liver. The kidneys were slightly congested, but otherwise healthy. There was no recent peritonitis. There was a little clear fluid in the pelvis. The perihepatitis and the band described were the only evidences of old peritonitis that were found.

The figure is a diagrammatic sketch of the specimen after its removal, and so arranged as to demonstrate the position of the band.



REMARKS.—The immediate cause of obstruction was without doubt the distension taking place above the acute bend at the hepatic flexure, and the band described was the means by which this had been produced.

The interference with the peristaltic function of the bowel that must have resulted from the adhesion to the liver, and the fixation of this portion of the colon in an acutely bent position, favoured the production of obstruction. This is a well-marked instance of that class of case in which obstruction occurs without any occlusion of the lumen of the bowel existing. Though the conditions must have been in existence for a long time, there is nothing in the history to suggest that they had given rise to any trouble till the end of November, and the absence of any hypertrophy of the muscular coats of the bowel above the obstruction, and the evidence that the distension, which was considerable, extended only to the ileo-cæcal valve, both point to a recent origin. It is likely that the cold he contracted led to some irregularity in the action of the bowels, and that the ascending colon becoming loaded produced a partial obstruction sufficient to lead to an accumulation of the intestinal contents, but capable of easy relief. The diarrhœa produced by the indigestible meal in all probability led to greater distension and a more pronounced obstruction. Had the patient recovered, the fæces would almost certainly have resumed the natural passage, and the opening in the loin would have closed, or must have been kept patent in case a similar state might again arise. The category to which this case belongs is rather doubtful. Taking Mr. Treves's classification (*Intestinal Obstruction*, p. 97), it might be included under the heading either of "occlusion by adhesion retaining the bowel in a bent position," or of "obstruction by matting of the bowel." In the latter division Mr. Treves refers to cases in which a portion of the transverse colon has been found adherent to the ascending colon along its whole length. Such cases are the nearest parallel to this particular condition that I am aware of, but as cases of this nature are rarely alike, it is not to be expected that an exactly similar one could be found. Would abdominal section have been a better operation than colotomy? It is true the band might have been found and adhesions separated, but they were so deeply situated and so obscure, that it is quite possible that they might have been overlooked; and in these days, when exploratory abdominal section is sometimes followed by colotomy, it is not unlikely that that course might have been adopted when the ascending colon was found distended and the exact cause of the obstruction not very plainly revealed. One other point of considerable interest was the escape of foul blood-stained mucus from the anus after the colon had been opened, as it proved, above the obstruction. At the time it did not strike me as peculiar, because I thought the obstruction was lower down at the splenic flexure, but when it was shown to have existed at the hepatic flexure, it seemed strange that none of this fœtid material should have been discharged through the wound, which was so close to the obstruction. I believe that this difficulty was one of my own making, and that the water that was injected through the wound at the operation forced this material beyond the hepatic flexure, which had ceased to constitute an obstruction when the distension of the bowel above had subsided after the escape of gas through the newly-formed opening.

A CASE OF RENAL HYDATIDS TREATED BY ABDOMINAL SECTION.

By FRANCIS IMLACH, M.D.

WHEN hydatids grow in either kidney the tumour may burst into the renal pelvis, and the cyst-walls, together with their fluid contents, be discharged *per urethram*. This discharge may quickly cease or it may continue for years, and end in extensive renal suppuration. But if the hydatid tumour grows as large as an orange, or, at the most, as large as the adult head, rupture into the peritoneal or pleural cavity appears to be its usual course. Rupture into the peritoneum may cause rapidly fatal suppurative peritonitis, though by a more chronic process, of which I have seen an instance, the peritoneal cavity may become filled with thick fluid, like pea-soup. In either event, incision, free irrigation, and draining are obviously indicated.

The case I have to record is one in which a renal cyst grew to the size of the uterus at full term, and so closely resembled it that before operation repeated stethoscopic search for the fœtal heart-sounds was made. The patient, who was 43 years old and thrice married, had a child at 18, but none since. She made a bad recovery, thinks a lump appeared in her abdomen soon after childbirth, and that her tumour grew from this lump. During the past eight months menstruation had entirely ceased and the abdominal tumour had increased rapidly. On admission to the Liverpool Hospital for Women, to which at that time I was attached, the tumour was smooth, oval, and tense, and not at all like an enlarged kidney. It was mobile; on its left side was an outgrowth resembling a small cystic ovary, and on its right side a similar but smaller nodule. There was dulness in the left flank, while the right flank was resonant. The sigmoid flexure of the colon passed in front of the tumour, and it was only this circumstance which seemed against the diagnosis of fibro-cystic uterine tumour. There was no hydatid fremitus. *Per vaginam* the tumour was apparently continuous with the uterus, but the cervix was not soft, as in pregnancy.

On August 3rd, 1885, an exploratory incision was made in the middle line of the abdomen. The exposed mass looked like medullary cancer of the uterus, but when its wall, which was half an inch thick, was punctured with a trocar fluid clear as spring water poured out, and the diagnosis became plain. After a free incision of the cyst-wall with scissors hosts of hydatids spurted out, many of them as large as Tangerine oranges, a multitude about the size of hazel-nuts, and others smaller. Renal tissue was discernible in the cyst-wall, and it became evident, while removing the last of the hydatids, that the tumour occupied the region of the left kidney. The empty capsule

was stitched to the abdominal wall, a drainage-tube inserted, and dry dressing applied. For a few days the urine was black like porter, but then it cleared, the patient made a capital recovery, and remains perfectly well.

CASE OF SUPRAPUBIC LITHOTOMY IN A CHILD.

By WILLIAM SYKES, M.R.C.S., Mexborough.

As few cases of suprapubic lithotomy in private practice have been reported, I venture to send the following, declaring at the same time my opinion that, from the comparative simplicity of the operation and from the generally good results obtained, it is destined to replace the lateral operation, in the same way as it was itself replaced by the latter.

J. T., aged 9½ years, but looking not older than 6, with lateral curvature of the spine and a strumous appearance, came under my care in November, 1886. He was suffering from all the usual symptoms of stone in the bladder. The urine was loaded with pus and mucus, and the child seemed in great pain. The history of the symptoms extended over two years. On sounding, a stone was felt; indeed, the sound had some difficult in entering the bladder, as it at once impinged on the calculus, which appeared to be fixed.

I operated on November 25th, making the incision of the length recommended by Sir H. Thompson. I found that the bladder was not sufficiently distended, and had to make my final incisions dangerously near the peritoneum. I had no difficulty in extracting the stone between my two fingers when once I had entered the bladder. There was very little hæmorrhage. I put only one suture in the upper part of the wound, and I afterwards regretted placing this one in, as it caused some dragging. The wound was dressed with lint dipped in carbolised oil, merely laid on, and frequently renewed during the first three days; afterwards only changed night and morning, and moistened externally with the oil.

For the first week the urine passed exclusively through the wound, then began to come through both the natural and artificial passages, and finally ceased to trickle from the wound about one month after the date of operation. The wound itself, however, took on the appearance of a strumous ulcer, and did not finally heal until the end of January of the present year.

The stone was phosphatic, of the dumb-bell shape, with one end much larger than the other. It appeared as though it had been tightly grasped in the middle, and the resistance to the passage of the sound gave one the same impression. It weighed, when dried, a quarter of an ounce.

REMARKS.—The only difficulty in the operation was caused by the bladder not rising sufficiently over the pubes, owing to insufficient distension. The ivory instrument recommended by Sir H. Thompson for tearing the connective tissue could have been well dispensed with, and is of an unfair cost. After enjoying fair health and entire freedom from any difficulty with the bladder until the beginning of the present month (June), the child was attacked by broncho-pneumonia, and died from that disease, having only been ill three days.

SUPPURATIVE OTITIS MEDIA: PERFORATION OF MASTOID: TREPHINING AND EXPLORATION OF THE TEMPORO-SPHENOIDAL LOBE.[1]

By JAMES BLACK, M.B., F.R.C.S.

H. H., aged 22, a lamplighter, was admitted into the Bouverie Ward of the Westminster Hospital on November 30th, under the care of Dr. Allchin. The note taken by the house-physician, Dr. Scott Sanders, at the time of his admission, states that: "On November 27th, the patient shivered and felt very sick, but did not vomit. For some days he had not been feeling well, 'had a dull sort of pain in his head, and lost his appetite.' The headache became very severe, and had been getting worse ever since. From a child he had had otorrhœa, for which he could not attribute a cause; he had never had scarlet fever, small-pox, nor syphilis. There was no history of a blow on the head."

[1] Abstract of a paper read on this case before the Medical Society of London on February 28th.

On December 8th (week after admission) the thermometer registered a temperature of 104° at 4 A.M., but showed a decline to 99° four hours later; and subsequent to this similar elevations and remissions frequently occurred; for example, on December 11th, there was a rise to 104.5°, followed by a rapid fall to 99°. The next day the patient had a rigor lasting twenty minutes. On December 14th (a fortnight after admission) I was first asked to see the patient. He had then a very offensive otorrhœa from his left ear; after cleansing the external auditory meatus of pus, I detected a large perforation at the anterior part of the membrana tympani. The patient informed me that at the age of 17 he became so exceedingly annoyed by the offensive otorrhœa, that he used effectually to plug the external auditory meatus with cotton-wool, so as to prevent the escape of the fœtid discharge. This was naturally followed by inflammation about the mastoid process, and a sinus eventually ensued, from which matter for a time gained exit. He never sought advice for his ailment, but there was a depressed scar left at the site of the sinus, which was tender, and which bore out the veracity of the man's statement. Taking into consideration the repeatedly occurring elevations of temperature, and the fact of there having been a well-marked rigor, I was at once convinced of the serious nature of the case, and arranged to perforate the mastoid antrum on the following day, ordering in the meantime a saturated solution of boracic acid to be injected pleasantly warm along the meatus every three or four hours.

On December 15th, at 1 P.M., the patient having been put under the influence of an anæsthetic, a crucial incision was made over the mastoid process, and the soft parts reflected down to the bone. Not being able to detect any signs of a previously existing sinus under the depressed scar, I proceeded to very cautiously perforate the bone at the spot recommended by Mr. Barker, half an inch behind and above the auditory aperture, in a direction forwards and inwards, so as to open the "antrum," and at the same time avoid wounding the lateral sinus. $HgCl_2$ solution (1 in 2,000) was syringed into the perforation, and as it was believed that the fluid was seen to well up in the external auditory meatus, there appeared to be no doubt that the operation had succeeded in effectually opening up a communication with the tympanic cavity. No pus, however, gained exit through the opening made, and, on December 17th, a severe rigor, lasting twenty-five minutes, occurred. I then arranged with Dr. Allchin to trephine for intracranial abscess.

On December 18th, at 11.45 A.M., having explained the nature of the operation to the patient, and obtained his consent, I had him anæsthetised with chloroform, and, under the carbolic spray, dissected back the soft parts to the mastoid foramen, as advised by Mr. Barker, for the purpose of detecting if there were any matter thus gaining exit, as might possibly occur if suppuration existed beneath the dura mater corresponding to a thromboid lateral sinus, or if the disease had extended in a backward direction sufficiently to have given rise to cerebellar abscess; but as there was no such exit of pus, I proceeded to thoroughly syringe out the external auditory meatus and the perforation in the mastoid portion of the temporal bone with boracic acid lotion, and sprinkled the parts very thoroughly with iodoform, and then made an incision upwards from the original wound, and dissected up a V-shaped flap of soft parts, including the periosteum. The bone was perfectly healthy and normal in appearance. With a trephine having a crown of the circumference of a sixpence, I carefully removed a disc of the skull an inch and a quarter above, and only slightly behind, the external auditory meatus. I chose this in preference to the spot selected by Mr. Barker, namely, an inch and a quarter above, and a like distance behind, the auditory aperture, for I found that in a skull I examined this exactly corresponded to the position of one part of the course of the lateral sinus. The posterior branch of the middle meningeal artery crossed the middle of the hole made in the skull; this I cleared by nicking the dura mater on either side of the vessel, when I was able, with a bent aneurysm-needle, to carry a ligature across beneath the artery, and tie in two places and divide between. I then reflected the dura mater, which was normal in appearance, and exposed the brain, and, with a perfectly clean aspirating syringe, pierced the cerebrum slowly in a direction downwards and inwards, until it impinged on the bone corresponding to the roof of the tympanum. On drawing up the piston, no pus appeared. So soon, therefore, as all bleeding had thoroughly stopped, I brought the edges of the wound into apposition with silver-wire sutures, and, having dredged well with iodoform, applied salicylic-wool dressing.

On December 19th the patient had a rigor lasting twenty minutes, and the temperature mounted to close upon 105°. The rigors were attended with copious sweating, and the patient was getting much emaciated; he had a dry brown fissured tongue and sordes on the lips and teeth. I now, with Dr. Allchin's concurrence, commenced to