occurred between the ages of 10 and 20 years, and in 10 cases the attack was the first. These patients were generally admitted in *extremis*, with a history of from three to eight days' illness. The abdomen was opened in 8 cases, and in the others the diagnosis was verified or made at the necropsy.

In conclusion, taking all the cases together, the usual symptoms were fairly constant. In 3 cases pain and swelling were more marked on the left side, and in 8 cases pain was complained of during micturition. Concretions were recorded in 12 instances (5 in Class c), and in 1 case the appendix came away as a slough three days after an abscess was opened. A faecal fistula resulted in 3 cases, and a ventral hernia in 2.

CASE OF GALL STONES: CHOLECYSTOTOMY.

HOURL-GLASS CONTRACTION OF THE GALL BLADDER.

By HUGH COLLIGAN DONALD, M.B., C.M.,
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MY reason for reporting the following case is that I believe many cases of hour-glass contraction of the gall bladder have not been recorded, although on reading Mr. Mayo Robson's recent and most instructive work on *Diseases of the Gall Bladder and Bile Ducts* I find that under the heading of Hour-Glass Contraction of the Gall Bladder he remarks: "Hour-glass-shaped gall bladder is probably not uncommon, for though I have found only one specimen in the museums, and that at Middlesex, I have myself operated on two cases in which the distal part of the gall bladder contained calculi, and was connected with the gall bladder proper by a narrow neck. While in one case I thought this deformity might be due to the contraction of an ulcer, in the other, the mucous membrane being smooth, the deformity was apparently congenital."

Mrs. H., aged 40, housewife, was admitted to hospital under my care on November 8th, 1897, with the following history: Two nights previously she was seized with a sharp spasm of pain in the right hypochondrium, radiating towards the umbilicus, and passing round to the right shoulder. It lasted two hours, increased in severity, and ultimately subsided with an attack of vomiting. She stated that nine years ago she had a similar attack to that described, which was followed by a second three weeks or a month later, but for the following five years she was free from pain or sickness of any kind, and up to the onset of the present illness only remembered having had one similar attack of spasm. On admission, the patient was slightly jaundiced, emaciated, and weak; the urine contained bile, and the motions were pale in character. Beyond tenderness on palpation over the region of the gall bladder, no other physical sign was elicited. The patient was under observation in the ward for ten days before operation, and during that time she had from two to three spasms of pain per day, followed by vomiting, some of these slight, others very severe, but with each successive attack the symptoms tended to become worse than its predecessor. I should have preferred to have delayed operation till these attacks of pain had subsided for a few days, but as there was no evidence of this occurring, and the patient was rapidly losing ground, I operated on November 12th, assisted by my colleague Dr. Gibb. The details of the operation were carried out on the lines described in the book already mentioned, by Mr. Mayo Robson, whom I had the great privilege of assisting in many of his gall-bladder operations during the period I acted as his private assistant. The gall bladder was found to be thickened and contracted, being firmly adherent to and tucked up to the under surface of the liver. It was distinctly hour-glass in character, and contained a thick, clear, and glairy mucus. Two calculi were removed from the proximal part of the gall bladder, which was separated from the distal by a narrow neck, the calibre of which would admit a long probe such as used in exploring the ducts. The distal portion and neck were excised, and the proximal part brought and anchored to the aponeurosis. The wound healed by first intention, and the gall bladder was drained by means of a rubber tube, which was removed three weeks after operation. During the first three or four

days after operation mucus was freely discharged, followed for two days by an admixture of mucus and pus, and latterly by pure bile. The opening into the gall bladder was completely healed six weeks after operation, and the patient was dismissed on the 8th, free from pain, improved in colour, and gaining weight and strength.

I cannot advance an opinion as to whether this condition of gall bladder was congenital or due to ulceration.

For notes on the history of this case I am indebted to Dr. Mackay, House-Surgeon.

TWO UNUSUAL CASES OF FOREIGN BODIES REMOVED BY THE AID OF THE ROENTGEN RAYS.

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Surgeon to Stevens's Hospital, etc.

SINCE the introduction of radiography into surgery many advances have been made in its application, but a great deal still remains to be worked out and perfected. I have not as yet been able to try any of the methods put forward by various authors, such as that of Dr. Davidson¹ or Dr. Harrison,² for localising and defining exactly the size of a foreign body, and at what depth it lies from the surface. From reports in the journals of a few successful cases, some of these methods seem to fulfil two conditions absolutely essential:

(a) To be able to plan the incision, so that with the least damage to the parts the object may be removed.

(b) To be able to say at what distance from the surface a substance lies—for example, whether in a joint or outside of it.

(c) A third essential would be to my mind rapidity in the method employed.

As I was the first surgeon in Ireland (on March 23rd, 1896, at Stevens's Hospital) to remove from a patient a foreign body, the presence of which was clearly shown in a radiograph taken for me at that time by Professor Barrett, Royal College of Science, Dublin, the subject of radiography has always had an attraction for me, and I have used it very extensively for many purposes.

Two cases have lately been under my care in hospital, and as they presented some points of special interest, I may be pardoned for briefly relating them.

CASE 1.—E. W., an epileptic from a convent in the south-west of Ireland was admitted to Stevens's Hospital on January 27th, 1898. She stated she had a fall (a fit?) a month previous to admission, with sewing in her hand, and that a needle had entered near the wrist of the right arm. On admittance the hand and forearm were swelled, the latter red-den and eczematous; and it presented five marks of incisions, previous attempts to find the needle, three of which were not closed and suppurating. Looked at with the barium platino-cyanide screen the needle was plainly seen in its entire length above the inflamed part of the forearm, about an inch below the elbow-joint, lying in front obliquely on the radius, but also a little over the interosseous membrane and ulna. It could be distinctly felt in one spot deep on the outside of the forearm, and could have been removed, but the girl would not allow it then.

She was prepared for operation next day (January 28th); but when the dressings were removed no needle could be felt with the most careful manipulation, so she was allowed back to the ward to recover from the anæsthetic. She was put on potassium iodide and ammonium bromide, but had some fits that day and the next, and on January 30th she was brought to the room to be radiographed. Unfortunately, owing to excitement, she had a fit before the radiograph was finished. She was removed to the ward again, and the plate when developed showed plainly that the needle had shifted from its original position and was now lying at the junction of the lower and middle thirds of the forearm.

By February 4th the fits had been got under control and the forearm was in a healthy condition; it was disinfected, and the girl was carried in a chair and the arm examined as before with the screen, the needle being now seen occupying an intermediate position to the two former ones. With a blue pencil, while the screen was being used, the line of the needle was easily drawn on the skin of the forearm, on back and front. She was at once anæsthetised, and the needle was without much difficulty removed by an incision 2 inches long from the outside of the forearm from underneath the supinator longus and extensor carpi radialis longior and brevior. Esmarch's bandage was not applied, fearing that it might move the needle; one vessel was twisted and the wound put up dry. The girl left hospital in ten days' time. The wound was soundly healed; the forearm was free from eczema and she had full use of the hand and arm. The needle was complete and measured 2½ inches long. It was blackened, as is always the case.

The special points of interest in this case seem to be: (1) The large size of the needle entire in length, which on