and intestinal haemorrhage were regarded as the result of tuberculous ulceration of the intestines, and probably of tuberculosis more or less generalized throughout the body. Tuberculous ulceration of the intestines is, in our experience at least, hardly ever accompanied by profuse intestinal haemorrhage; but Professor Osler speaks of having had several fatal cases from this cause. The occurrence of profuse haemorrhage of the stomach without haematemesis was presumably explained by the pressure exerted by the growth against the cardiac orifice, and to some extent by the presence of the oesophageal growth, conditions which would make vomiting impossible. Much stress cannot be laid on the obstructive influence of the latter, inasmuch as there was at no time any recognizable dysphagia. The same argument might, indeed, be raised with regard to the gastric growth; but it seems reasonable to believe that the gastric growth, which did not quite reach the cardiac orifice, did not obstruct that orifice when the stomach was passive, but that in vigorous contraction of the stomach, such as would induce vomiting in a healthy person, the cardiac orifice became obstructed by the pressure of the growth. In other words, that the obstruction was valvular.

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TWO CASES OF MULTIPLE INTESTINAL OBSTRUCTION.

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In the first of these cases the patient, a night watchman, aged 81, stated that though for some years he had been subject to bronchitis in winter and for many years had a left inguinal hernia, he had been a very healthy man, the hernia giving no trouble. About 8 p.m. on the evening preceding his admission the patient, being then on duty, was suddenly, and without apparent cause, seized with severe abdominal pain. He was taken home. Vomiting commenced shortly afterwards and continued, pain later on being felt in the hernia and over the abdomen.

State on Admission.—He was in fair condition; pulse about 100, with occasional irregularities; temperature normal; marked faecal vomiting was present. The abdomen was much distended and tense; the large left inguinal hernia present was firm, painful, irreducible, dull on percussion, and had no impulse on coughing.

Operation.—Under chloroform the hernia was cut down on, and on opening the sac a large quantity of clear serous fluid escaped; there was a loop of bowel in the sac, slightly distended and red, but having no marked appearance of strangulation; the ring was wide and the bowel easily returned. As this did not seem to afford sufficient explanation of such marked faecal vomiting, a median laparotomy was performed, distended small bowel presented, and this, on being followed down, led to a loop of ileum fixed tightly behind the caecum, evidently being of the nature of an internal hernia; this loop was almost black in colour, but on reduction appeared viable, so the abdomen was closed and the patient put back to bed.

Second Operation.—Faecal vomiting continued all night, and, as the patient was rapidly sinking, the abdomen was again opened in the morning, eight hours having elapsed since the former operation. Another impacted and strangulated internal hernia was discovered, this time up in the region of the splenic flexure, where the bowel had got caught in a peritoneal pocket; this bowel was also nearly black, but was treated by simply replacing it in the abdomen.

Result.—After this the vomiting ceased, and in six hours the bowels moved. The patient remained free from pain, his temperature kept from 98° to 100°, his pulse improved, and the day following operation his bowels moved again. On the fourth day his cough became very

troublesome, and a dull patch was detected in one lung. This increased, and he died on the eighth day after the last operation. The following notes were made at the autopsy:

The body is that of an emaciated old man, and the arteries show signs of senile degeneration; there is an operation wound over the left inguinal region, which is almost healed; there is also one over the middle line of the abdomen, below the umbilicus; this one, though quite aseptic, shows very little healing change; the bowel throughout is in good condition; both lungs are in a state of hypostatic pneumonia, consolidation being marked at both bases. There was nothing of note in the other organs.

The second patient, a hammer boy, aged 18, stated that he had always been healthy, but seven years ago had been run over by a van, and had his abdomen injured. After this he was in hospital for eight weeks, but eventually made a perfect recovery.

On July 17th, eight days before admission to the infirmary, he was away for a day's trip, and next morning felt sick and had some abdominal pain; it was thought to be due to what he had eaten the day before. In the evening severe vomiting commenced, and had continued till admission. For the last forty-eight hours it had been faecal in character. Two enemata were given on the 19th with fair result, but since then the bowels had never acted, nothing whatever had been retained, and abdominal pain was excessive.

State on Admission.—He was in a desperate condition; his pulse very weak and about 104 in rate; his temperature 99°; very marked faecal vomiting was present; the abdomen was not markedly distended and no local tumour could be felt.

Operation.—Under chloroform an incision was made in the middle line, somewhat distended small intestine presented, and on following this down it was found to go in at the foramen of Winslow; almost 3 ft. of bowel was pulled out through this foramen; at one part there was a slight mark of constriction, but there was nothing which seemed sufficient to account for the symptoms, so a further search was made and a long, inflamed appendix was discovered twisted firmly round a part of the small intestine and evidently completely blocking it. The adhesions were broken through and the appendix removed; the small bowel thus freed was about 6 in. away from the ileo-caecal valve, and it was much congested.

Result.—He lived about six hours after the operation, and during that time his bowels moved slightly; however, there was no proper rally. At the autopsy the following was observed: There was no marked distension of bowel, no obstruction, intense congestion of a part of the lower end of the jejunum, which had a haemorrhagic appearance in places, no peritonitis nor ulceration of bowel. In the appendix region there was also marked congestion involving the stump of appendix and caput and especially the lower end of the ileum; inside the bowel at this part there was congestion of the Peyer's patches, without ulceration, also enlarged retroperitoneal glands were felt. The other organs showed no marked pathological lesion.

REMARKS.—In both these cases there seems no doubt that the vomiting and peristalsis induced by the primary obstruction were the causes which induced the secondary herniae. This possibility should be remembered, for in any violent vomiting we have a predisposing cause for an obstruction. If, therefore, we find what appears to be an insufficient obstruction, or in cases where an operation has not seemingly relieved the obstruction, the possibility of a second one must be borne in mind. As these secondary obstructions may not be very tight, and may resolve themselves with the general relaxation at death, it is possible that they account for some of the cases of so-called paralysis of the bowel where no peritonitis or obstruction is found after death.

My thanks are due to Dr. Adams for permission to treat these cases in his ward and also to publish the results.

TWO NEW GENERA OF NEMATODES
OCCASIONALLY PARASITIC IN MAN.

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THE helminthic affections of man are in not a few instances cases of accidental or occasional parasitism, the normal host being one of the domesticated lower animals more or less closely associated with him. Thus, *Fasciola hepatica*, *Dicrocoelium lanceatum* and *Opisthorchis felinus* among the Trematoda, *Eustrongylus gigas*, *Ascaris mystax*, and *Strongylus longevaginatus* among Nematodes, and the