"cigarette drain." The upper incision was closed in three layers. On his return to bed he was put in the Fowler position and continuous rectal saline infusion given. Unfortunately he developed chest symptoms and died on the tenth day after the operation.

At the *post-mortem* examination it was found that the abdominal organs were matted together by recent plastic peritonitis. There was some lymph around the track of the drain; the rupture was closed so as to be watertight. The upper lobe of the right lung was in a condition of grey hepatization, and almost the whole of the left lung was in the same condition. He had clearly died from pneumonia, and not from the abdominal condition.

These three cases have so many points in common that it is difficult to believe that coincidence is a sufficient explanation. They were all well-developed, strong men, in the prime of life; they all suffered accidents which involved them being suddenly and unexpectedly dragged by their arms fully extended above their heads; they none of them complained of violence applied to the abdomen or showed any external evidence of severe injury to that part. Two of them were absolutely free from the slightest abrasion or bruising on the trunk; the other had some superficial skin scratches; none of them showed immediate marked collapse or such symptoms as would lead me to feel certain that any severe internal injury had occurred; each of them had a rupture of the small intestine; in all the rupture was transverse to the long axis of the bowel; and in all the rupture was within a foot of the commencement of the jejunum; and unfortunately all of them died. I have been strongly impressed by these cases, and ask myself whether the mechanism of the rupture was not as follows: When each was suddenly dragged by the arms, the chest would be forced into the position of full inspiration, and the diaphragm raised, as shown by indrawing of the epigastrium; therefore the upper abdominal organs (liver, stomach, and spleen) would be drawn upwards. The pancreas and duodenum are usually considered to be fixed, but any small movement which might take place in these organs would be in an upward direction. At the same time, as one easily finds by standing with the arms extended above the head, the lumbar spine would be markedly arched forwards, and there would be, I think, a very strong contraction of the anterior abdominal muscles made by the patient in the effort to recover himself. I find by examining thin people in this position that the anterior and posterior abdominal walls actually meet. It seems to me that the small intestine would then be suddenly and violently forced down towards the pelvis, and I ask if it is possible that the only part of the small intestine which cannot go downwards, the first part of the jejunum, is so dragged upon as to rupture transversely, just as one finds that a string fixed at one end and jerked by the other, breaks near the fixed end.

The explanation of the mechanism of these cases is of more than academic interest, because, if they can be explained in this or some similar manner, surgeons would, I think, be justified in operating in such accidents on clinical evidence which falls short of that usually associated with acute abdominal conditions, and therefore they would not lose those favourable early hours whilst waiting for indications which in injuries to that part of the intestines have often not appeared until the time favourable for operation has passed. I should not have operated as early as I did in the last of these had I not had in mind the other two cases, and remembered the vagueness of the symptoms for some time after the accident.

I am indebted to Dr. Gerrard, the pathologist to the Oldham Royal Infirmary, for the particulars of the second of these cases, and for his reports upon the *post-mortem* findings in all of them.

WE learn from the *Medical Record* that a bill has recently been introduced into the New York State Legislature which would provide at least one medical judge in each county, three in the Court of Appeals, and three in each Appellate Division of the Supreme Court, to sit when any medical evidence is to be offered. Under the terms of the bill the medical judges would be appointed for five-year terms at £1,440 a year, with an additional allowance of £100 for expenses. They would sit when any evidence as to sanity was to be given, and would advise the court and would instruct the jury as to the correctness of statements and conclusions of medical witnesses.

RUPTURE OF DUODENUM CAUSED BY A BLOW.

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THIS case is of extreme interest, as, beyond diagnosing a subphrenic abscess, I could not be sure as to the original seat of the trouble.

A Hindu, male, aged 25, stated that six weeks before admission to hospital on February 8th, 1914, a wooden plank fell from the ceiling on to his right side while he was asleep. The corner of the plank hit him over the eighth rib in the mid-axillary line. For three weeks he felt a dull aching pain, and then noticed a small swelling, and the pain became severe, especially on respiration; at the same time he said he had fever every day. There was no history of dysentery. The patient was desperately ill, extremely emaciated and in great pain; the evening temperature was 101.8° F., and the pulse 100; a dry cough was very troublesome. Over the centre of the eighth rib was a fluctuating swelling about two inches in diameter; it was extremely painful on palpation. The liver dullness was diminished, reaching to one inch above the costal margin. The abdomen was moderately swollen and hard; it was evident that chronic peritonitis was present. The bowels moved freely, the tongue was coated.

On February 9th, under cocaine, I incised the swelling in the seventh intercostal space in the mid-axillary line, and at once gas and 6 oz. of pus escaped. The odour was faecal. I then introduced my finger and discovered that the eighth rib was denuded of periosteum and very rough. I could then feel an abscess cavity in the right lobe of the liver, and that the liver had fallen away from the chest wall, so that I could only just reach it. Above I could feel the diaphragm, but below nothing. I put a large-sized drainage tube just through the chest wall, and applied an antiseptic dressing and bandage.

The temperature that evening was only 99° F., and after that remained normal. The differential blood count was as follows: Polymorphonuclears 86 per cent.; mononuclears 1.6 per cent.; lymphocytes 12.4 per cent.

The patient improved slightly, the pain being negligible, and he slept soundly. The discharge from the wound was only thick yellow pus. On February 13th I gently washed out with a weak iodine solution. He passed five loose motions a day, with a tinge of blood and slime. The pulse kept rapid, varying between 92 to 100. His condition remained the same until February 16th, when at 7.30 a.m., in spite of the strictest warnings, he suddenly got out of bed and fell back on to the bed in a state of collapse, from which he never recovered; he died at 11.45 a.m.

Post mortem it was found that the posterior surface of the descending portion of the duodenum had ruptured in the long axis of the bowel. The infection then spread round the chest wall, along the eighth rib, pointed, and then infected the liver, forming an abscess cavity. The lower portion of the right lobe of the liver was gangrenous. The peritoneal cavity contained serous fluid, and large masses of clear gelatinous matter.

The history was clear that the injury was the starting point of the illness, and after opening the abscess I realized that we were dealing with some intestinal injury, but the most careful examination of the discharge gave no clue as to what part of the intestinal tract was damaged, as nothing but small quantities of foul, thick pus were discharged through the drainage tube. The actual tear in the duodenum was closed by adhesions, and I think that, considering his wonderful vitality, if the patient had come to hospital earlier, there would have been a reasonable chance of his recovery.

CONDENSATION OBSTRUCTION IN RELATION TO PERICOLITIS AND INTESTINAL KINKING.

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SINCE interest has been aroused in the presence, pathology, symptomatology, and mode of formation of accessory peritoneal adhesions and bands, causing more or less definite symptoms of alimentary toxæmia, a number of explanations have been advanced. The membranes or bands associated with the names of Jackson and Lane especially have been known and noted since the advent of laparotomy. Only recently has the more correct name "appendicitis" replaced the older one of "perityphlitis";