night and there were sickness and vomiting. On the 20th the abdomen was swollen and tender. An enema was given with much benefit. During the following night the patient was much worse and she vomited a good deal of bilious-looking material. On the 21st Dr. J. A. Dewar of Arbroath was called in. He concurred in our diagnosis and advised immediate operation.

With the valuable advice and assistance of Dr. Dewar I undertook the operation, Mr. Robertson administering chloroform. Under the anæsthetic taxis again failed. An incision two and a half inches long was made over the swelling. The sac was opened and was found to contain very little fluid. The bowel looked fairly healthy. The constriction was found to be at the crural ring. The tip of the little finger could not be passed into this opening. With a probe-pointed bistoury the stricture was notched and the bowel after being carefully washed with lotion was pushed back into the abdomen. The sac was dissected up, ligatured, and cut off. The wound was closed with a continuous catgut suture and a carbolic gauze dressing was applied. The operation lasted not more than 30 minutes. There were some sickness and vomiting half an hour afterwards. The pulse was 60 per minute, regular and fairly strong. The temperature was 98.6° F. Half a grain of morphia was given per rectum.

The patient made a rapid and uninterrupted recovery. On the tenth day the stitches were removed and the wound was healed. On the fifteenth day an enema was given and 20 days after the operation the patient was taking ordinary diet and was going about almost as well as ever.

Frickheim, N.B.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL

NOTE ON A CASE OF PERFORATED GASTRIC ULCER; RECOVERY.

By A. E. ROUSE, L.R.C.P. LOND., M.R.C.S. ENG.

A FEW months ago I was sent for in the early hours of the morning to see a patient who, I was told, was suffering from a bad attack of sickness and who had also brought up a good deal of blood. On arriving at the house I found a girl, aged about 20 years, in bed, in a state of profound collapse, cold and almost pulseless; the bedclothes were covered with blood and vomit, while there was also about half a pint of blood in a porringer. I obtained a history of chronic dyspepsia of some months' standing and I also elicited the fact that the patient had been vomiting off and on the entire day and that she had brought up blood twice besides that which I saw on the bed and in the porringer. On questioning as to food I found that, despite the vomiting and hæmatemesis, she had eaten some steak-pie for her supper with the result of copious hæmorrhage, acute pain, and collapse. As a matter of course I diagnosed gastric ulcer and within half an hour of seeing her started to give nutrient enemata consisting of milk, egg, and two drachms of brandy, adding the last owing to the extreme collapse and bad pulse. The above injection was repeated every three hours during the night with the exception of the brandy. I applied hot fomentations of lead and opium to the abdomen for the relief of the pain, to be renewed every two hours, and gave a hypodermic injection of morphia. On seeing the patient the next day I found, as I had expected, undoubted signs of perforation—great pain and tenderness over the abdomen, the pain being chiefly referred to the umbilicus, rigid abdominal muscles, both legs drawn up, and the typical abdominal facies. The temperature was 102° F. and the pulse was inclined to run.

Operative measures were out of the question owing to refusal on the part of the parents, so I continued the fomentations as they afforded considerable relief, and also the rectal injections, and gave a grain of opium in a pill every four hours until four pills had been taken, when I administered a pill every six hours. This treatment allayed peristalsis without producing narcotism. 48 hours after I first saw the patient the vomiting for the first time was fæcal, about one ounce being brought up. I had ordered a warm rectal wash

night and morning, and now in addition every other day a warm oil enema was given. On the fourth day she vomited more fæcal matter which was extremely offensive; she felt relieved afterwards and started to improve from that time. Her convalescence was a somewhat protracted one, but she was well enough to be moved at the end of seven weeks. I put her on arsenic and iron and gave her a strict diet whilst she was away. She eventually made a perfect recovery and when I saw her six months afterwards she was strong and well, taking ordinary food and being quite free from indigestion.

Worthing.

TWO CASES OF GANGRENE OF THE EXTREMITIES.

By JAMES GILROY, M.B., C.M. GLASG.

ON Sept. 25th, 1902, I was called to see an unmarried woman, 40 years of age, who told me that on the previous day she had been washing and before beginning the work she had asked a niece to touch a pustule on her little finger with a needle. The girl refused and the patient therefore did it herself. At the time of my visit she was in bed; the inner aspect of the little finger of her right hand was quite black, the entire hand was swollen, especially over the back, and there was erysipelatous inflammation of both the right and the left upper arm. I incised the little finger freely, bathed it in warm water in which some two-grain tablets of potassium permanganate were dissolved, and afterwards, as the pain was severe, I put on a poultice of linseed meal with a sprinkling of lead acetate. The general treatment consisted of large doses of tincture of perchloride of iron, frequent bathings, Dobson's treatment by puncture with a lancet over the back of the hand for the purpose of relieving tension, and the free use of boric acid. The little finger blackened *en masse* and there was no difficulty in cutting through the ligaments of its second joint on Oct. 3rd. The patient was moderately stimulated with wine and brandy and had soups, beef-tea, jellies, and such like. On the 5th her breathing became difficult, the expectoration had a foetid odour, and death took place the same day. Her temperature varied between 103.6° and 101.4° F.; her pulse-rate was from 96 to 120. A series of such cases which is recorded in Cooper's "Surgical Dictionary" shows their marked tendency to terminate fatally.

Two years ago I had under my care a man, 60 years of age, who had complained for some weeks of severe pain in his left foot. The dorsum of the foot ultimately became black, whereupon I administered chloroform and made free incisions over the tendons. The subsequent treatment consisted in the antiseptic application of carbolic acid and frequent bathing with warm carbolic acid solution. The man was confined to bed for nine weeks; he lost all the toes of that foot but is now able to follow his employment. After the healing process was complete he was seen by Professor Thomas Annandale who said that the case was remarkable in some respects and showed the patient to his class in Edinburgh.

Ecclefechan.

A REMARKABLE CASE OF PNEUMOTHORAX.

By H. G. L. MORRIS, M.D. BRUX., M.R.C.S. ENG.,
L.R.C.P. LOND.

THE following case presents many points of interest and is, I think, worth recording.

On Sept. 13th a perfectly healthy man, aged 36 years, was cleaning a window, when he missed his footing and fell about 20 feet on to the grass below. He appears to have fallen on his feet and then to have bounced on to his left shoulder. He was picked up unconscious and taken into the house. When I saw him 20 minutes after the accident he had recovered consciousness and was writhing about complaining of great pain over the left chest. His breathing was rapid and his pulse was 84 and small. Pending his removal to his home he assumed the knee-elbow posture which gave him considerable relief. Shortly afterwards a detailed examination revealed traumatic emphysema over the left side, extending from the clavicle to the lower margin of the ribs. With the exception of slight grazes on the left shoulder and side of the face there was no other external sign of injury. A physical

examination of the chest disclosed the fact that the left side was very nearly immobile. The percussion note was tympanitic all over the left chest, breath sounds and vocal fremitus were absent, and a metallic echo was easily obtainable. The heart was slightly displaced inwards but the cardiac dulness was demonstrated with difficulty. The heart sounds were somewhat weak and muffled. He still complained of pain over the præcordium, but although his breathing was frequent he was not suffering from respiratory distress. The symptoms were diagnostic of a fractured rib having penetrated the lung, but neither at the time nor subsequently could I find a trace of the fracture. The first thing noticeable when I saw him on the next day was an extraordinary sound which came from the interior of his chest and was synchronous with the cardiac systole. It was something between a click and the noise made by a bursting bubble and was distinctly heard all over the room. On auscultation, in addition a loud to-and-fro churning sound was heard over the præcordium. The subcutaneous emphysema was distinctly less but no breath sounds could be heard. He had very little discomfort, his temperature was normal, and his pulse was 68 and of good volume. Indeed, during the whole course of his illness the temperature never rose above normal, neither did his pulse-rate after the first day range above 70. The clicking sound was audible to those standing by the bedside for four days and was always worst when he turned on to his left side. The subcutaneous emphysema had disappeared by the third day. On the fifth day breath sounds were faintly heard over the apex and gradually became louder each day until the fourteenth, when the lung had fully expanded. The sounds heard over the præcordium—namely, the clicking and friction sound—remained very loud until the seventh day and then got fainter and were last heard on the tenth. I can only think that they were caused by the squeezing of bubbles of air between the pericardium and the parietal layer of the pleura. Most certainly the man had no pericarditis. A fortnight after the accident the chest presented no abnormality whatever and a week later the man returned to work perfectly well.

The case deserves notice on account of (1) the curious nature of the accident; (2) the extraordinary rapidity with which the man got well; and (3) the exocardiac sounds which I have not seen described in connexion with any other case.

Bognor.

A Mirror

OF

HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv., Proœmium.

ST. GEORGE'S HOSPITAL.

A CASE OF RUPTURED SPLEEN; SPLENECTOMY; RECOVERY.

(Under the care of Mr. A. MARMADUKE SHEILD.)

THE following is an excellent example of the removal of an injured spleen and it demonstrates well that if the operation be undertaken sufficiently early and no other abdominal injuries are present the prognosis is favourable. There is a striking contrast between the comparatively slight disturbance resulting from the removal of a ruptured spleen and the hitherto invariably fatal result following the excision of the spleen in leukaemia. For the notes of the case we are indebted to Mr. C. R. Keyser, surgical registrar.

The patient, a colonial trooper, aged 25 years, was thrown from his horse whilst on duty on Coronation Day, August 9th. The horse rolled on to him and then kicked him in the abdomen. He was brought into St. George's Hospital at once and on admission was collapsed and semi-conscious, sweating freely, and lying with his legs curled up. The temperature was 98° F. and the pulse was 80 and weak. On examining the abdomen marked rigidity and tenderness all over the left side were found but there was no evidence of fracture of the ribs. In the region of the spleen there was

dulness on percussion over an area four inches square and the tenderness and rigidity were here specially marked. A marked symptom was intense pain, the patient groaning and shrieking in agony and pressing his hand to his left side. It was obvious that some serious internal lesion had occurred the exact nature of which was uncertain. The condition of the patient was rapidly getting worse. His left olecranon process was broken transversely and he also had a small scalp wound. About three hours after the accident Mr. Sheild opened the abdomen by an incision external to the left semi-lunar line and found much blood in the peritoneal cavity. The hæmorrhage was very serious, the blood welling up and flooding the entire area of operation and threatening soon to extinguish life. The spleen was ruptured across the hilum and greatly lacerated, the lower surface being quite smashed. The pedicle was clamped by feeling, not sight, and the spleen was removed. After ligaturing the pedicle and removing a quantity of fluid blood the wound was closed, a large drainage-tube being inserted. As the patient was still collapsed he was transfused with two pints of normal saline solution and one pint of the same fluid was injected into the rectum. During the evening he was very restless and a small amount of morphia was given hypodermically. Nourishment was administered for the first few days by means of nutrient enemata and on the 11th his general condition was good. The drainage-tube, which had been shortened the day before, was now removed altogether, and from this time the patient made an uninterrupted recovery. On the 19th the blood was examined by Dr. T. R. C. Whipple, medical registrar, who reported as follows:—"White corpuscles number 21,000 per cubic millimetre; polymorphonuclear, 79.5 per cent.; eosinophile, 1.5 per cent.; hyaline, 5 per cent.; lymphocytes, 10 per cent.; transitional, 2 per cent.; indeterminate, 1.5 per cent. The hæmoglobin equalled 90 per cent." On Sept. 22nd the patient was given solid food for the first time since the operation. Examination of the blood gave the following results: red corpuscles, which number 5,083,000 per cubic millimetre, show as a whole but little signs of degeneration and can fairly be called "good." On Oct. 4th the red corpuscles numbered 4,962,500 and the white corpuscles numbered 16,300 per cubic millimetre. The hæmoglobin equalled 82.5 per cent.; polymorphonuclear, 74 per cent.; eosinophile, 1.3 per cent.; hyaline, 8 per cent.; lymphocytes, 15.3 per cent.; and transitional, 1.3 per cent.

When the patient was last seen the wound was completely healed and he could walk about quite comfortably. There was no obvious enlargement of the glands or marked tenderness in the bones. The patient writes on Oct. 20th that he is putting on weight rapidly and feeling strong.

Remarks by Mr. SHEILD.—This case is related to add another to the series of successful splenectomies for injury which have been already published.¹ The case is principally of interest as showing what desperate lesions may be recovered from by prompt abdominal surgery. In some cases of rupture of this organ the tear is slight and superficial and such cases may be treated by the gauze tampon or by suture of the splenic substance. In the present case the laceration of the organ was so extreme that it was wonderful that the patient did not die from hæmorrhage. The abdomen was full of blood and the clamping of the pedicle was done entirely by feeling, it being impossible to clear the area of operation by sponging.

A number of instances of successful splenectomies for injury are given by Nussbaum and Lederhose.² Probably a few unpublished cases also exist in the records of our large hospitals. In cases where the symptoms of rupture of the spleen are marked probably abdominal section gives the best chance. Violent tearing pain and local swelling indicate persistent and furious bleeding and the need for speedy operation. The operator must be prepared to meet the hæmorrhage and probably in extreme laceration the placing of a large clamp on the pedicle of the organ, which can readily be felt, is the first step towards safety. Large and dangerous anomalous vessels, such as are met with in cases of splenic leukaemia and other conditions where the spleen is much enlarged, are not so frequent or perilous in removal of a spleen of normal size which may be extensively ruptured. In the present instance the vessels in the gastro-splenic omentum were torn through and gave no trouble.

In minor ruptures of the spleen the extravasation of blood

¹ THE LANCET, Feb. 22nd, 1896, p. 434; and Sept. 13th, 1902, p. 744.

² See article in Treves's System of Surgery, vol. ii., p. 573.