operation, and this fact is perhaps an argument for at least delay before deciding to follow Talma's example. How far the splenic improvement is due to the operation on the liver must be uncertain. In the cases hitherto published in one case the gall-bladder has been stitched to the abdominal parietes. The cases given here, however, would seem to be the first in which the stitches have been passed through the liver substance, the omentum, and the abdominal peritoneum.

DISCUSSION OF THE MANNER IN WHICH THE OPERATION IMPROVES THE CONDITION OF THE PATIENTS.

Does the improvement both in the general health and in the local condition—viz., the disappearance of ascites—simply depend on the collateral circulation relieving the pressure in the portal vein? This was the assumption on which Dr. Drummond and Mr. Morison planned their operation, and more recently it has been emphasised by Weir. Against this it may be argued (*a*) that ascites does not occur when the blood-pressure is presumably highest in the portal vein—viz., earlier in the course of the disease when hæmatemesis is met with; and (*b*) that ascites is a late manifestation and appears to be rather a result of a toxæmic condition of the blood than a mere mechanical result of increased portal blood-pressure, and that it is the outcome of a poison in the blood exerting a lymphagogue action.⁸ The toxæmic state depends on hepatic insufficiency—in other words, on the cirrhotic liver being unable to destroy poisons that are continually passing to it from the alimentary canal; these poisons, therefore, reach the general circulation and lead to œdema of the feet, ascites, and to the constitutional nervous symptoms of the late stages of cirrhosis. If the collateral circulation between the peripheral parts of the portal vein and general systemic veins is markedly increased less blood will go through the liver and the toxæmia will be increased. In fact, the collateral circulation between the portal and the general venous system is carried to its logical conclusion in Eck's fistula. In this experiment the portal vein is interrupted in the portal fissure; its proximal end is closed while its distal end is put into communication with the inferior vena cava. In other words, the portal circulation through the liver is short-circuited and all the blood from the intestinal area enters directly into the inferior vena cava, as shown by the very successful experiments of Hahn, Nasse, Nencki, and Pawlow.⁹ In dogs this procedure tends to induce a disposition to uræmia. Thus if the dogs were fed on meat severe nervous disturbance, depression, asthenia, clonic and tonic spasms, and coma were brought on and sometimes, indeed, ended in death. It is noticeable that one of Mr. Morison's¹⁰ patients was alternately excited and depressed for three weeks after the operation; this was regarded as due to intestinal products passing directly into the general circulation without the intervention of the liver.

Thus, though an increase in the collateral channels between the portal vein and the systemic veins might modify the engorgement of the portal vein it would not tend to improve the general state of health but would have rather the opposite effect. Inasmuch, therefore, as ascites is not a mere mechanical result of increased pressure in the portal vein, and as a very extensive communication between the portal vein and the general venous system leads to a deterioration of the general health, it appears that the good effects of the collateral circulation are not solely due to relieving the pressure in the portal vein.

It seems to us that there are two possible ways in which the development of a collateral circulation in adhesions around the liver may be beneficial to the economy. 1. By somewhat diminishing the flow of blood through the liver it may enable that organ to deal more satisfactorily with the blood passing through it, and so reduce the toxæmic condition of the blood which is probably the important factor in inducing ascites. 2. That the increased vascular supply to the surface of the liver may, by improving the nutrition of the hepatic cells, enable them to undergo compensatory hyperplasia. The compensatory hypertrophy of the liver¹¹

will enable the organ to perform more efficiently its important antitoxic functions and so lead to a latency of the symptoms. If the last hypothesis be true it is evidently of importance that any operation for the formation of vascular adhesions around the liver should be undertaken before the liver tissue is so disorganised that compensatory hyperplasia is impossible.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

A RARE FORM OF FRACTURE OF THE LOWER END OF THE RADIUS.

BY JAMES B. CLARKE, M.B., CH.B. VICT.

EARLY in August a patient came under notice suffering from an injury to the wrist which he had sustained from a bicycle accident. The wrist was considerably swollen and increased somewhat in the transverse diameter. On inspection it slightly resembled a Colles's fracture. There was an appreciable shortening of the forearm and no crepitus whatever could be obtained. Flexion of the wrist was very painful and limited, but pronation and supination could be managed without much difficulty. The accompanying illustration is reproduced from a radiogram which was taken by

Radiogram showing a rare A-shaped form of fracture of the radius.

Mr. Alfred H. Marsh and shows an unusual condition. The lower end of the radius presents a A-shaped fracture, separating the styloid process and adjoining articular surface for the scaphoid from the articular surface for the semilunar bone. The previous history may shed a little light on this unique fracture. 15 years ago the patient broke his arm (probably a Colles's fracture) in the East Indies and was entirely unattended medically. This is shown in the radiogram by a slight darkening in the radius about the usual situation of a Colles's fracture. The patient stated that this left a permanent deformity, which existed at the time of the recent accident. The old injury may have given the radius unusual strength at the site of the old fracture, so that instead of giving way and causing an ordinary Colles's fracture the carpus was driven upwards like a wedge, splitting the radius in the manner shown. The wrist was tightly put up in plaster-of-Paris for a fortnight and for another three weeks in a poroplastic splint, making a perfectly good recovery.

I have never seen a similar case reported or one that does

⁸ Cf. Hale White: Clinical Journal, April 26th, 1899.

⁹ Archiv für experimentelle Pathologie und Pharmacologie, Band xxxii., S. 161, 1895.

¹⁰ THE LANCET, vol. i., 1899, p. 1426.

¹¹ It is interesting to note that in a case of hepatic cirrhosis, in which it was suggested that the symptoms were arrested as the result of universal peritoneal adhesions, the liver weighed 89 ounces and presented nodules on its surface which may be interpreted as due to compensatory hyperplasia of the liver cells. The patient died from poisoning by mussels. (F. P. Weber, St. Bartholomew's Hospital Reports, vol. xxxiv., p. 321.)

more to prove the utility of the x rays in the diagnosis and treatment of obscure fractures.

Northwich.

A FŒTAL ANOMALY.

By PERCY SHELLEY, M.R.C.S. ENG., L.R.C.P. LOND.

AN account of the following curious specimen of a monster may be interesting. I have never seen such a one in a museum or heard of a similar case in practice. A male foetus of six and a half months' was born in the right mento-anterior position. The arms and legs had to be released and great care was required so as not to tear the perineum. When the legs were released the foetus did not come away and had to be extracted by force, gently applied, when a curious mass appeared. There was a spina bifida in the lumbar region and apparently no sacrum or coccyx. The mass was some 16 inches in circumference and seemed to enclose and envelop the lower extremities. Its surface was smooth in appearance like the foetal side of a placenta covered with veins and its texture was spongy. At its lowermost end there was a rent from which venous blood poured as out of a bladder which had been torn when full. The foetus was born alive and lived for five minutes. The placenta was covered with caseous tuberculous masses. There was an immense quantity of liquor amnii. The mother suffers from pulmonary phthisis. I had not the opportunity given me for preserving this curious specimen. I may add that in my opinion the child would never have been born at full time without possibly a Cæsarean section on account of the extraordinary development of the lower parts; as it was the labour was a most difficult and trying one.

Wetheridge.

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.

GUY'S HOSPITAL.

A CASE OF CARCINOMA OF THE RECTUM; COLOTOMY;
DEATH FROM SUPPRESSION OF URINE OF 21
DAYS' DURATION.

(Under the care of Mr. L. A. DUNN.)

THE long duration of life in this case after obstructive suppression of urine is very remarkable, though it appears to have been slightly exceeded in one other instance. The contrast to these afforded by the speedy termination of cases of "non-obstructive" suppression is always very striking and the true pathological explanation has not yet been discovered. Equally remarkable are the cases in which in error the sole surviving kidney has been removed; patients in whom this has occurred, if they survive the shock of the operation, often live for a week or ten days; the cases are, in fact, very similar to those of obstructive suppression. For the notes of this case we are indebted to Mr. G. N. Meachen, assistant house surgeon.

A woman, aged 49 years, was admitted into Guy's Hospital on August 2nd, 1899, for pains in the lower part of the back and constipation. There was nothing noteworthy in her family history and she had had no previous illnesses. In October, 1893, she first began to suffer with pain in the lower part of the abdomen and back, and at the same time had a good deal of pain and difficulty in passing her motions, which were constipated. There had been no diarrhoea, but blood and matter had at times been observed in the evacuations. In July, 1899, her condition became worse, she had lost flesh, and had subsisted chiefly upon slops. On admission to hospital the temperature was 99° F., the pulse was 104, and the respirations were 20. A rectal examination revealed the presence of a malignant stricture the orifice of

which was felt a finger's length above the anus. The lower part of the rectum was "ballooned." In the abdomen a hard mass could be felt in the left inguinal region which was partly growth and partly no doubt scybala. The patient's general condition was good.

On August 4th transverse colotomy was performed, the abdomen being opened in the middle line above the umbilicus, as it was suspected that the sigmoid and descending colon would be too firmly bound down by growth to admit of an inguinal colotomy. This supposition proved to be only too true as the mesenteric glands were enlarged in all directions. The patient took the anæsthetic (A.C.E. mixture) well. Instead of opening the bowel on the third or fourth day it was found necessary on the morning of August 6th to open it, as there were some vomiting and slight abdominal distension. These symptoms, however, quickly subsided and by the 11th she was taking fish and chicken. On the 28th she was measured for a colotomy belt and arrangements were made for her going out of the hospital. On the 31st, a day or two before her intended discharge, the sister of the ward reported that the patient had not passed urine for 18 hours, the secretion up to that time having been normal in quantity. A catheter was then passed, but no urine was withdrawn, and the bladder was not in the least distended. The pulse was normal and the patient was in no discomfort. Diuretics and plenty of fluids were ordered. The bowels were acting freely. She was evidently suffering from obstructive suppression of urine, as in her case hysterical deception was out of the question. At this time she complained of backache. On Sept. 7th a slight enlargement of the left kidney could be felt and bimanual palpation caused pain. There was no headache, optic neuritis, or retinal hæmorrhages, and the tongue was moist. The anuria was practically complete, save that the draw-sheet was on two or three occasions stained with a fluid that gave the reaction for urea. There was no cedema, the temperature varied between 96° and 97°, and the patient was sick once for the first time. On the 8th the right kidney could also be felt and a papular, erythematous rash appeared on the extensor surfaces of both forearms and around the ankles. There were no râles in the lungs and the respirations were not increased. She suffered no pain but was getting drowsy. A drachm of the tincture of jaborandi was given every six hours. On the 9th the rash had become more vivid and had spread to the trunk. She was vomiting and the drowsiness had increased. Half a pint of normal saline solution was infused subcutaneously, after which she appeared to be brighter and was more conscious. The pulse was 100, being weaker. Stimulants and a hot-pack were given, but the skin reacted little if at all. It was proposed to cut down in the left loin and drain the kidney, but all ideas of further operation were persistently refused by the patient and her friends. On the 10th paroxysms of hurried breathing were noticed for the first time. On the 14th the tongue and mouth were very dry and she was restless and tossing herself about in bed. On the 17th the tongue was dry, glazed, and covered with a brown fur, sordes appeared on the lips, and swallowing was painful and difficult. Some irregularity of the pulse was noted and a few fine râles were audible at the left base. The renal tumours were larger. On the 18th the pupils were contracted, the temperature was 95.6°, the patient was fitfully somnolent, and her breathing was typically "slow, panting, and laborious." There was another larger stain on the draw sheet during the night. On the 20th a pint of normal saline solution was again infused subcutaneously as she was quite comatose. The pulse was 72 and feeble, a mitral systolic bruit could be heard, and there was some slight cedema of the legs. In this condition she remained all day and died at 9.45 P.M. on the evening of the twenty-first day from anuria.

Necropsy.—The thoracic viscera were not examined. The right ureter was kinked just outside its entrance into the bladder by a hard gland affected with secondary growth, while for the rest of the course it was surrounded and pressed upon by numerous enlarged glands. The left ureter was pervious but was pressed upon in a similar way. Both kidneys were large, the pelves being dilated and containing some dark chocolate-coloured fluid. The cortex was pale and firm. There was a blood-clot in the left renal pelvis. The bladder was normal. The uterus and cervix were free, as had been made out during life per vaginam. The primary rectal growth was situated three inches above the anus, encircling the bowel and presenting a foul, ragged, ulcerating surface. There were no secondary deposits of