ipecacuanha. It is true that these are largely tinged with bile, and that they contain a good deal of it; but after all, it forms only a small proportion of what is now known as "the ipecacuanha stool."

Brighton.

A MIRROR OF HOSPITAL PRACTICE.

MEDICAL COLLEGE HOSPITAL, CALCUTTA.

COMPOUND COMMINUTED FRACTURE OF TIBIA AND FIBULA. AMPUTATION AT KNEE JOINT WITH REMOVAL OF PATELLA, LEAVING ARTICULAR CONDYLES.

BY SURGEON-MAJOR J. O'BRIEN, M.A., M.D.

The patient, a powerful Mussulman aged 30, got wounded on night of 9th June, by a rocket stick shooting into his leg. He was brought to the hospital at 5 A. M. next morning. There was a large wound in the upper third of leg on its outer side, and copious oozing of blood which pressure failed to stop. On examination the whole of the upper third of the tibia was found to be smashed and fissured into so many pieces, and for such a large extent that repair was impossible. The fibula was also broken and the soft parts badly mangled. The main arteries, *viz.*, the anterior and posterior tibial were intact.

It was thought at first that amputation below the knee would meet the requirements of the case, and flaps were cut for this purpose, but when the bone was exposed just below the tubercle, a fissure was discovered extending upwards through the shaft of the tibia as far as the articular cartilage. It was accordingly found necessary to amputate at the knee joint. A broad anterior flap, and as long as possible, extending down, in fact, to the edge of the laceration, was dissected off, the joint was then opened and a short posterior flap cut through the muscles at the back. The joint was quite free from injury.

Having disarticulated the leg, the question arose as to whether I should remove the patella or not. It appeared to be certainly best to leave it, but the moderate length of the anterior flap, which was barely sufficient to cover the surface of the condyles of the femur, decided the point, and I removed it to reduce the bulk of the stump. There are, it appears to me, two grave objections to the removal of the patella. In the first place, when it is gone a deep hollow is left above the condyles which is undesirable; and in the next place, the dissection necessary for its removal interferes to a considerable extent with the nutrition of the long anterior flap and predisposes to sloughing. If I had to perform a similar operation again, I would endeavour to supplement the skin required either from the sides or posteriorly, so that the patella might be left.

Another question that arises in amputations at the knee is, whether it is best to leave, or to remove the articular surface of the condyles of the femur. My own experience is decidedly in favor of leaving it. The section through the condyles which is generally known as Carden's operation, leaves sharp edges of bone which do not readily round off, and which are a source of much discomfort in thin subjects. To obviate this I have in a case, on which I operated lately, chipped off the sharp edge with bone forceps all round. There is moreover to be considered the increased danger from septic influences which the opening of the cancellous tissue of the bone involves. On the other hand the condyles when left in their integrity form a safe and rounded stump, and one that affords an excellent point of support when an artificial limb is used.

With regard to the question of the manner of dealing with the patella in this operation there are differences of opinion. Many surgeons advocate its removal on the grounds that if it is left, it leads to a dragging up of the anterior flap and of the structures in front of the condyles owing to the retraction of the quadriceps extensor, but I think this objection is groundless. In the first place the patella itself is fixed to the anterior margin of the intercondyloid notch by a prolongation of the synovial membrane, which contains a few ligamentous fibres, and in the second place, it is so firmly connected with the fasciæ at the sides of the condyles by the fibrous expansion of the end of the quadriceps muscle that much retraction is not possible. In removing the bone these powerful lateral fibrous attachments are not easily divided.

To sum up—with regard to amputation at the knee joint I find that the great weight of evidence is in favor, first, of leaving the patella; secondly, of leaving the articular surface of the condyles. On this subject Agnew says:—

"Another question of some importance is, what disposition to make of the patella, should it be dissected out from its bed in the anterior flap as some advocate, or should it be allowed to remain? The excision of the bone renders the vitality of the flap precarious. My own practice has always been to allow it to remain; and I have never discovered any evil result from so doing. Its tendency to be drawn up on the anterior face of the thigh, has been urged as an objection to its presence. But this is easily obviated by following the directions already given in reference to not carrying the incision for the anterior flap too high on the sides of the condyles, and thereby severing those bands of fascial and fibrous tissue which serve to connect the involucrum or wrapper of the joint. Neither is there any valid reason for removing the articular cartilage, when it is sound, from the condyles of the femur as some have advised. It should not be disturbed. The idea that its disintegration retards healing is not sustained by experience. Nor is it desirable to remove a thin slice from the under surface of the patella as is sometimes done."

Bryant also approves highly of the simple operation by disarticulation at the knee. He has performed it 23 times, on 7 occasions for compound fracture of the leg, six of which recovered, and 13 times for chronic disease of the knee joint or leg with 11 recoveries. In only 2 or 3 cases did he remove the patella. Writing of this operation he says: "It is an excellent operation in all ways, and one that should always be performed in preference to any higher amputation when the special circumstances of the case will allow. It is apparently attended with less risk to life than when a section of the bone is made, and yields an excellent and serviceable stump on which the weight of the body can generally be sustained."

The following advantages may, in my opinion, then be claimed for this operation over any other in the same situation.

(1) Facility of execution.
(2) Superiority of the stump.
(3) And last, but not least, diminished risk to life.

SABATHU STATION HOSPITAL.

LIGATURE OF RIGHT ULNAR ARTERY. EXCISION OF LEFT EYE-BALL. REDUCTION OF A SUB-CORACOID DISLOCATION OF RIGHT HUMERUS.

BY SURGEON-MAJOR S. B. COTTER, M.D., A.M.D.

Sergt. T., whilst half awake on the morning of 24th May, threw out his right arm violently against the broken edge of a jug which his wife brought to the bedside with milk for a baby. The result was a wound about 1¼ inch long crosswise from Flexor carpi ulnaris to Palmaris longus tendons. The wound was deepest at its inner end, and considerable hæmorrhage resulted. The hæmorrhage soon ceased, and no evidence of real mischief appearing, the wound was brought together with plaster and carbolized oil applied; the arm being placed in a sling. On 31st May he had a sudden rush of hæmorrhage in the morning, and a small traumatic aneurism was found to have formed, which under examination burst out afresh. A tourniquet being applied to brachial and chloroform at once given, Surgeon A. E. Hayes, A.M.D., proceeded to operate, and having in vain tried to secure the vessel by deepening the wound, had to make an incision upwards along the course of the artery between the flexor carpi ulnaris and flexor sublimis digitorum, and tied the vessel at both ends with some difficulty but complete success. The incisions were then stitched and supported by plasters. This is the tenth day since ligature; the incisions are healing, no bleeding has occurred, and the ligature remains *in situ*.

Pte. S., who shows a history of gonorrhœal ophthalmia, was operated on (Iridectomy) for opacity of cornea at Bareilly in 1879 by Surgeon A. E. Hayes, A.M.D., was taken into hospital here for the same in February last, and I performed the same operation, but without benefit; synechia anterior was present on 15th March. Since before the first operation he has constantly been subject to more or less deep-seated pain in the eye. Antalgics, atropine, Pot. Iod., &c., were used without benefit.

I explained this case to Mr. Nettleship, F.R.C S., Ophthalmic Surgeon to St. Thomas' Hospital, enquiring as to whether excision or abscission was preferable. Mr. Nettleship advised the former, on the grounds that in the latter the sympathetic mischief is more likely to persist, and adds, "it may make a