on the case in the light of the post-mortem examination, one can now see that a little more boldness might have been shown at the first examination of the case; and further, that a fatal result might possibly have been averted had the fungous mass been explored when symptoms of secondary meningitis began to appear. But the pulsation at that period was so marked, and the resistance or obstacle opposed to the escape of the pulsating fluid was apparently so dangerously slight, that the idea of making an incision into the mass never even suggested itself. It seems probable now that the pulsation was seated in the fluid exudation, which was thrown into vibration by the underlying arteries; and that no serious consequences, at any rate no hæmorrhage, would have resulted from an exploratory incision. In *The Lancet* for June 7 of this year, a somewhat similar case, under the care of Mr. Sydney Jones of St. Thomas' Hospital, is reported in which such an exploratory incision was made, about one year after the date of the bullet-wound, with an excellent result. It is there stated that 'a quantity of serous looking-fluid welled from the opening, but no ill result ensued.'

A case having some features in common with this is related in Professor Longmore's Essay on Gunshot Injuries (Holmes' System of Surgery, vol. I. p. 507, Edition of 1883).

It should have been stated above that the bullet in striking the skull at a very acute angle had been cut into two pieces, one only of which had lodged.

Mardan.

MEDICAL COLLEGE HOSPITAL, CALCUTTA.

REMOVAL OF A LARGE ELEPHANTOID TUMOUR OF THE SCROTUM COMPLICATED WITH SCROTAL HERNIA ON THE RIGHT SIDE.

By Surgeon-Major J. O'Brien, M.A., M.D.

The history of the case was briefly as follows:—The patient had been suffering for some years from elephantiasis of the scrotum, and the tumour attained a considerable size. While suffering from it, some two or three years ago, a right inguinal hernia developed itself and gradually descended into the scrotum.

The patient had also been a sufferer from cataract. The lens in his left eye was reclined by a hakim about a year ago, leaving him a tremulous iris, and he first sought admission into the Medical College Hospital on account of the cataract in the other eye. Dr. Sanders operated on him and extracted the cataract successfully. He has now very useful vision in both eyes. He was next transferred to the surgical wards on account of the scrotal tumour, and came under my charge.

On examination he was found to have a good sized elephantoid tumour of the scrotum, and in the interior on the right side there was a reducible hernia about the size of a small cocoanut. As the size of the tumour prevented him from following his occupation, which was of a laborious nature, he requested that it might be removed.

The operation was performed on 16th July. The elastic cords were applied and the scrotal tumour removed bloodlessly under chloroform in the usual way. The penis was decorticated and the testes in their tunics dissected out. The hernial sac which was exposed by the incisions on the right side, was then dissected away from the spermatic cord, ligatured opposite the external abdominal ring and amputated. The ligatured stump was then pushed up into the inguinal canal, and the pillars of the external ring and the conjoined tendon were drawn together by stout catgut sutures. The right tunica vaginalis was found to be greatly thickened from chronic inflammation, distended with fluid, and the testicle flattened and atrophied. As it appeared to be inadvisable to leave these useless structures to occupy the surface of the wound, they were amputated and the spermatic vessels tied separately. The left testicle was healthy. Short flaps of healthy integument which had been saved from the sides of the tumour were then stitched over the remaining testicle with a continued catgut suture. They afforded a good covering to it, and afterwards adhered by first intention to the tunica vaginalis of the testicle.

The progress of the case has been uninterrupted. There was no peritonitis, and no bad symptoms of any kind. The temperature never rose above 101°. The wound was treated antiseptically under what might be termed modified Listerism. The spray was not used. The raw surface was merely irrigated in the first instance and afterwards washed when the dressings were changed every, or every other day, with a 2 per cent. carbolic solution. Boracic lint and carbolic gauze were the dressings employed. The patient is now practically well, cured of his cataract and cured of his elephantiasis and hernia. The delay in his cure in my hands was caused entirely by the slow granulation and cicatrization of the decorticated penis.

This is the third case in which I have operated, within the past few months, for the radical cure of hernia by excision of the sac and occlusion of the external abdominal ring. The other two cases were equally successful. In one the operation was undertaken as a sequel to the reduction of a strangulated inguinal hernia by incision, and the other was purely a reparative operation undertaken for the cure of the hernia.

The cases were briefly as follows:—

(1). Grish Chunder, a Hindu male, age 40, was admitted into the hospital on 8th May for strangulated hernia of the left side. The hernia was of the oblique inguinal variety, and was of over ten years' standing. It descended into the scrotum. The strangulation was of 12 hours' duration, and was caused by the descent of a fresh portion of bowel into the sac during some unwonted exertion on the previous night. Taxis under chloroform and the free application of ice having been tried in vain, the usual operation for the relief of the strangulation was performed. An incision about 3 inches long was made by raising and transfixing a fold of skin and cellular tissue in the situation of the inguinal canal. The external ring was then examined and the stricture found to lie outside the sac in the tightly strained fibres of the ring itself. Division of these for quarter of an inch at once permitted the reduction of the hernia. The sac was then opened and dissected away from its attachments to the scrotum and tunica vaginalis. This part of the operation is the most difficult—puzzling rather. It is not always easy to find the sac. Unless thickened by old or recent inflammation it is usually so thin and lies in such close connection with the spermatic cord that it appears to form part of it. But once the sac has been found and accurately mapped out its removal is easy. To effect this the simplest plan is one that was pointed out to me by Dr. McLeod. The sac lies almost invariably in front of the cord. Accordingly the tissues lying on the cord are to be carefully pinched up by two pairs of forceps, one held by an assistant, and an incision carefully made through them parallel to the long axis of the cord until the sac is laid open. The finger is then introduced into it, and its size, position and attachments determined. A little gentle tearing and a few touches with scissors generally suffice to free it from its attachments in the scrotum; but much care is needed in separating it from the spermatic cord, otherwise some of the elements of the cord may be incautiously divided.

The further steps of the operation were easy. The sac was firmly ligatured at the neck with catgut and pushed up into the abdomen. The pillars of the ring and the conjoined tendon were drawn together with catgut sutures and a drainage tube introduced through the track of the wound from the bottom of the scrotum. The ligatures of the sack and of the pillars of the ring were also left long for drainage.

In this case there was some local peritonitis and some suppuration in the track of the wound, but the man's condition was at no time dangerous, and the incisions healed in about three weeks. He was not, however, discharged from the hospital until 13th June, as his recovery was delayed by an attack of mumps which he contracted about a week after the operation. Small abscesses formed in both parotid glands and delayed his discharge.

I have since seen this patient in August, about three months after the operation. The cicatrix in the groin was firm, and there was no sign of a return of the hernia. There was some fulness along the inguinal canal in the situation of the neck of the old hernia; but this was to be expected, and could not be prevented by the operation.

(2). The other case in which the operation was undertaken, simply for the radical cure of a reducible hernia, was that of a stout Hindu in good health and aged about 30. He was suffering from a hydrocele on the right side, and a large scrotal hernia. The inconvenience caused by the size of the double tumour was so great that he begged to be relieved by operation. Accordingly I operated on 15th March. The hydrocele was first tapped and an incision about 3 inches in length made over the course of the right inguinal canal. The sac was then raised and opened in the manner described in the previous case, and its fundus dissected out of the scrotum. The neck was then

separated from the cord, ligatured, pushed up into the abdomen, and the pillars of the ring drawn together. Provision for drainage was made as in the previous case, and the wound dressed antiseptically. The progress of the case was uninterrupted. It was hoped that the hydrocele would have been cured by the inflammation excited outside the tunica vaginalis : but it was not, on the contrary it filled rapidly and had to be tapped, while the drainage tube was still *in situ*. However the case healed rapidly, and the patient was discharged cured on 2nd May, *i.e.*, 48 days after the operation.

In addition to these I have, as previously reported, performed an operation almost similar for the radical cure of a congenital hydrocele, *viz.*, ligatured the neck of the sac and excised it. Thus my experience of this operation extends over four cases. I am bound to say that it is a severe one, and not to be lightly undertaken in cases of strangulated hernia if much inflammation exists. The dissection of the sac, and the ligature of the stump and ring cause a certain amount of inflammation on their own account, and when this is superadded to the inflammation already existing in the intestines the case may become dangerous.

On the other hand, as a pure operation of a reparative kind in a healthy man, if the case is treated with strict antiseptic precautions, I think the operation, though certainly severe, is a safe one. And we must remember that in the labouring class, among whom cases of this kind generally occur, a hernia simply is not unattended with danger. Strangulation, or other injury may cause death any day, so that even if the operations were slightly risky, it would be justifiable provided a real cure followed. This, I think, does follow in most cases, and a moment's reflection will show that the operation is a most thorough one, and certainly superior to all of the ordinary operation by invagination, &c. In fact, most surgeons acknowledge now-a-days that these operations are extremely uncertain in their results.

AHMEDABAD.

A CASE OF HYDROPHOBIA : INCUBATION 23 MONTHS.

BY *Asst.-Surgeon* TRIBHOWANDAS MOTICHAND SHAH.

I was called on the evening of 14th June last to see a patient who was said to be unable to drink water on account of pain in the side. The patient was about 20 years of age, in fair health, though somewhat thin, and was lying in bed on his face. His pulse was almost imperceptible and his limbs cold. On attempting to bring a light near him he was terrified, and could not bear it. He shouted not to bring the light within his sight. On asking about his complaint he said he had pain in the diaphragm or rib, which was so severe as to make him believe that he was about to die. He could not drink water. His mouth was clammy and he exhibited constant sipping movements. He would not turn on his back as he could not face the light. He was repeatedly attacked by general spasms. On offering him water he knocked away the vessel. Seeing this I at once suspected hydrophobia. I questioned both the patient and his relations about whether or not the patient had been bitten by a dog, and I found that 23 months ago he had a slight dog-bite, but the dog was not apparently rabid. He disturbed a dog which gave him a little scratch over the leg, and tha healed up by the application of tobacco, and no importance was at all attached to the incident. The later history was, that within the last one month he had undergone much exertion on account of 3 successive marriages in the family, and he was then suffering from dyspepsia and tension of the recti muscles. He had fever for last 3 days. He took purgative in the morning of 11th. Took *kheechree* in the evening, and could not drink water from midnight time. Did not sleep. He suspected some spell as the cause of all this, therefore he went to a Báwá on the noon of 12th. Báwá spelled some water and ordered him to drink, but he convulsed and could not drink, could not eat, and was gradually getting worse till I saw him at 12 P.M.

Patient died at about 2 A.M. (14th June 1884), about two hours after he was seen by me.

REMARKS.—The points for remark are the long period of incubation of the hydrophobia poison, the misleading nature of the commencement of the disease, and the apparently non-rabid condition of the dog. The intervening period was so long and the bite so trivial that the patient and his relations had almost forgotten all knowledge about it. The disease commenced with dyspepsia and fever, and the symptoms of hydrophobia then supervened insidiously. The dog was not suspected to be rapid in the least ; it was lying down, and when teased gave a slight scratch on the patient's leg. Subsequently the dog was found sitting by the side of the patient, and was even fed by him and his friends.

KASHMIR MISSION HOSPITAL.

SENILE GANGRENE : AMPUTATION : RECOVERY.

NOTES BY R. B. THOMAS, H. A., House Surgeon.

Rahim, a Kashmiri woman aged over 50 years, was brought to hospital on July 26th, suffering from gangrene of the left leg. *History.*—Three months before she had a pain at the hip, which went down to the foot—where she soon noticed want of sensation. This gradually extended up the leg, and the skin became black. She was treated by native hakims with poultices of milk and cabbages. When admitted the gangrene was only 6 inches below the knee-joint, but not clearly defined. Patient very weak and thin, and almost pulseless. By permission and with assistance of Dr. Neve the leg was amputated by Mr. Thomas. There was a long anterior flap. At the operation there was no bleeding.

As usual the spray was used, and the case dressed with iodoform and with carbolised sawdust bags. On the third day dressings were removed and there was no pus. The patient was well fed and had stimulants. She progressed well and picked up strength ; the wound healed rather slowly. A small spot of ulceration in the patella remained unaltered throughout the whole case. The patient left hospital on the 22nd day after the operation. This was clearly a life-saving operation. But in performing it there was much risk, for the patient seemed so weak and bloodless that merely to give chloroform was dangerous. The want of reaction shown by the lack of blood during the operation rendered sloughing of the flaps probable. Fortunately this did not occur.

"THE SAGACITY AND MORALITY OF PLANTS: a Sketch of the Life and Conduct of the Vegetable Kingdom," is the title of a work by Dr. J. E. Taylor, F. L. S., which is to be published soon by Messrs. Chatto and Windus. The intention of Dr. Taylor is to show that all the qualities and attributes which distinguish animals are also to be found in the vegetable kingdom, and that in both instances they have been evolved in the struggle for existence.

A TAILED CHILD.—A correspondent of *Science* (June 6th) describes a tailed child which was recently born in Louisville, Ky. The child was visited by a party of four, which included a prominent physician. The writer says :—

"We found a female negro child, eight weeks old, normally formed in all respects, except that slightly to the left of the median line, and about an inch above the lower end of the spinal column, is a fleshy, pedunculated protuberance about two and one-half inches long. At the base it measures one and one quarter inches in circumference. A quarter of an inch from the somewhat larger, and from that it tapers gradually to a small blunt point. It closely resembles a pig's tail in shape, but shows no signs of bone or cartilage. There seems to be a slight mole-like protuberance at the point of attachment. The appendage has grown in length about quarter of an inch since the birth of the child.

"The mother, Lucy Clark, is a quadroon, seventeen years old, and the father a negro of twenty, both normally formed."

"In Darwin's Descent of Man, vol. i., p. 28, he speaks of a similar case and refers to an article in *Revue des Cours Scientifiques* 1867-68, p. 625. A more complete article is that by Dr. Max Bartels, in *Archiv fur Anthropologie* for 1880. He describes twenty-one cases of persons born with tails, most of them being fleshy protuberances like the one just described."—*Boston Med. and Surg. Jour.*