REPORT OF A
CASE OF POPLITEAL ANEURISM CURED BY
COMPRESSION.

By JAMES ALLAN, M.D.,
DEPUTY-INSPECTOR OF THE ROYAL NAVAL HOSPITAL, HASLAR.

WILLIAM J—, aged twenty-seven years, a pensioner from the Royal Marines, was admitted, on the 10th October, 1848, into the Royal Naval Hospital, at Haslar, by Admiralty order, with aneurism in the right popliteal space, about the size of the longitudinal section of a turkey's egg; the pulsation strong and bruit distinct. He stated that it had been gradually increasing for the last five weeks; he walked lame, suffering from pain and numbness of the leg and foot; had been employed as a labourer, and obliged to carry heavy weights frequently.

He was put upon low diet, his bowels freely opened, and the part occasionally looked at, until the 16th, when a flannel bandage was rolled from the toes to the groin, and a tourniquet applied, the pad resting on the artery about half an inch above the tumour. The pressure was only carried to the extent of making a slight impression upon the pulsation, and to give him little or no pain.

On the 19th, a second tourniquet was applied on the femoral artery, at the lower third of the thigh, and regulated so as to relieve the lower instrument. He then took the following pill three times daily:—Acetate of lead, half a grain; powder of opium, one-fourth of a grain,—made into a pill with extract of liquorice; and, at the same time, a draught of one drachm of distilled vinegar and one drachm of syrup of poppies, in an ounce of water.

On the 27th, a third tourniquet was applied, as nearly as possible below the giving off of the profunda, and the pressure regulated to ease the other two, but not to suppress the pulsation entirely. The process of cure was fully explained to the patient, and strict directions given to keep up such a degree of pressure as only to control the circulation, and not to give pain. He was seen frequently daily, and the nurse, an intelligent woman, who had previously had the care of two cases successfully treated by compression, kept a watchful eye upon him, reporting every circumstance, and was obliged occasionally to call the medical officer on duty, to relieve the pressure when it had been carried too far. The bandages were removed daily, and the tourniquets shifted, so as to keep up a certain degree of pressure, and prevent the full impetus of the circulation into the tumour, which had been getting firmer and smaller since the 27th.

On the 4th of November, the pulsation being indistinct, the tourniquets were removed, to allow one of the medical officers to examine the part; and although only off for a few seconds, the pulsation returned in the upper part of the tumour, causing pain down the leg and in the foot, but which was in a short time relieved by the application of the bandage and tourniquets.

On the 8th, he complained of faintness, coldness about the heart, and pain in the stomach. The pills and draughts were omitted, and these feelings disappeared.

On the 10th, no pulsation could be felt in the tumour, from which date the pressure was gradually relaxed, until the 27th, when it was entirely removed, and friction with soap-liniment applied to the limb. The tumour was then solid, and several vessels were felt pulsating round the knee and sides of the limb.

On the 2nd of December, he was allowed to sit up; on the 8th, to walk about the grounds; and on the 29th, the tumour being almost entirely absorbed, and his health good, he was discharged cured.

Remarks.—This case is considered interesting, as, from the size of the tumour, and thinness of its parietes, treatment by compression was thought a very doubtful remedy.

Two of the tourniquets used were half-circles of iron, with a screw and pad at one end, and a flat splint at the other. The third was a forceps, with the pad and splint on the ends of the blades, the regulating screw passing through the opposite extremity of the instrument, the pressure being thus applied only over the artery, and the counter-pressure on the back of the limb, leaving the circulation otherwise uninterrupted.

APPOINTMENT.—Dr. Pereira has been appointed Physician to the London Hospital, in the room of Dr. Framp-ton.

CASE OF
COMPLICATED GUN-SHOT WOUND OF THE
LEFT ARM AND SHOULDER,

FOLLOWED BY SECONDARY HÆMORRHAGE FROM THE AXILLARY ARTERY, AND THE SUCCESSFUL APPLICATION OF LIGATURE TO THE LEFT SUBCLAVIAN ARTERY.

By JOHN CRAWFORD, Esq.,
ASSISTANT-SURGEON HONOURABLE EAST INDIA COMPANY'S SERVICE,
BOMBAY PRESIDENCY.

WHILST serving in the Gulf of Persia, I was hurriedly called upon, in the absence of other surgical aid, to attend a case of the above description. It was one of a peculiar nature; and as the history of its progress elucidates some points in practice, as well as presents food for reflection, if not for discussion, I hope it may be considered worthy of insertion in a journal so widely circulated as *THE LANCET*.

Being obliged to make a short sea-voyage, I did not reach the station (Bassadore) where the wounded officer lay until Monday, the 3rd of February, five clear days after the receipt of the accident. Upon examination, I found as follows:—

Jan. 29th.—Mr. P. W. F—, a midshipman in the Indian navy, had been out fowling, and while in the act of drawing his gun towards him by the muzzle, the left barrel accidentally exploded, and the shot took effect upon the front of the left arm near to the shoulder. There had been excessive hæmorrhage, which was arrested by pressure applied by the Native Hospital assistant, there being no medical officer at the station. Upon the removal of some poultices and bandages, I found a large, open, contused, and lacerated wound occupying the front and inner side of the left arm, commencing about two and a half inches below the acromion process of the scapula, extending about four inches in length and about three in breadth. The violence had torn away a considerable portion of the front edge and body of the deltoid, the long head and a large portion of the belly of the biceps, the outer edge of the coraco-brachialis, and had cut across the cephalic vein, external cutaneous nerve, and the superior profunda artery at its origin from the brachial. From the state of feeling in the parts supplied by the musculo-spiral and median nerves, I concluded that they were safe, although, from the irritation of parts about their origin, their functions were in some degree interfered with. The impulse had fractured the humerus a little above the junction of its superior and middle thirds, driving and impacting the end of the lower fragment upwards and backwards, and thus causing the upper fragment to ride upon and overlap it by about two inches. I could also pass my finger along the bicipital groove of the humerus almost into the shoulder-joint, but I had still a hope that its cavity was not opened; and from the separation of the body of the deltoid from the capsular ligament, both anteriorly and posteriorly, the burrowing extent of the wound, and the distance to which I could pass up a bullet-probe in front and behind the shoulder-joint, I could have little doubt that a great portion, if not the whole charge of shot (No. 6) was lodged, not only around, but *above* the joint. It appeared as if the centre of the volume of the charge had struck fair upon the shaft of the humerus, and its mass being divided by that hard and resisting body, as well as its direction changed, one portion glanced up along the front of the joint, and lodged as high up as the lower edge of the clavicle; and the other, passing posteriorly, settled in the soft parts of the infra-spinal fossa of the scapula; and, from a particular tenderness upon touch, accompanied with redness and swelling in the supra-clavicular region of the neck, I entertained the idea that a few pellets might even have forced a passage into that space. The arm was advanced from the body whilst in the act of drawing the piece backwards, and as the latter was lying upon an elevated rock, and thus raised almost to a level with the shoulder, the axis of the humerus must have formed but a small angle from the horizontal. The muzzle also could not have been more than fourteen to sixteen inches distant from the shoulder at the moment of explosion, so that the circle formed by the shot when it first struck the arm must have been of small diameter. The edges of the wound were ragged and irregular, the surrounding soft parts hot and much swollen; a dark, foetid, and unhealthy discharge had begun to flow; but the lower parts of the arm and forearm were of their natural colour and temperature, soft also, and devoid of any characteristic of gangrene; and with the exception of that portion of the integuments supplied by the external cutaneous nerve, the sensitive power of which was quite destroyed, the general functions of the muscles and