the autumn of 1867, on account of a foreign body lodged in the bladder, which had resisted the efforts of two medical men to extract from the viscus. She stated that, six weeks before, as she was suffering from retention of urine, she obtained the services of a nurse. This female attempted to relieve her by means of an ivory clyster-pipe, and did so successfully; but the pipe, slipping from her hold, disappeared, and found its way into the bladder. Having placed the patient under the influence of chloroform, I dislodged the clyster-pipe from the impacted position it occupied in the bladder, and effected its extraction.

Clyster-pipe lodged in the bladder of Case II. Encrustation of phosphates on surface. Both extremities impacted in the coats of the bladder by ulceration.

CASE III.—A child, aged 5 years, was sent to my charge, in the Royal Infirmary, from Innerleithen, by Dr. J. Andrew. Her father, who accompanied her, stated that, two days previously, she began to complain of urinary irritation, and that her mother observed her urine was tinged with blood. Dr. Andrew informed me that, on sounding her bladder by means of a bent probe, he detected a foreign body; and that the child, according to her mother's account, admitted she had put something up her urethra, which she described as a pin, but which her mother believed to be a hair-pin. On placing the child under the influence of chloroform, and introducing the forceps, a foreign body was at once detected. It lay obliquely across the neck of the bladder from right to left and from above downwards. Using the forceps as described below, the length of the body was determined to be more than two inches; and, from its other characters when grasped by the forceps, taking it for granted that it was a hair-pin, and that its rounded or blunt end must have been first inserted, I carried the forceps downwards to the left or lower extremity, and, after a little manipulation, contrived to bring the two points of the hair-pin into the axis of the forceps and urethra, and to effect its extraction. The hair-pin was of small size, measuring exactly two inches and a quarter in length. Immediate relief was afforded, and the child returned home in the course of the ensuing day.

Hair-pin (actual size) extracted from the bladder of a little girl, aged 5 years.

These cases illustrate the circumstances, accidental and intentional, under which foreign bodies may be lodged in the bladder; for while, in the first case, the portions of catheter were undoubtedly inserted to satisfy a morbid irritability of the genito-urinary system, and not left behind in the bladder by the accidental fracture of the instrument after it had been introduced, there can be no reasonable doubt, in the second case, that the facts were as narrated by the patient, and the lodgment of the pipe due simply to accident. The third case was one in which a perfect child accidentally hit upon the urethra in attempting to push the blunt end of a hair-pin up one of the channels of the body, by the same perverse ingenuity, in all probability, as leads children to insert peas or beads into the nose, or meatus auditorius externus.

So far as the materials of the foreign bodies were concerned, they were, in the first case, generally soft, non-encrusted gum-elastic catheters, but in two instances metallic; and in three instances the gum-elastic instrument had become calcareously encrusted. In the second, the pipe was hard and non-pliant—sonorous, however, to touch, but impacted by each extremity in the coats of the bladder, from the occurrence of ulceration. In the third, of a metallic nature, but exceedingly ill formed for recognition or extraction.

If the soft and pliant nature of the material of which the gum-elastic catheter is composed affords a greater apparent facility in effecting the extraction of such a foreign body, this advantage is in practice quite lost by the difficulty its softness and non-sonorous character oppose to its ready recognition. If, therefore, no means of examining the bladder are employed, but the introduction and manipulation of the common sound, the existence of such a soft and non-sonorous body as an elastic catheter may easily be overlooked. When incrustation communicates to it new characters which facilitate its identification, such a procedure may suffice. In practice, however, I believe the recognition of the foreign body, and its extraction, can easily be effected at the same moment. For this purpose, nothing more is requisite than the common dressing-forceps usually carried in the pocket-case. When slightly curved in the blades, and with teeth extending well down towards the

joint between the blades and shanks, the instrument will be still better suited for our purpose.

The patient, either chloroformed or not, as may seem most advisable, should be lying on her back. The surgeon, standing on her left side, introduces the forceps, with the blades closed, into the bladder. If the bladder is full of urine, the opening of the blades usually at once permits the urine to escape, and brings the foreign body within their grasp as they are gently closed. Should nothing be felt between their blades, these may be opened and closed in another axis, and so, until either frequent tentative use of the forceps proves the bladder to be empty, or something is felt between their blades. If there is nothing, the forceps are withdrawn: the examination is complete. If the forceps cannot close beyond a certain extent, or, when closed, cannot be withdrawn, there is certainly something within their grasp. The forefinger of the surgeon's left hand should now be carried up the vagina as high as a point corresponding to the neck of the bladder, and the foreign body drawn down against its point; the forceps being rotated, so as to bring first the one end, and then the other, against the finger's point, so as to determine the distance of each extremity from the part held in the grasp of the forceps. Now, supporting one or other extremity of the foreign body with the finger, the forceps are made to dip along its surface, and the extreme point is secured. As the forceps are withdrawn, the foreign body comes away, embraced and protected by the extremities of the blades.

When, as in the second and third cases, the foreign body is rigid, and, by its form and nature, or prolonged residence in the bladder, has become impacted in the vesical coats, by ulceration occurring at one or both ends, the same procedure, slightly modified, is to be adopted. The forceps are gaped in different axes until the foreign body is secured somewhere about its centre; the forceps are then carried steadily down till they push back the vesical coats from the one or other extremity of the foreign body; and then, making traction on the end thus liberated from the pouch within which it was imprisoned, the extraction is completed by the simple withdrawal of the forceps.

I am aware that in cases where hair-pins, needles, pins, etc., have been lodged in the female bladder, hooks, or ingenious instruments calculated to secure, turn, or double-twist the foreign body, have been recommended. To the common blunt hook for the extraction of a hair-pin, no objection need be urged, though certainly its employment is not likely to be of the smallest advantage in the extraction of any other foreign body; while its efficiency cannot be greater than, and in the cases narrated not so great as, that of the forceps, employed as I have described. As regards the instruments for turning or bending a metallic foreign body: so long as it can be shown that so accessible an instrument as a pair of dressing or polypus forceps will effect all that is wanted with precision, rapidity, and efficiency, I can conceive no necessity for the surgeon encumbering himself with implements of such doubtful and at best occasional advantage.

THE CURE OF INTERNAL ANEURISM.*

By JOLLIFFE TUFNELL, Esq., Dublin.

BELIEVING that the exhibition of a preparation illustrating the mode of cure of internal aneurism by consolidation, together with a short history of the case, showing the influence of position in effecting this end, would be interesting to the members of the Association, I have brought the morbid specimen for their inspection.

The patient, from whom this preparation was removed, was a gas-fitter, aged 55, who was admitted into the City of Dublin Hospital, with ascites and anasarca, upon January 29th, 1868; but who had been lying in his own room, unable to rise, from October preceding.

When he first came under my observation, he was pale, wasted, and weak; his upper limbs were attenuated; his lower extremities were anasarcaous, more especially the right. The abdomen was distended by ascites, and traversed by dilated veins; the ribs and sternum projecting and defined, with emphysematous clearness upon percussion over the whole thorax. The breathing was very much oppressed, with slight hacking, continuous cough. The heart's action was regular; but the sounds were very indistinct and murmuring, and the pulse so weak as scarcely to be perceptible at the wrist. He had double scrotal hernia, with hydrocele upon the left side, and large flabby testes. The urine was clear-coloured and healthy. When tested by heat and nitric acid, there was no evidence of albumen. Its specific gravity was 1015; and

* Presented to the Surgical Section at the Annual Meeting of the British Medical Association in Oxford, August 1868.

the quantity passed not much below the natural standard. The bowels were obstinately costive.

The treatment adopted was that calculated to support the animal powers, and to eliminate the fluid from the abdomen. Aperients, consisting principally of the compound powder of jalap, were administered, and the tartrate of iron with juniper freely given, but without any appreciable effect. Tapping was resorted to upon March 10th, in order to relieve the excessive dyspnoea, at the patient's urgent request; but, although performed whilst lying recumbent, and well supported by stimulants, he speedily sank, and died the same night.

Upon making an examination of the body, eighteen hours after death, the internal organs presented the following appearances. The lungs were generally emphysematous; the heart was increased in size from dilatation of the right ventricle, and the mitral valves diseased, with dilated orifice. The liver was pale, greyish, and greasy; but presented no sign of cirrhosis. The kidneys were smaller than natural, granular, and nodulated; the pelvis enlarged; and the cortical portions contained numerous small cysts, some of the size of a pea, but many larger. The ureters were much dilated, their orifices being open; but the bladder was thickened, sacculated, and reticulated, with the middle lobe of the prostate so enlarged, as to obstruct the walls and the neck of the bladder. The arterial system was universally diseased. The aorta and the common and external and internal iliac arteries were all studded with atheroma. Upon the right side, the common iliac artery had been converted into an aneurism of the size of a large pigeon's egg; and this was three parts filled with fibrine undergoing the process of cure. Upon the left side, there was a second aneurism engaging the internal iliac artery, but entirely cured. The sac was contracted to the dimensions of an ovary, and, upon section, found to be equally solid and dense in consistence. The inferior vena cava was adherent to the posterior aspect of the aneurism of the common iliac, and, in addition to this, was filled to a considerable extent with coagulated blood. These conditions and appearances will all be seen in the preparation and drawing.

The brittleness of the abdominal aorta and its branches, and consequent loss of elasticity in this case, had led to the formation of two aneurisms in juxtaposition; and yet, in an individual (than whom it would be difficult to find one more generally the subject of disease), Nature had repaired the mischief altogether in one aneurism, and in the other was in process of cure.

Now what Nature has here done spontaneously, we may successfully imitate; and, by the means of fibrination, cause the blood, in its passage through the aneurismal sac, to leave upon its lining surface such consecutive layers as shall at first diminish the cavity, and ultimately, entirely, or partially, fill it up.

This fibrine is the result of a purely mechanical action. The deposit becomes, it is true, so intimately connected with the sac, as to be regarded by some as an organised product; but it is not so. It has no connection whatever with inflammation, or the exuding of lymph; it is pure and simple fibrine; and we have but to control the distensible action of the heart, and to reduce the forcible flow of blood, which is thinning and destroying the sac, by position, rest, and sedatives, to rob it of its noxious characters, and to convert it into the medium of cure.

The treatment of external aneurism by compression has proved that, in order to cure this disease, it is not necessary to do more than diminish the current of blood, so that it shall not be capable of giving forcible distension to its walls; and by position alone in internal aneurism much may be done to effect this end. In the recumbent position, indeed, does the main point of treatment lie. Placed horizontally for some time, and kept at perfect rest, the heart's action of an aneurismal patient will be reduced thirty beats per minute (as, for instance, from 96 to 66); and, if this diminution be calculated, it will be found that in twenty-four hours the sac of the aneurism, when the patient is recumbent, will have been distended with blood no fewer than 43,200 times less often than when the sufferer was erect.

Consolidation by position is a treatment that may almost universally be adopted. It produces no aggravation of the symptoms, no injury, or risk of life; and many cases, now considered hopeless and given up in despair, may not only be rescued from death, but restored to comparative health.

The case which I have here adduced, was one of spontaneous cure, brought about by position *ex necessitate* maintained; but, in the next instance (one of a series of recoveries), I will briefly illustrate the subject of consolidation as artificially brought about.

The patient, in this instance, was a die-cutter in steel, a man, named Parkes, 54 years of age, who was admitted into the City of Dublin Hospital, under my care, upon September 18th, 1854. He was suffering from thoracic aneurism; the tumour being three inches in diameter, considerably elevated above the surrounding skin, and situated to the right of the sternum, between the second and fifth ribs, occupying the sites of

the third and fourth, which, together with a portion of the sternum, had been absorbed. The fingers, when laid upon the tumour at its most projecting point, pressed against a soft, cushiony, elastic, pulsating surface, gave to the touch the sensation of the integument only intervening between the observer and the blood contained in the sac. The aneurism evidently sprung from the anterior aspect of the right side of the ascending portion of the arch of the aorta; and was rapidly approaching the surface, absorbing all before it in its course.

Treatment was commenced upon September 19th. Upon Oct. 15th, the tumour had become firmer, and flattened in the centre. Towards the middle of November, it was gradually getting dense; and, upon December 13th, Parkes left the hospital for his home, where he promised to remain at perfect rest for a while.

I did not see this patient again until December 1857, after an interval of three years. He now called upon me in reference to an ulcer of the leg. Upon questioning him with respect to the aneurism, he stated "that it never troubled him now"; that he was quite well as regarded it, and working at his trade as a die-cutter in steel. I stripped him and examined the chest. The first point that attracted my attention was the enlargement and tortuous condition of the abdominal and pectoral cutaneous veins; the epigastric, circumflex, and mammary, having assumed the condition of large venous trunks. The aneurismal tumour projected to the right of the sternum, nearly midway between the clavicle and nipple, presenting a bulging prominence of the size of a small saucer, making the right side contrast strongly with the hollow intercostal spaces and masked ribs upon the left. No pulsation was visible in the tumour, even when any testing object (such as a piece of white paper, for instance) was placed upon it. To the hand, it felt dense, and the cardiac impulse from within was unheeded by the patient.

The sound upon percussion was dull over a very large space around the heart; whilst to the ear was given a double sound, intermediate in time to the contractions of the heart. Upon deep inspiration, this portion of the chest did not expand. The general appearance indicated a barrier to the return of blood to the right side of the heart. There was some congestion of the face, which was increased on stooping, with puffiness of the neck to a slight degree. There was no interference by pressure upon the trachea or oesophagus. There was nothing abnormal in the carotid or radial pulses, and the circulation was equal upon both sides of the body. He stated that he lay at night upon the right side to sleep, and could not do so upon the other. He had been regularly working at his trade; and one of his most recent acts had been the cutting of a new seal for the College of Surgeons in Ireland; and it is from his hand that the die has issued which now stamps the diploma of the Dublin College of Surgeons.

CASE OF DISTENDED PERICARDIUM, THREATENING DEATH: RELIEVED BY PARACENTESIS.*

By C. G. WHEELHOUSE, Esq.,
Surgeon to the Infirmary, Leeds.

In the *Medical Times and Gazette* of November 3rd, 1866, my friend and colleague Dr. Clifford Allbutt very briefly placed on record a case of acute rheumatism complicated with distended pericardium, in which immediate death was ward off by the operation of paracentesis.

I should not have ventured to trespass upon the time of this meeting with the details of a solitary case, and especially of a case which has already been published, if I had not thought—1, that the treatment adopted was of more than usual importance; 2, that the result justified me in hoping that, by making it still more fully public, I might possibly furnish the means of hereafter saving an occasional life by surgical interference when the resources of medicine appear to be exhausted; and 3, that the mode of operation adopted needed some further explanation. I need not occupy your time by describing the whole course of the patient's illness, but will simply take up the case at the point at which my help was first sought.

On September 18th, 1866, C. S., a gas-pipe layer, was admitted into the Leeds Infirmary under the care of Dr. Allbutt, suffering from very acute rheumatism, both muscular and arthritic, accompanied by dyspnoea and oppression. On examination, the pericardium was found to be considerably distended with fluid, and there was acute pain in the region of the heart. A large blister over the heart and full alkaline and opiate treatment was ordered for him.

On the 19th, at 11.30 P.M., Dr. Allbutt was urgently summoned to the assistance of this poor man, who was said to be dying. On reaching his bedside, he found that this statement was unfortunately only too

* Read before the Medical Section at the Annual Meeting of the British Medical Association in Oxford, August 1868.