

thickness, projecting forwards as well as upwards and contains therefore an outgrowth of glandular tissue. In other words the vesical orifice is raised, displaced forwards and surrounded either by a continuous collar or by three projecting eminences which meet together over it when the bladder contracts. The lateral diameter deserves an equal amount of attention. Normally the transverse section of the prostatic urethra about its centre is crescentic in shape with the convexity forwards. When there is general enlargement this becomes altered into a triradiate star and then increased width is a sure indication that there is overgrowth in the posterior wall, involving not merely the vesical outlet, but the urethra as well—such a growth, in short, as can scarcely be dealt with satisfactorily by the supra-pubic route alone.

It is more difficult to ascertain the extent to which the urethra is displaced in the substance of an enlarged prostate. Usually there is very little overgrowth in front, but I have met with one instance in which this was so great that the channel lay a long way behind the centre, and in another in which prostatectomy was performed it is recorded that the anterior growth was the main and almost the sole obstruction. It may be suspected if when the prostate is distinctly enlarged the antero-posterior diameter of the urethra is not

the other, the interior of the prostatic urethra can be mapped out with perfect accuracy, and in many instances, owing to the difference in the resistance presented by the walls, the nature of the growth can be ascertained as well, whether it is soft, nodular and adenomatous or hard and dense like fibroid. Combining the knowledge obtained by these measurements with what is revealed by rectal examination and cystoscopy, an accurate opinion as to the size and shape of the overgrowth can usually be formed in those cases in which operation is advisable without having recourse to digital exploration.

Wimpole-street, W.

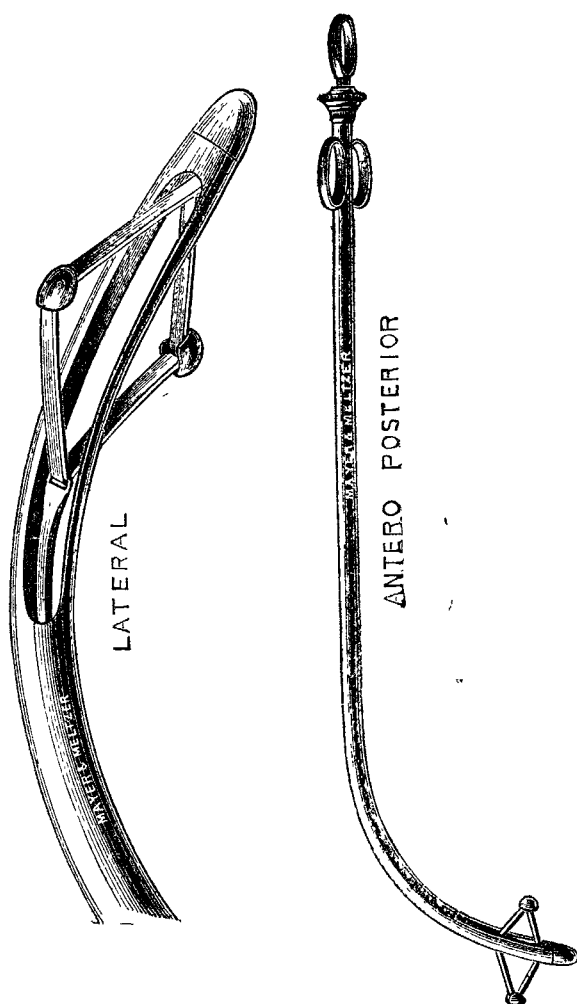
UTERINE DILATORS.

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ANYONE introducing a new form of uterine dilator owes some apology to the profession, yet I think the great variety of such instruments already in existence is in itself an evidence that no form has given perfect satisfaction. For some years past I have been accustomed in cases where I desired to effect rapid dilatation of the cervix, first to pass

FIG. 1.

FIG. 2.



increased and the channel is unusually straight, but it cannot be proved. The same thing must be said of irregular or extreme forms of overgrowth; it is seldom that they can be accurately defined without digital exploration.

Messrs. Mayer and Meltzer have made for me two instruments for taking these measurements, very simple in construction. Each consists of a diamond-shaped metal frame, hinged at the four angles to allow of expansion and contraction and enclosed in the curve of a prostatic catheter, part of the wall of which has been cut away. In the one the sides are open to allow of lateral expansion; in the other the front and back for antero-posterior measurement, the projecting angles in each case being protected by little rounded buttons upon the hinges so that the mucous membrane may not be hurt or bruised. Expansion and contraction are carried out by means of a stilet gliding backwards and forwards in the shaft and terminating in a finger ring, and the measurement scale, which is marked upon the handle of the stilet, gives at a glance the width to which the diamond is opened at the moment. By means of these, introducing first one and then



graduated metallic dilators, and when the canal was sufficiently opened by this means, then to effect further dilatation by means of a modified glove-stretcher. I have now got Messrs. Arnold and Son to make two instruments on the latter principle, which can be used separately or simultaneously, and by means of which the cervical canal can be rapidly and safely enlarged, in all cases where the cervix is sufficiently yielding to justify rapid dilatation, from a diameter slightly exceeding that of an ordinary uterine sound to a size sufficiently large to readily admit one finger. The accompanying illustrations will render a full description of the instruments unnecessary. But a few points and the method of use require special mention. The smaller instrument with the blades closed can be passed without difficulty through any uterine canal that will admit an ordinary uterine sound. The blades are curved and open in an antero-posterior direction on compressing the handles. The latter are provided with a catch working on a rack which permits their slow approximation, but checks their tendency to separate until it is so desired. When the full amount of dilatation has been effected, the blades of this

instrument are permitted to close; it is then withdrawn, and the larger one is substituted. This is used in a similar manner, except that the blades expand in a lateral direction—i.e., at right angles to the other. When the larger instrument has been compressed so as to produce the fullest expansion of the blades, if any further dilatation be desired, it can be accomplished by inserting the smaller dilator between the expanded blades of the larger one, and again opening them. But for the purpose of curetting this will not be found necessary. In cases where the cervix is rigid and rapid dilatation to any considerable extent is therefore contraindicated, the following method will be found most satisfactory:—First, use the small dilator until the canal is sufficiently opened to admit a medium-sized tent, then introduce a tent, and permit it to remain for three or four hours. At the end of this time the cervix will have become so soft and yielding that the full amount of dilatation required for ordinary purposes can be readily accomplished with my dilators.

For these dilators I claim the following advantages:—1st. Only two instruments are required for all ordinary purposes. 2nd. They will rapidly and safely dilate the cervical canal from its ordinary size to a diameter sufficiently great to admit a full-sized finger. 3rd. Owing to the way in which the blades open, they will dilate the os internum to a slightly greater extent than the os externum, a point which most of the dilators in use fail to accomplish. 4th. The compressing force of the hand, while capable of exerting all the force desirable, acts as a guide to the amount of pressure and resistance, and can be used in a delicate manner, so as not to risk any injury by over-stretching, having this great advantage over any screw-like mechanism. 5th. As the blades are only two inches long from the projecting shoulders they will not come in contact with the fundus.

Sidney-place, Cork.

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.

UNIVERSITY COLLEGE HOSPITAL.

TWO CASES OF EXOSTOSIS INVOLVING JOINTS; REMOVAL THROUGH THE JOINTS; COMPLETE RELIEF.

(Under the care of Mr. ARTHUR BARKER.)

THESE cases illustrate the safety with which exostoses may be removed at the present day even when their removal involves incision into a large joint. Before the system of antiseptics had been sufficiently developed surgeons would have hesitated before attacking such bony outgrowths, however much they might have interfered with the neighbouring joint. They may, however, now be removed, and frequently are, without risk of pyæmia or bone inflammation, if they simply cause unsightly deformity. Should they interfere with the utility of a limb, give rise to neuralgia or other symptoms due to pressure or be increasing rapidly, few surgeons would hesitate to remove them. Innes has recorded a case in which an exostosis of the head of the tibia caused gangrene of the foot and leg by pressing on the arteries, and Braun also relates a case of ankylosis of hip due to the presence of such a growth. We are indebted to Mr. J. B. H. White, surgical registrar, for the notes of the cases.

CASE 1.—A man aged fifty-eight, an engineer by occupation, was admitted to University College Hospital on March 17th, 1891. Eight months before admission he had noticed a little tumour the size of a pea just above the flexure of the left elbow-joint. It could be shifted from side to side and the movement was often accompanied with grating. There was no pain, but as the swelling gradually enlarged increasing difficulty in bending the elbow made him seek relief. There was no history of an injury. On admission there was, in the position indicated above, a prominent swelling of bony hardness and as large as a walnut; with the arm extended the summit of the swelling was crossed by the

median basilic vein and just internal to this by the brachial artery; the mass then appeared to be fixed. When the elbow-joint was flexed to a right angle the tumour was movable from side to side, but not in the direction of the length of the limb. The tumour appeared to be altogether beneath the brachialis anticus muscle. The next day an incision two inches long was made over the summit of the swelling. The median basilic vein and brachial artery were held aside by hooks. The fibres of the brachialis anticus muscle were divided longitudinally over the tumour, and when the latter was reached the fibres of the muscle had to be separated from its surfaces, to which they were closely attached. In removing the lowest part of the tumour the elbow-joint was opened. The wound was sutured with silk, with a drain consisting of several strands of silk, and was dressed with dry salicylic wool. The arm was placed on a splint in a nearly extended position. The parts removed at the operation consisted of a piece of bone measuring $2 \times \frac{3}{4} \times \frac{3}{8}$ in. Both surfaces were covered by torn muscle fibres, in places distinctly tendinous. At the lower end of the fragment were two articular surfaces separated by a notch; these surfaces were covered by very dense fibrous tissue and not by cartilage. One of the articular surfaces on the anterior half of the other articulated with the coronoid process of the ulna, in which there was a pit to receive it; the posterior half of the latter surface articulated with the humerus. In the evening of the day of operation the temperature reached 101.6° ; it had regained the normal by the fourth day after operation and remained normal afterwards. The wound was dressed on the second day after operation; the discharge was serous. The wound was dressed again on the sixth day and the silk drain removed, and on the twelfth day, when all the sutures were removed. There was a small part unhealed in the centre of the wound from which some clear fluid like synovia was discharged. The patient left the hospital on the seventeenth day after the operation with the wound soundly healed and with perfect use of the limb.

CASE 2.—A woman aged forty-four was admitted to this hospital on Aug. 10th, 1891. Twenty-six years ago she was run over by a travelling coffee stall, the wheel of the vehicle passing over her legs just above the knees. Six years later she first noticed a little lump just above the left knee-cap. It was then no larger than a pea. During the last twenty years it had gradually increased in size, but more rapidly during the last two or three years. On admission there was a bony outgrowth from the front of the left femur forming a considerable prominence on the front of the limb a finger's breadth above the upper margin of the patella; it was completely covered by the quadriceps extensor and appeared to be pedunculated; when the knee-joint was flexed an interval of three inches and a quarter separated the patella from the exostosis. On the third day after admission an incision three inches long was made on the outer side of the swelling and deepened through the muscle; the supra-patellar pouch of the knee-joint was opened; the exostosis was cut off with an osteotome and the base afterwards rendered smooth; the edges of the posterior layer of the synovial membrane of the joint were sewn together by a continuous silk suture over the bony defect and the skin wound by interrupted sutures; the wound was dressed with dry salicylic wool; it was not drained. A back splint was placed on the limb. With the exception of a rise to 100° on the day following the operation the temperature was normal throughout. The wound was dressed on the third and again on the tenth day after operation. On the latter day all the stitches were removed and wool and collodion applied. The patient left the hospital on the fourteenth day with the wound quite healed and with perfect movement in the joint. The parts removed at the operation consisted of a flat oval piece of bone measuring one inch and three-eighths by three-quarters of an inch. It was composed of spongy bone, with a thin layer of compact tissue all round the sides and on the summit a layer of cartilage one-sixteenth of an inch thick. The periosteum covering it was much thicker than normal.

Remarks by Mr. BARKER.—Of the numberless cases of bony exostoses which every hospital surgeon meets with it must be admitted that very few ever imperatively require operation. Those which lie in the neighbourhood of joints, however, are the exception to this rule, interfering as they often do with the movements of the articulation. Such I have frequently had to remove by operations of more or less severity. Both the cases recorded above I believe to have been originally exostoses, although in the first the bony mass was movable when first seen and was seated in the insertion of a tendon.