New Inventions.

A BACK-FLOW CATHETER FOR URETHRAL IRRIGATION.

OPINIONS differ very much concerning the treatment of gonorrhœa by the use of antiseptic and astringent injections, but the majority of those who see much of the disease order injections of some kind to be used during one stage or another. There can be no doubt that if an injection is to do any good at all it must be properly administered, and much of the failure of injections to hasten the cure must be attributed to the inadequate method

of use. Messrs. Down Brothers of 21, St. Thomas's-street, London, S.E., have made for me a back-flow catheter through which any quantity of fluid can be made to irrigate the whole urethra without entering the bladder. The instrument is composed of a metal catheter, with a bulbous extremity, curved in the ordinary way. The eyes of the catheter consist of three apertures situated at the junction of the stem and the bulb. The greatest diameter of the bulb is three sizes larger than that of the stem. I have found that No. 4 for the stem and No. 7 for the bulb is the most useful size. The shoulder of the bulb fills up the urethra in front of the eyes and all the lotion escapes in a rapid stream at the side of the stem. The best arrangement is to attach the instrument by means of a rubber tube to a can containing one quart of the lotion. The instrument is passed with the ordinary precautions as far as the compressor urethræ, when it is naturally arrested. This is far enough for a case of anterior urethritis, but in posterior urethritis the instrument should be passed into the bladder, and then withdrawn until the bulb is felt to be just grasped by the vesical orifice. The douche can is raised three feet above the patient's bladder and the quart of lotion takes from three to five minutes to run out. An intelligent patient can be taught to do this for

himself night and morning, and provided he sterilises the catheter each time there is no more risk of septic infection than when he uses an injection with an ordinary glass syringe. The rapid improvement in cases where it is used will soon convince anyone of the practical utility of the device. An ordinary glass syringe can, of course, be used instead of the douche can.

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THE NORLEDGE EXTENSION APPARATUS.

THE illustration represents an extension apparatus for surgical purposes which seems to me to possess advantages over those at present in use. Some of its special features are that it is free from vibration, simple in construction, easily fixed, portable, slightly, and can be rendered aseptic. The apparatus consists of a frame having adjustable hooks by which it can be hooked on to the rails at the foot of the bedstead and to the frame is adjustably attached a tube through which runs a cord, having at one end means of attaching it to the leg of the patient and at the other end a weight or shot-can, a pulley being provided for the cord to pass over. A convenient form of the apparatus is two bars, each having a rigid hook at the upper end and an adjustable one at the lower end. On these bars slides a cross-bar, detainable in any required position and carrying a tube having a pulley at one end,

through which tube passes the cord. The makers are Messrs. Arnold and Sons, West Smithfield, London, E.C.
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A NEW METAL CATHETER GAUGE.

I HAVE usually found that a considerable amount of vagueness exists, not only about the numbers and diameters of the French and English catheters respectively, but also on the relation the two scales of measurement bear to each other. To obviate this I have devised the following instrument, of which the accompanying figure is an illustration. By an omission the last three numbers of the diameter in millimetres of the French catheters have been left out in the figure. The gauge is made of German silver (polished) and is 13½ inches in length and 5 inches wide. On the left-hand side the number and diameter in millimetres of the French catheters are represented, and on the right side the English. By using this gauge not only can the number and diameter in millimetres of any metal catheter be determined at once (and this is a great advantage where the numbers are only placed on the stylets, which are liable to be put back into the wrong catheters) but also the relation the French scale bears to the English can be appreciated at a glance. The gauge can be sterilised by boiling and does not tarnish. It has been made at my suggestion by Messrs. Arnold and Sons, West Smithfield, London, E.C., who after several trials have successfully surmounted all the technical difficulties in connexion with its manufacture.

METAL CATHETER GAUGE			
ARNOLD & SONS LONDON			
FRENCH		ENGLISH	
NUMBER	DIAMETER IN MILLIMETRES	NUMBER	DIAMETER IN MILLIMETRES
1	— 1/8	1	— 1/8
2	— 1/4	2	— 1/4
3	— 3/8	3	— 3/8
4	— 1/2	4	— 1/2
5	— 5/8	5	— 5/8
6	— 3/4	6	— 3/4
7	— 7/8	7	— 7/8
8	— 1	8	— 1
9	— 1 1/8	9	— 1 1/8
10	— 1 1/4	10	— 1 1/4
11	— 1 3/8	11	— 1 3/8
12	— 1 1/2	12	— 1 1/2
13	— 1 5/8	13	— 1 5/8
14	— 1 3/4	14	— 1 3/4
15	— 1 7/8	15	— 1 7/8
16	— 2	16	— 2
17	— 2 1/8	17	— 2 1/8
18	— 2 1/4	18	— 2 1/4
19	— 2 3/8	19	— 2 3/8
20	— 2 1/2	20	— 2 1/2
21	— 2 5/8	21	— 2 5/8
22	— 2 3/4	22	— 2 3/4
23	— 2 7/8	23	— 2 7/8
24	— 3	24	— 3
25	— 3 1/8	25	— 3 1/8
26	— 3 1/4	26	— 3 1/4
27	— 3 3/8	27	— 3 3/8
28	— 3 1/2	28	— 3 1/2
29	— 3 5/8	29	— 3 5/8
30	— 3 3/4	30	— 3 3/4

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