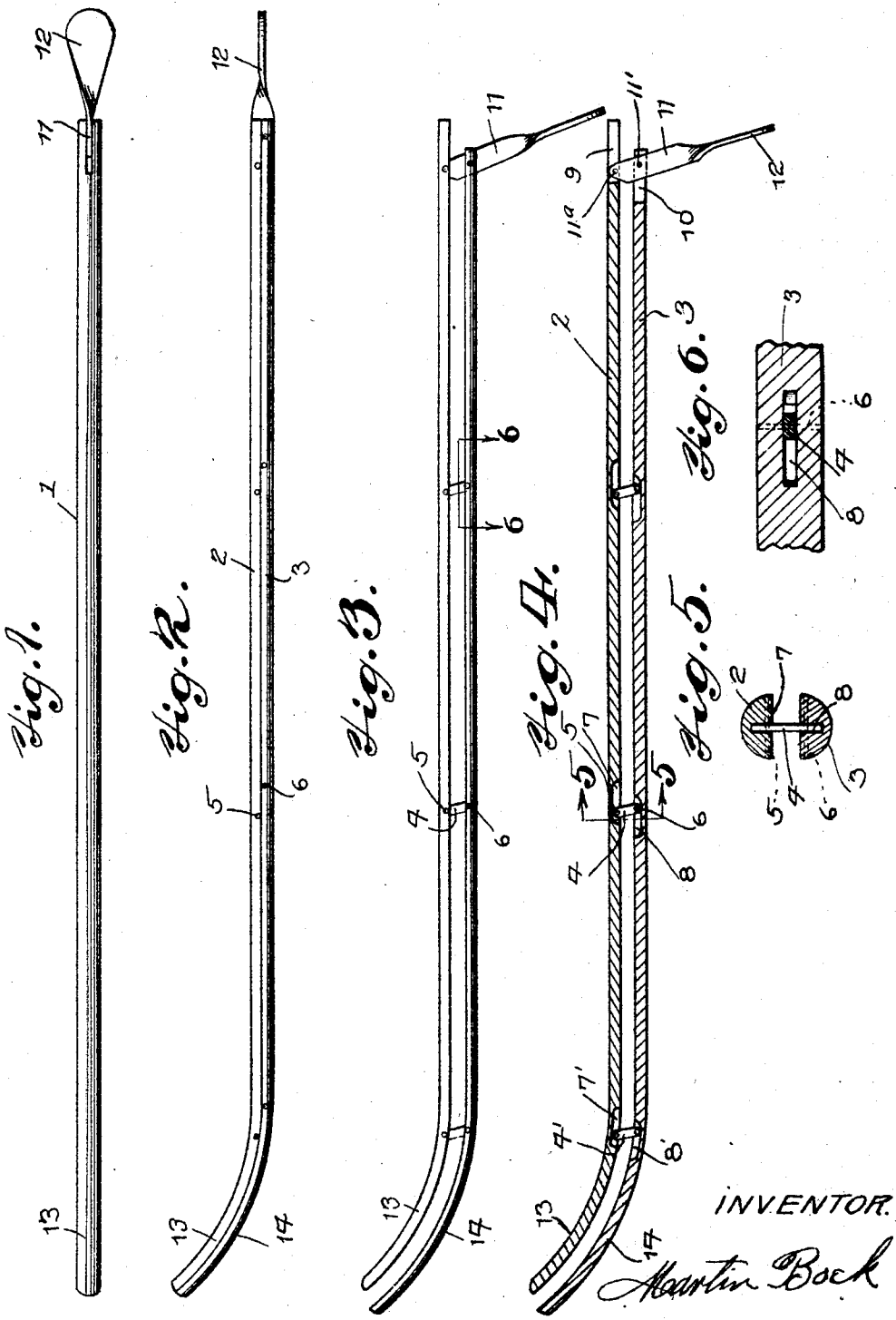
Nov. 3, 1925. 1,559,737

M. BOCK

CATHETER

Filed June 28, 1922



Patented Nov. 3, 1925. 1,559,737

UNITED STATES PATENT OFFICE.

MARTIN BOCK, OF PHILADELPHIA, PENNSYLVANIA.

CATHETER.

Application filed June 28, 1922. Serial No. 571,582.

To all whom it may concern:

Be it known that I, MARTIN BOCK, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Catheters, of which the following is a specification.

This invention relates to surgical instruments and has for its object to provide an instrument for use in the practice of urethrotomy for the purpose of expanding the urethra.

Another object of the invention is to provide a catheter by means of which the urinary canal in the male may be expanded.

With the above and other objects in view which will hereinafter more fully appear, I have invented the device illustrated in the accompanying drawings in which—

Figure 1 is a plan view of my device;

Figure 2 is a side elevational view thereof, in contracted or closed position;

Figure 3 is a similar view shown in an expanded position;

Figure 4 is a view similar to Figure 3, taken in longitudinal section;

Figure 5 is a section on line 5—5 of Figure 4; and

Figure 6 is a section on line 6—6 of Figure 3.

Like reference characters indicate like parts throughout the following specification and in the several views in the drawings in which, 1 indicates an expansion catheter which consists of a pair of longitudinal semi-cylindrical members 2 and 3 connected together by a series of expansion hinges 4, pivotally connected to the members 2 and 3 by pins 5 and 6 respectively, recesses 7 and 8 being provided in the opposing flat surfaces of the members 2 and 3 into which the hinge members 4 may seat when the device is in contracted or closed position, the pivot point 5 of the hinge 4 being at the forward end of the recess 7 while the pivot point 6 of said member is at the rear end of the opposing recess 8. The rear ends of the members 2 and 3 are provided with opposing slots 9 and 10 to receive the pivot lever 11, pivotally mounted in said slots by pivot pins 11′ and 11ª. When the device is closed, as in Figure 2, the handle 12 of the lever member 11 is in parallel alignment with the members 2 and 3. However, upon operating said handle to an angular position relative to said members 2 and 3, the member 2 is drawn rearwardly or toward the lever 11 causing the hinge members 4 to rest at substantially right angles to the members 2 and 3, thus spreading the said members apart for the purpose of expanding the urethra after the instrument has been inserted in said canal.

After the stricture has been relieved or when it is desired to withdraw the catheter, the handle 12 is again brought to a parallel position relative to the members 2 and 3, which reverses the operation and closes the members 2 and 3 upon one another whereby the instrument may be withdrawn. The forward ends 13 and 14 of the device are slightly curved in order to make them assume the proper position in the bladder. The hinge 4′ and its slots 7′ and 8′ are provided just before the curved ends 13 and 14 are reached and no hinges are placed on the curve in order that the members 2 and 3 may open and close in parallel relation to one another.

Having described my invention that which I claim to be new and desire to procure by Letters Patent is:—

1. A device of the character described consisting of a pair of semi-cylindrical members curved at one end and spreader members hingedly connecting said first members, and a lever member at the other end of said members pivotally connected to each of said members at spaced apart points.

2. A device of the character described consisting of a pair of semi-cylindrical members curved at one end and spreader members hingedly connecting said first members, and a lever member at the other end of said members pivotally connected to each of said members at spaced apart points, said members having recesses into which said spreader members are adapted to be completely enclosed.

In testimony whereof I affix my signature.

MARTIN BOCK.