

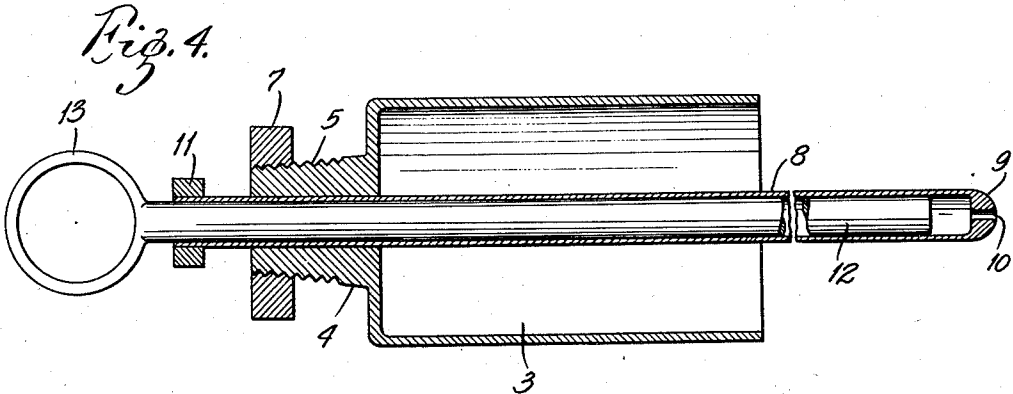
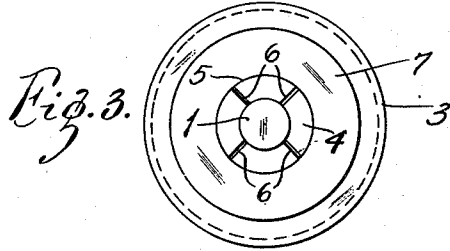
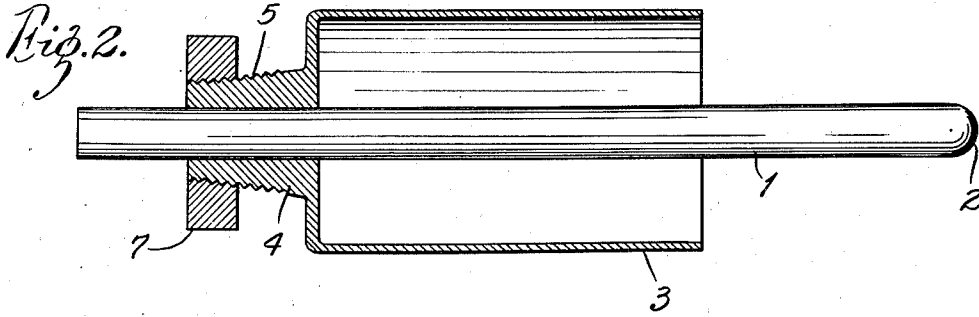
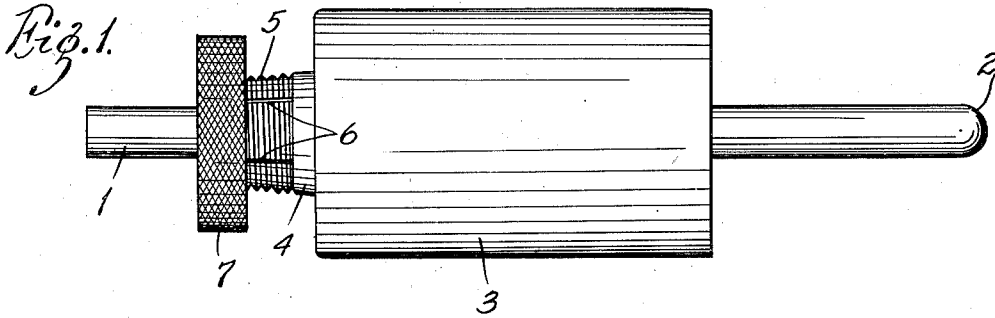
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COMBINED DILATING AND MASSAGING DEVICE

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COMBINED DILATING AND MASSAGING
DEVICE

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5 Claims. (Cl. 128—341)

This invention relates to a novel instrument for use in dilating and massaging organs of the human body and is intended for use, more particularly, in the treatment of the prostate gland.

The general object of the invention is to provide a device which will enable the operator to insert the instrument into the canal or orifice to be dilated, to massage the same and where necessary, to introduce a lubricant or suitable medicament to the part treated.

The general advantages to be attained by the use of my invention are to enable the dilation and massaging of the gland, or other part, to be effected with the minimum of pain or discomfort to the patient; to secure accuracy in the depth to which the instrument is inserted and to provide a device of such simple and unique construction that it may be inserted and manipulated with certainty, ease and facility and as stated, with the least possible discomfort to the patient.

With the above objects in view the invention consists, in one form, of a single round rod having a combined depth gauge and hand hold adjustably mounted thereon, the rod being of a suitable size for insertion in the organ, the gauge being adjustable to determine and limit the depth of insertion, and the hand hold affording a firm grasp for the operator to enable him to readily insert the rod in the organ and thereafter to manipulate the rod and massage the gland or other part without, in the case of the treatment of the prostate, having to exert pressure on the urethra.

In another form of the invention the rod is snugly fitted into an outer circular casing having an aperture in its outer end, and which itself acts as the dilator, the rod in this case serving as a piston to enable lubricant or medicament to be forced through the aperture in the end of the outer sheath or casing for application to the gland, organ, or canal being dilated or treated.

The invention is illustrated in the accompanying drawing, in which:

Figure 1 is a plan view of the invention employing the single rod construction;

Figure 2 is a longitudinal sectional view thereof;

Figure 3 is an end view; and

Figure 4 is a longitudinal sectional view illustrating a modified construction in which the dilator is in the form of a sheath or cylindrical casing and a rod or plunger is snugly fitted therein.

Referring now to the drawing, the numeral 1 indicates a round rod of highly polished steel perfectly straight and provided with a rounded end 2. This rod may be of any desired length and diameter, but a standard size would be a rod approximately 10 inches long and approximately $\frac{3}{8}$ of an inch in diameter. It will be understood,

of course, that the rod or dilator may be made in different sizes, so that a smaller size could be used for initial treatment and a larger size or sizes thereafter employed. Adjustably mounted on the rod 1 is a combined depth gauge and hand hold 3, which is preferably about 3 inches in length and $1\frac{3}{4}$ inches in internal diameter. This hand hold is inflexible or rigid, and will usually be constructed of metal or hard rubber. The combined hand hold and depth gauge is hollow or cylindrical and at its rear end is provided with a hub 4, which snugly embraces the rod. This hub is formed tapering and is exteriorly screw-threaded as indicated at 5. To enable the hand hold to be clamped on the rod the hub 4 is provided with cross slots 6, in its outer end, extending to within about $\frac{1}{4}$ of an inch of its base and a nut 7, is mounted on the hub, which when turned toward the hand hold will serve to clamp the slotted part of the hub on the rod.

It is within the purview of the invention, however, to omit the nut and simply have such a snug fit between the bore of the hub and the rod 1 that the combined hand hold and depth gauge will have little or no tendency to move on the rod after the required amount of force has been exerted to move it to an adjusted position thereon.

In the use of this form of the invention a suitable lubricant will first be inserted in the organ and the rod 1 itself also lubricated, after which it is carefully inserted in the organ, to extend through the neck of the bladder, the organ extending into the interior of the hand hold, the bottom of which limits the extent to which the rod can be inserted. The depth of the insertion can be regulated by changing the position of the hand hold on the rod 1, either by moving the same thereon against frictional resistance, or, if the binding nut 7 is used, by first loosening the binding nut and adjusting the hand hold to a desired position on the rod and then turning the nut to clamp the hub against movement from such position.

After the rod has been inserted to the desired depth the operator grasps the hand hold 2 and manipulates the rod, either to simply draw it back and forth, as might be the case in the initial stages of treatment, or to impart a circular movement to the end of the rod extending through the gland to massage the same. The hand hold enables this massaging operation to be performed without the necessity of the operator holding the organ, and thereby exerting pressure on the urethra, which in many cases produces great pain and discomfort to the patient.

In the device illustrated in Figure 4, I employ an outer tubular casing 8, having a rounded end 9, provided with an aperture 10. The inner end of this casing is provided with a knurled nut 11, 60

by means of which the casing 8 may be turned. Mounted within the casing 8 is a solid rod 12, which fits snugly in the casing so that when lubricated it practically forms an air tight connection with the inner wall of the casing 8. At its outer end the rod 12 is provided with a ring 13, to receive the thumb or finger of the hand of the operator, and in this way both the outer casing 8 and the rod 12 may be manipulated with one hand. That is to say, the operator can readily turn the nut 11 and also move the rod inward in the casing 8, which operation is used to inject a lubricant or medicament within the casing through the opening 10 in its end, so that it may be applied to the part or the organ being treated.

The combined hand hold and depth gauge may be applied to this two-piece form of the device by being secured on the casing 8 in the same way as it is secured on the rod 1, as previously described. If this hand hold and depth gauge is not employed, the device illustrated in Figure 4 is inserted in the organ in the ordinary way, and to manipulate the device for massaging the prostate, the operator will grasp the organ at its base between the thumb and forefinger to provide a pivot and the outer end of the device is then given a circular motion, which causes its inner end to have a corresponding motion and thus progressively dilate the wall of the prostate. As stated, however, it is usually desirable to avoid exerting pressure about the urethra and so I prefer to employ the hand hold with the two-piece device as well as with the single rod construction first described.

It will be understood that with the two-piece device illustrated in Figure 4, the casing 8 will be of the same diameter as the rod 1 for a given type of treatment and that it acts as the dilating and massaging element. In addition, this construction of device enables lubricant or medicament to be applied with facility to the gland, and, if necessary, along the interior walls of the urethra by the instrument, simultaneously either with the insertion or withdrawal of the device from the organ being treated.

My invention differs from instruments ordinarily used for insertion in the male organ for the treatment of the prostate in that it is perfectly straight, a device which is curved being unsuited to my purpose, as it is practically unusable for the gentle massaging of the prostate. By such treatment, I seek to remove the cause of the trouble and allow nature to reestablish normal circulation and nerve action and renew muscular control so as to restore normal functioning of the gland. Massaging of the prostate gland is a recognized method of treatment for prostatic trouble; but, so far as I am aware, this is almost uniformly done manually by way of the rectum. Such treatment, while to some extent beneficial, does not reach the real seat of the trouble, in that it does not effect dilation of the gland and massaging of the same at the precise point where restoration of circulation, nerve action and muscular control are most needed.

The massaging of the prostate can be started initially in the most gentle manner, as, in the use of the round rod of Figure 1, by moving it gently back and forth and rotating it on its axis; or, in the use of the device of Figure 2, by using

the same movements; in this case, however, the casing 8 being conveniently rotated between the thumb and finger of the hand applied to the nut or ring 11.

While I have described my invention as particularly applicable for use in the treatment of the prostate gland, it will be obvious to those skilled in the art that both forms of my invention are capable of use in other connections, such as in rectal and vaginal treatments, and the like.

I claim:

1. A combined dilating and massaging device of the class described comprising a central, straight, round, smooth and inflexible member having a rounded end and of a length and size permitting it to be inserted through the urethra and into the neck of the bladder, and a rigid circular hand hold adjustably mounted thereon to concentrically surround the same and of a size to comfortably receive the male organ when said smooth member is inserted therein.

2. A combined dilating and massaging device of the class described comprising a straight, smooth cylindrical and inflexible member having a rounded end and of a length and diameter permitting it to be inserted through the urethra and into the neck of the bladder, and a combined hand hold and depth gauge of rigid construction adjustably and concentrically mounted on said member and of a length and diameter to comfortably receive the male organ when said smooth member is inserted therein.

3. A combined dilating and massaging device of the class described comprising a straight, round, smooth and inflexible member having a rounded end and of a length and size permitting it to be inserted through the urethra and into the neck of the bladder, and a combined depth gauge and hand hold adjustably mounted on said member and comprising a rigid cylindrical element having a closed end slidably mounted on said member and an open end directed toward the rounded end of said member, said element being of a size to comfortably receive the male organ.

4. A combined dilating and massaging device of the class described comprising a straight, round, smooth member having a rounded end, and of a length and size permitting it to be inserted through the urethra and into the neck of the bladder, a combined depth gauge and hand hold of rigid construction adjustably mounted on said member and comprising an enlarged cylindrical element provided at one end with a screw-threaded hub receiving said member, said hub being tapered and slotted and provided with a nut to permit the hub to be clamped in any desired position on said member, and the cylindrical element having an open end directed toward the rounded end of said member for comfortably receiving the organ in which said member is adapted to be inserted.

5. A combined dilating and massaging device comprising a central inflexible member of a length and size permitting it to be inserted through the urethra and into the neck of the bladder, and a rigid circular hand hold adjustably mounted thereon to concentrically surround the same and of a size to comfortably receive the male organ when said member is inserted therein.

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