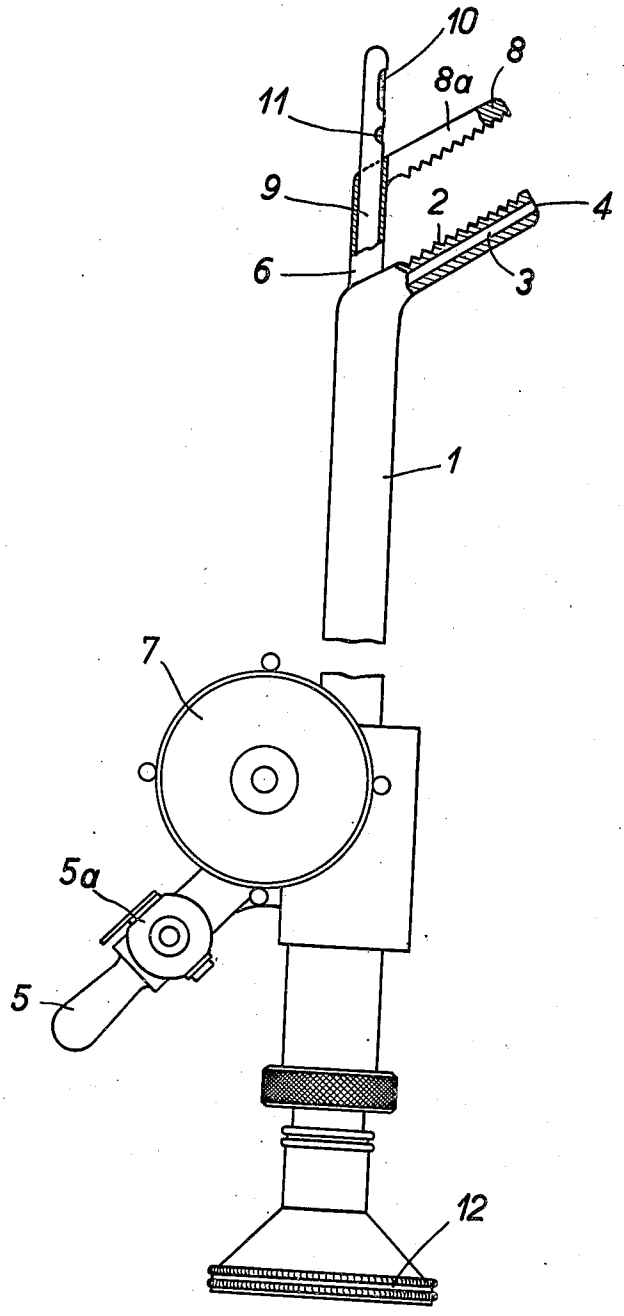
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CYSTOSCOPIC LITHOTRITE

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CYSTOSCOPIC LITHOTRITE

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1 Claim. (Cl. 128—328)

The known type of cystoscopic lithotrites is so constructed that the jaw facing the ocular end of the instrument can be moved parallel to the jaw facing in the other direction. The usual procedure adopted in manipulating instruments of this type was that, after crushing the bladder stones the lithotrite together with optical tube was removed from the bladder, whereupon an aspiration tube, as a special instrument, was introduced through the urethra into the bladder to evacuate the stones previously crushed by the forceps of the lithotrite. A further procedure also resorted to was to remove the optical tube from the lithotrite and in its place introduce an aspiration tube connected with a flushing attachment. In the latter case the facility of observation had to be dispensed with when the crushed stones were being evacuated.

In order to avoid duplicate instruments for crushing the bladder stones and evacuating them and to be able also to evacuate, under observation, the stone fragments after having crushed the bladder stones, the suggestion is made according to the present invention to fixedly connect the jaw facing the ocular end of the instrument with the sheath of the instrument and to provide along the said jaw an aspiration canal beginning at an aspiration stud disposed on the sheath of the instrument and draining at the free end of the fixed jaw. The second jaw of the forceps is disposed displaceably on the sheath in the latters' longitudinal direction. This solves the problem of carrying through with one single instrument and during observation the crushing as well as the evacuating of the crushed stones, i. e. the employment of duplicate instruments is no longer required and the patient saved the pain caused by the duplicate introduction of instruments into his bladder.

The movable jaw of the forceps is expediently made somewhat shorter than the fixed jaw. By doing so, and particularly also by the fact that the jaw facing the observer is in a fixed position, the bladder stones can be seized with a greater degree of certainty since the movable jaw facilitates fetching the stone and holding it against the fixed jaw. By shortening the movable jaw the instrument, furthermore, adapts itself more satisfactorily to the form of the bladder when crushing the stones.

In the drawing a constructional example of the invention is illustrated in lateral view with a partial section through the jaw of the forceps.

The cystoscopic lithotrite consists of a sheath 1 of approximately oval cross section and at the free end ends in a jaw 2 made of steel. On the back of the said jaw 2 an aspiration canal 3 is provided for whose mouth 4 ends flushly with the free end of the jaw 2. This canal 3 runs through the lower part of the sheath 1 of the instrument and connects with an aspiration stud 5 which can be closed by means of a hand valve 5a. Within the sheath 1 a tube-like body 6 is disposed displaceable by means of a hand wheel 7, the said body 6 ending in a second jaw 8. The said jaw 8 is provided with a perforation 8a and is somewhat shorter in length than the fixed jaw 2, i. e. the distance between the free end of the displaceable jaw and the longitudinal axis of the said sheath being smaller than the distance between the free end of the fixed jaw and the longitudinal axis of the sheath. Through the tube-like body 6 of the movable jaw 8 an optical tube 9 with a lamp 10 and with an outlook 11 is displaceably mounted. At the other end the optical tube carries an eyepiece 12, through which the operator can observe the bladder and the stones which he intends to seize and to crush. The operator is, furthermore, in a position to observe the evacuation of the stone fragments after the stones were crushed by means of the compressible parallel jaws 2 and 8 of the forceps.

I claim:

In a cystoscopic lithotrite, a hollow sheath capable of taking an optical tube, two jaws, that one of these jaws lying nearest to the ocular end of the lithotrite being fixedly connected with the sheath and the other being displaceably disposed in the longitudinal direction of the sheath, an aspiration stud on the said sheath, an aspiration canal leading from the said aspiration stud to and along the jaw fixedly connected with the sheath and ending at the free end of the said jaw.

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