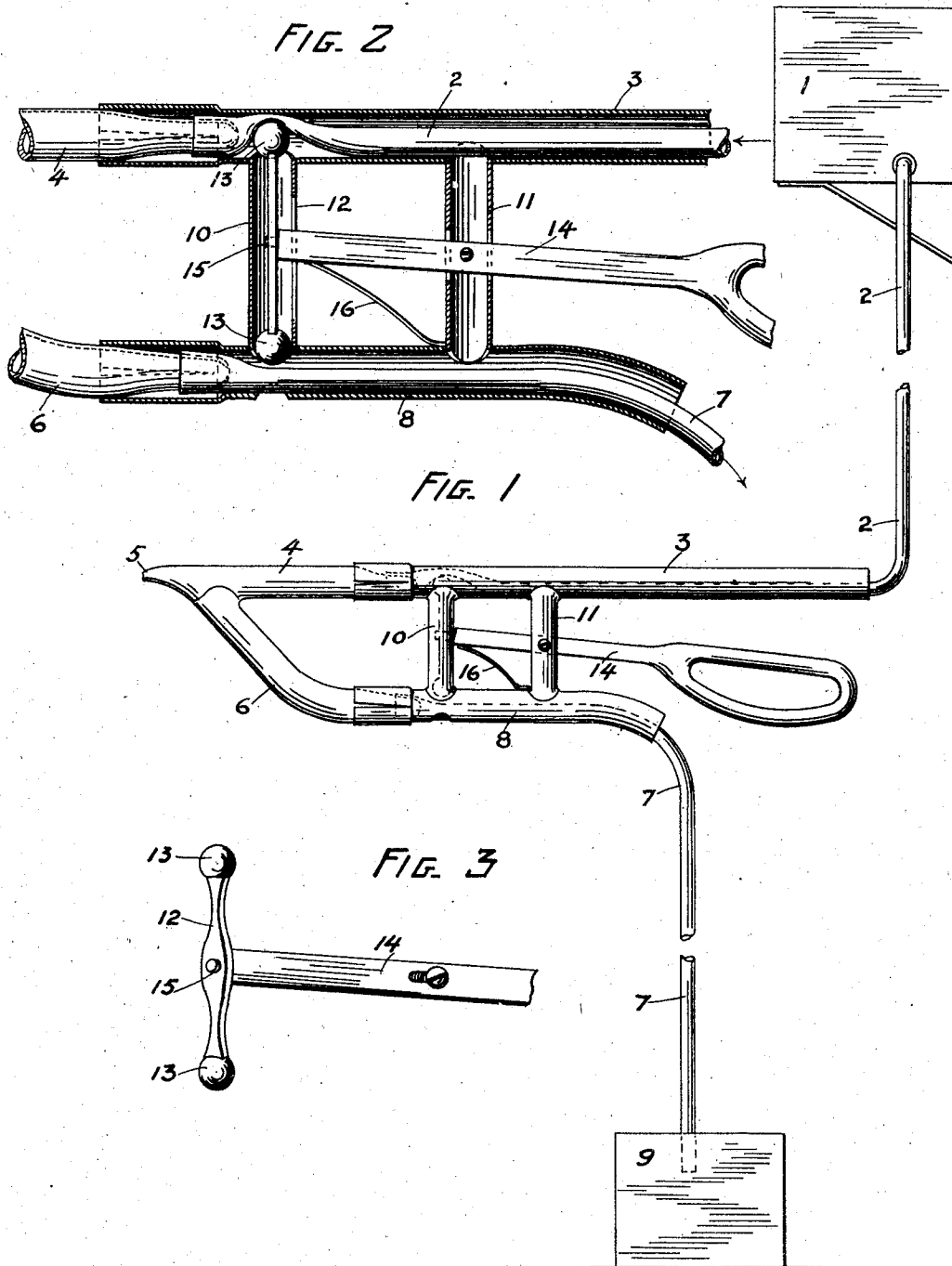


No. 790,353.

PATENTED MAY 23, 1905.

E. S. ESTLINGEN.
IRRIGATOR FOR URETHRAL OR OTHER CAVITIES.
APPLICATION FILED AUG. 31, 1904.



WITNESSES:

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UNITED STATES PATENT OFFICE.

EVERETT S. ESTLINGEN, OF SAN FRANCISCO, CALIFORNIA.

IRRIGATOR FOR URETHRAL OR OTHER CAVITIES.

SPECIFICATION forming part of Letters Patent No. 790,353, dated May 23, 1905.

Application filed August 31, 1904. Serial No. 222,901.

To all whom it may concern:

Be it known that I, EVERETT S. ESTLINGEN, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Irrigators for Urethral or other Cavities, of which the following is a specification.

My invention relates to irrigators for urethral and other cavities, the object of the invention being to provide an instrument of this character which shall be more convenient and shall admit of more rapid action than those at present in use.

In the accompanying drawings, Figure 1 is a side view of the apparatus. Fig. 2 is an enlarged vertical section of the middle portion thereof, and Fig. 3 is a perspective view of the valve and valve-lever detached.

Referring to the drawings, 1 represents a liquid-receptacle supported at a suitable height above the instrument, from which the liquid descends by a rubber tube 2, said tube passing through a metallic tube 3 and being connected with the rear end of a glass tube 4. Said latter tube extends to a nozzle 5, adapted to be inserted into the mouth of the cavity to be irrigated, and by this means the liquid is discharged into said cavity. After irrigating the cavity the liquid flows out through the nozzle into a lower glass tube 6, formed in one piece with the tube 4 and the nozzle 5, and thence by a rubber tube 7, connected to said glass tube 6 and protected by a metallic tube 8, being discharged into a suitable drain-pan or other receptacle 9. The metallic tubes 4 and 8 are connected by cross-tubes 10 11, and thus form a frame or body portion for the instrument. The rubber tubes 2 and 7 can readily be passed through the metallic tubes 3 and 8 and then attached to the rear ends of the glass tubes 4 and 6, said rear ends being then pushed back into the metallic tubes 3 and 8.

In order to control the passage of the irrigating liquid, there is provided a valve 12, having ball-shaped ends 13, sliding in the cross-tube 10 nearest the nozzle, and in the other cross-tube, 11, is pivoted a lever 14, the front end of which passes through a slot in the

tube 10 and enters a hole 15 in or near the center of the valve. A spring 16 normally presses the front end of said lever upward, and thus presses the upper ball-shaped end 13 of the valve against the rubber tube 2 and closes the same against the descent of the liquid. By raising the rear end of the lever with the hand the valve is depressed and opens the tube 2, allowing the liquid to descend, at the same time closing the tube 7. Upon removing the upward pressure of the hand the valve again rises, closing the upper tube and opening the lower and allowing the liquid to drain out of the cavity. The instrument thus permits of the operation of irrigation being repeated without the necessity of removing and replacing it, whereas in prior instruments for this purpose this removal was necessary for each flushing therewith.

I claim—

1. An instrument of the class described comprising supply and discharge tubes, a common nozzle therefor, and a valve simultaneously closing one of said tubes and opening the other, substantially as described.

2. An instrument of the class described, comprising metallic upper and lower tubes, rubber tubes therein, a common nozzle with which said rubber tubes are connected, a valve passing into the metallic tubes and engaging the rubber tubes alternately, and means for operating said valve, substantially as described.

3. An instrument of the class described, comprising metallic upper and lower tubes, rubber tubes therein, a common nozzle with which said rubber tubes are connected, a valve passing into the metallic tubes and engaging the rubber tubes alternately, means for operating said valve, said means comprising a spring acting to close the upper tube, and a lever acting against said spring, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two subscribing witnesses.

E. S. ESTLINGEN.

Witnesses:

FRANCIS M. WRIGHT,
BESSIE GORFINKEL.