(Model.)

G. W. GOODNER.

SYRINGE.

No. 289,528. Patented Dec. 4, 1883.

Fig. 1.

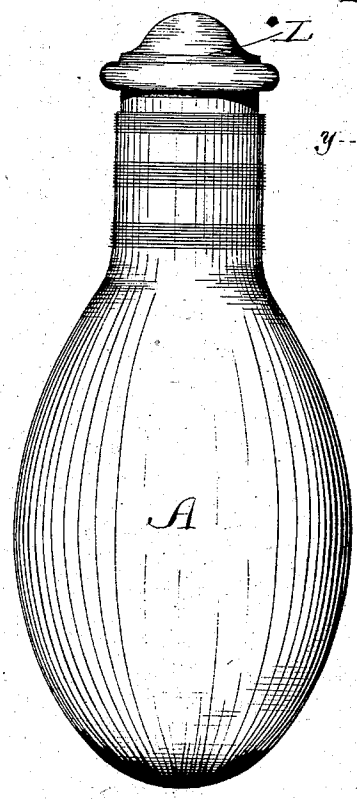


Fig. 3.

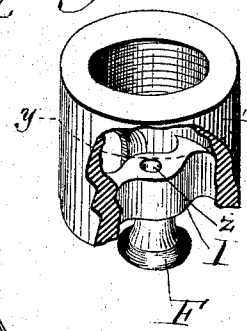


Fig. 2.

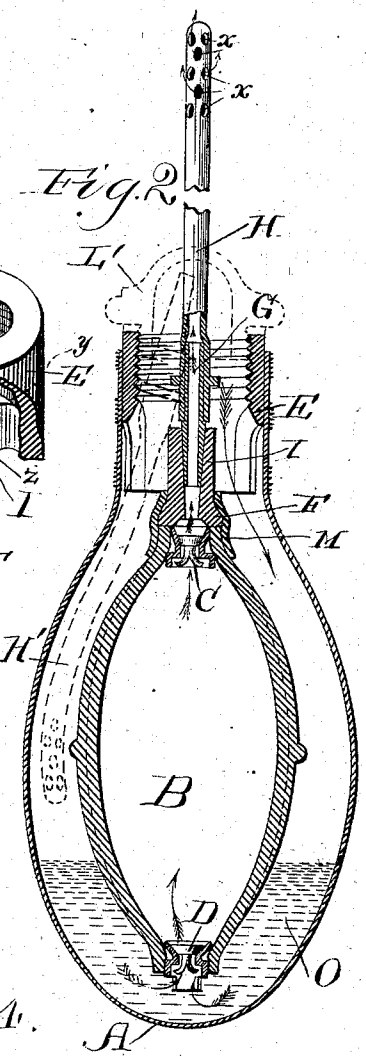
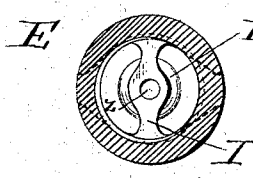


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE WASHINGTON GOODNER, OF CHICAGO, ILLINOIS.

SYRINGE.

SPECIFICATION forming part of Letters Patent No. 289,528, dated December 4, 1883.

Application filed June 7, 1882. (Model.)

To all whom it may concern:

Be it known that I, GEORGE WASHINGTON GOODNER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Syringes, of which the following is a specification.

My invention relates to improvements in syringes, especially such as are used in treating ureteritis and gonorrhea; and the objects of my improvements are, first, to provide a syringe which need not be removed from the urethra during the process of injection; second, to combine a syringe provided with a bulb or bulbs and valves with a bottle or reservoir which incloses it and contains the fluid to be used; third, to combine with a syringe a sack or bottle, so that the liquid, as it passes out of the urethra or vagina, will return again to the bottle for use; fourth, to provide a syringe so constructed that a continuous flow of fluid can be maintained through the parts treated, the irritation caused by the friction of numerous insertions being thereby avoided. I attain these objects by the mechanism hereinafter described, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the device when closed. Fig. 2 is a vertical section taken through the center of the syringe, showing all the parts in operation. Fig. 3 is a broken perspective view of the neck of the bottle. Fig. 4 is a section of the neck of the bottle, taken through the line *y y* in Fig. 3.

Similar letters refer to similar parts throughout the several views.

A is a fluid bottle or reservoir, inside of which is placed the syringe bulb and valves.

In B, C, and D are check-valves placed in the ends of the bulb and opening in the same direction.

E is a neck, which is secured in the top of the reservoir.

I, is a rib extending across and within the same.

F is a tubular projection attached to the rib, and secured to the bulb by the band M.

H is a tube having the perforations *x x x*, and attached by the telescopic coupling G to a tubular opening, Z, in the rib I. The openings X X X may be of any size, shape, or number, and placed as desired. The connection between the bulb and tube H may be made as desired.

L is a stopper, with which the reservoir and syringe are closed, the tube H being then placed in the position shown by dotted lines H′ in Fig. 2.

O indicates the fluid in the bottom of the reservoir, and the arrows the course which it takes when the device is operated.

The operation of my device is as follows: The stopper L having been removed, the fluid is poured into the reservoir through the openings in the neck-piece E. The tube H is then coupled to the bulb B, as shown in Fig. 2, and inserted in the part to be treated. The reservoir and bulb are then compressed to form a vacuum in the latter, whereby the fluid is drawn from the reservoir through the valve D into the bulb. A second compression repeats this action and forces the fluid in the bulb through the valve C, tubular projection F, rib I, coupling G, and tube H into the parts to be treated. The fluid, after bathing the parts, is returned into the neck E, and thence through the openings into the bottle A.

When the device is used to treat the urethra or other parts, the tube H is of such a length as to bring the lower end of the urethra or vagina into the upper end of the neck E, the person retaining its natural position while treating the same, thereby rendering the action of the device the more certain and perfect.

I do not confine myself to the precise form of device above described, and shown in the drawings, as numerous modifications thereof can be easily devised; but

What I do claim, and desire to secure by Letters Patent, is—

1. The combination of a syringe provided with suitable valves in the bulb, one of which communicates with an inclosing fluid-reservoir about said bulb.

2. The combination of a syringe provided with suitable valves in the bulb, an inclosing fluid-reservoir about the bulb, and a suitable connecting-piece, I, in the end of the fluid-reservoir.

3. In a syringe-reservoir, the combination of a sack, A, neck E, rib I, having the perforation Z, and the tubular projection F.

4. In a vaginal or urethral syringe, the combination of the bulb B, having the valves C and D, with the reservoir A, having the neck-piece E and the tube H connected thereto.

GEORGE WASHINGTON GOODNER.

Witnesses:
SIDNEY THOMAS,
HARRISON D. PAUL.