No. 818,814. PATENTED APR. 24, 1906.

M. L. BOSWORTH.

VAGINAL SYRINGE.

APPLICATION FILED NOV. 7, 1905.

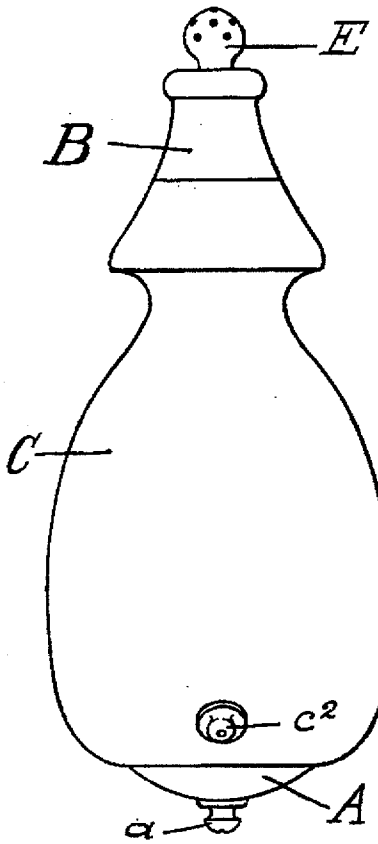


FIG. 1.

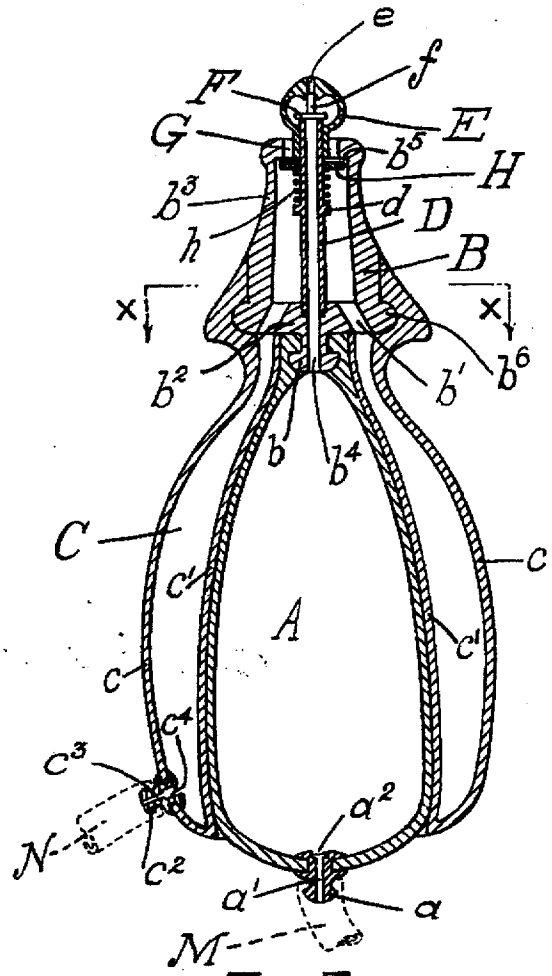


FIG. 2.

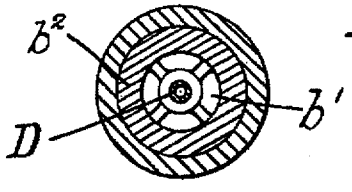


FIG. 3.

WITNESSES.

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MARTIN L. BOSWORTH, OF BRISTOL, RHODE ISLAND, ASSIGNOR OF ONE-HALF TO EDWARD J. BROWNELL, OF BRISTOL, RHODE ISLAND.

VAGINAL SYRINGE.

No. 818,814. Specification of Letters Patent. Patented April 24, 1906.

Application filed November 7, 1905. Serial No. 286,201.

To all whom it may concern:

Be it known that I, MARTIN L. BOSWORTH, a citizen of the United States, residing at Bristol, in the county of Bristol and State of Rhode Island, have invented certain new and useful Improvements in Vaginal Syringes, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to vaginal syringes, and has for its objects the ends commonly sought in this class of devices, but more particularly to secure a continuous flow of the cleansing liquid and insure against a repeated use of the latter.

My invention consists in supplying a plurality of independent compressible receptacles, one of which contains and injects the cleansing liquid and the other of which coacts with the first to exhaust or discharge the liquid after contamination.

In the accompanying drawings, which form a part of this specification, Figure 1 is a side elevation of a syringe embodying my invention; Fig. 2, a central vertical section of the same, and Fig. 3 a transverse section on line $x\,x$ of Fig. 2.

Like reference characters indicate like parts throughout the views.

My syringe in its approved form of embodiment comprises a compressible rubber supply or injection bulb or receptacle A, fixed to a knob b, projecting downwardly from a hard-rubber neck-piece B. The latter is provided with circularly-disposed apertures b' in its base b^2 and has an exteriorly-inclined distending wall b^3. Engaging an exterior retaining-bead b^6 upon the neck-piece B is the upper margin of the outer wall c of a compressible rubber receptacle C, whose inner wall c' is cemented to or coincident with the wall of bulb A. A retaining-knob c^2, with an opening or passage c^3 therethrough into receptacle C, is located in the lower portion of wall c and said opening provided with a valve c^4. The bulb A is also provided at its lower extremity with a retaining-knob a, having an opening or passage a' therethrough into the receptacle A, and is provided with a valve a^2.

An inlet-tube D is fixed in the base b^2 of the neck-piece and connects, through a passage b^4 in the latter, with the receptacle A. Upon the upper end of the tube D is mounted a perforated nozzle E, provided with a vertical passage e in its apex to receive as a sliding fit the stem f of a valve F, which is seated upon the end of the inlet-tube D. By the above construction an annular channel or opening G occurs intermediate nozzle E and distending wall b^3. Seated upon an internal shoulder b^5 of the latter is a valve H, supported by a spring h, resting upon an annular shoulder d on the inlet-tube D.

To the knobs a and c^2 may be attached flexible supply and waste pipes, respectively, (shown in broken lines in Fig. 2 as M and N.)

The operation of my new syringe is as follows: The manual compression and release of the receptacles or sacks A and C charges the former with the cleansing fluid, which enters through the valve a^2. A second compression of the sacks forces the fluid through the passages b^4, elevating the valve F, and issues through the perforated nozzle E to cleanse the vaginal cavity. The release of pressure upon the receptacle permits the valve F to descend and close the passage through inlet-tube D. The simultaneous release of the receptacle C causes a suction which, together with the weight of the water in the vaginal cavity, depresses the valve H against the tension of spring h, permitting and drawing the used liquid through the channel G and apertures b' into the exhaust-receptacle C. The next manual compression of the sacks discharges the waste water from receptacle C through the valve c^4.

Having described my invention, what I claim is—

1. In a vaginal syringe the combination with an injection-receptacle for the cleansing liquid, of suctional means coacting with the injection-receptacle for removing the liquids, the egress and ingress passages being concentric and the egress-passage extended beyond and unobstructing the ingress-passage.

2. In a vaginal syringe the combination with a compressible injection-receptacle, of a compressible exhaust-receptacle, a neck-piece with concentric egress and ingress passages and the egress-passage extended beyond and unobstructing the ingress-passage, and valvular means for controlling the flow of liquid into the exhaust-receptacle after its discharge from the injection-receptacle.

3. In a vaginal syringe, the combination with a compressible injection-receptacle of a valve-controlled supply-inlet in the injection-

receptacle, a compressible exhaust-receptacle, and a valve-controlled discharge-outlet in the exhaust-receptacle, a neck-piece with concentric egress and ingress passages and the egress-passage extending beyond and unobstructing the ingress-passage.

4. In a vaginal syringe the combination with a neck-piece, provided with concentric ingress and egress apertures, the egress-passage extended beyond and unobstructing the ingress-passage and a distending wall of a compressible injection-receptacle attached to the neck-piece an inlet-tube in the neck-piece, a nozzle on the inlet-tube, a second compressible receptacle on the neck-piece connecting with the apertures, and a valve controlling the flow through the inlet-tube.

5. A vaginal syringe comprising a neck-piece with chamber with apertures at the base and apertures at its outer end, a central tube, a perforated nozzle, a valve therein closing the outer end of said tube, a spring-actuated valve movable on said tube to close the said apertures in the outer end of the neck-piece, and concentric compressible receptacles secured to said neck-piece, the inner one communicating with said tube.

In testimony whereof I have affixed my signature in presence of two witnesses.

MARTIN L. BOSWORTH.

Witnesses:
HORATIO E. BELLOWS,
WILLIAM H. WRIGHT.

Correction in Letters Patent No. 818,814.

It is hereby certified that the name of the assignee in Letters Patent No. 818,814, granted April 24, 1906, upon the application of Martin L. Bosworth, of Bristol, Rhode Island, for an improvement in "Vaginal Syringes," was erroneously written and printed "Edward J. Brownell," whereas the said name should have been written and printed *Edward I. Brownell;* and that said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 15th day of May, A. D., 1906.

[SEAL.]

F. I. ALLEN,
Commissioner of Patents.