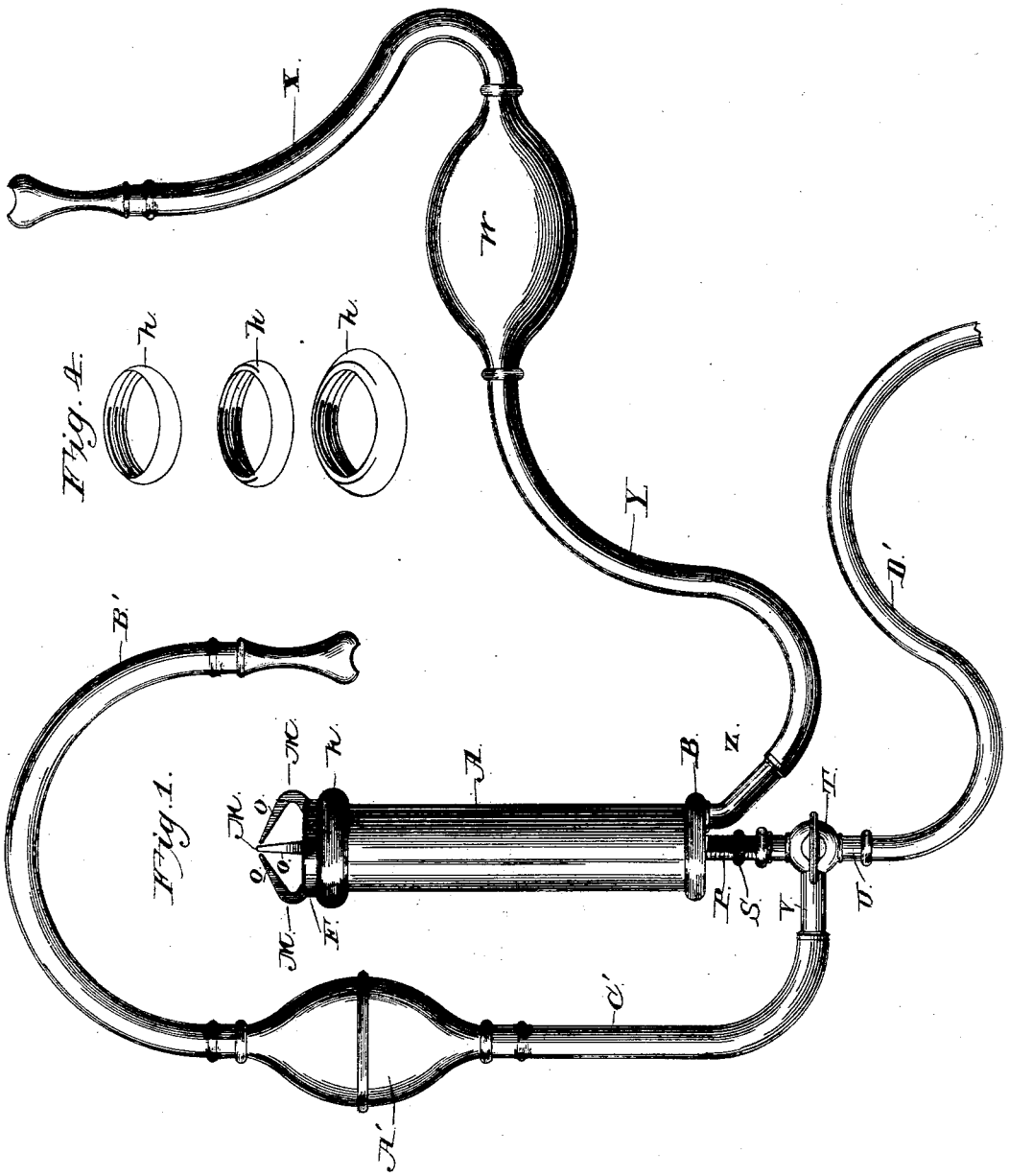
(No Model.) 2 Sheets—Sheet 1.

# J. M. COOMBS.

## VAGINAL SYRINGE.

No. 385,911. Patented July 10, 1888.




Witnesses.
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E. G. Siggers.

Inventor,
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By his Attorneys
C. A. Crowell.

(No Model.) 2 Sheets—Sheet 2.

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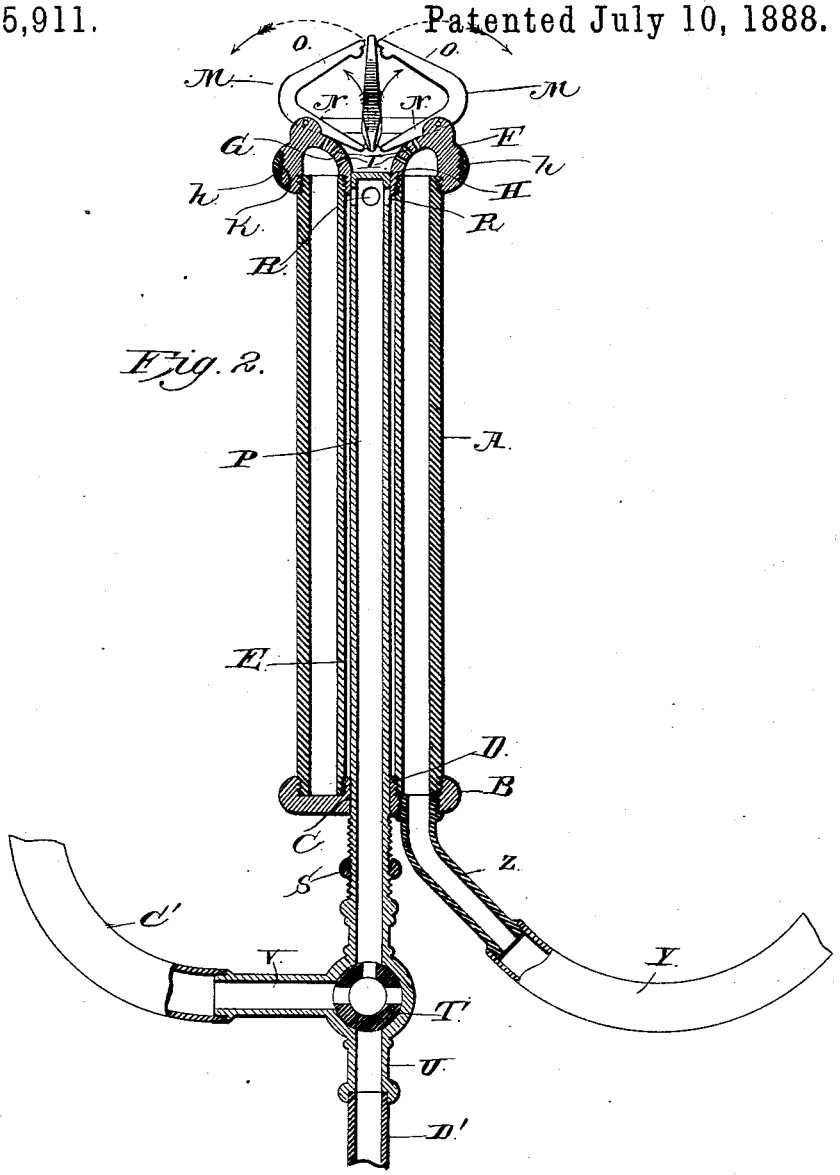
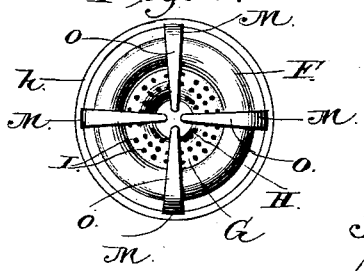



Fig. 2.

Fig. 3.




Witnesses,
M. Fowler.
E. L. Siggers.

Inventor,
John M. Coombs,
By his Attorneys
C. A. Snow & Co.

# UNITED STATES PATENT OFFICE.

JOHN M. COOMBS, OF HICKSVILLE, OHIO.

## VAGINAL SYRINGE.

SPECIFICATION forming part of Letters Patent No. 385,911, dated July 10, 1888.

Application filed January 11, 1888. Serial No. 260,422. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN M. COOMBS, a citizen of the United States, residing at Hicksville, in the county of Defiance and State of Ohio, have invented new and useful Improvements in Vaginal Syringes, of which the following is a specification.

My invention relates to improvements in vaginal syringes; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

The object of my invention is to provide a syringe by means of which the vagina and cervex uteri may be washed and medicated without permitting the escape of fluid and soiling the linen or bedding of the patient.

In the accompanying drawings, Figure 1 is an elevation of my improved syringe and its attachments complete. Fig. 2 is a vertical central sectional view of my improved syringe. Fig. 3 is an end view of the same. Fig. 4 is a detailed perspective view of the series of interchangeable rings.

A represents the outer cylindrical tube of the syringe, which is of suitable size to be introduced into the vagina, and has exterior screw-threads at its upper and lower ends. To the lower end of the tube A is screwed a head, B, having a central axial opening, C, and a circular boss or sleeve, D, that projects upwardly from its upper side. The exterior of this boss or sleeve is provided with screw-threads.

E represents an interior smaller tube, which is arranged centrally in the tube A and has its lower end screwed to the boss or sleeve D.

To the upper end of the tube A is screwed a head or cap, F, having a concavo-convex central diaphragm, G, provided with a central opening, H, and having a series of radially-arranged perforations, I. The lower side of the said diaphragm enters and is screwed to the upper end of the tube E. The outer side of the head or cap is provided with screw-threads K, adapted to be engaged by either of a series of interchangeable rings, *h*, of different external diameters for the purpose of enabling the head or cap to fit snugly against the walls of the vagina or cervex uteri and preventing the escape of fluid from around the syringe.

M represents a series of dilators, each of which is substantially in the form of a letter V, having a lower arm, N, and an upper arm, O. The said dilators are pivoted in notches made in diametrically-opposite sides of the upper edge of the head or cap by means of pivotal pins which extend through the arms N of the dilators near the outer ends of the said arms.

P represents a small central tube that passes through and is fitted snugly in the central opening of the head B and has its upper closed end passed through the central opening in the head F. The upper end of the tube P is closed, and openings R of considerable diameter are made in its sides. The tube P is movable longitudinally in the syringe and has its lower portion provided with screw-threads, with which is engaged an adjusting or stop nut, S. At the lower end of the tube P is formed a three-way cock, T, having a stem, U, and a stem, V, at right angles thereto.

W represents a compressible valved bulb, of the usual well-known construction, having an induction-pipe, X, and a pipe, Y, that is connected to a stem, Z, which depends from the head B and communicates with the annular space between the cylinders A and E.

A′ represents a similar compressible bulb having an induction-pipe, B′, and a pipe, C′, that is connected to the stem V. To the stem U is attached a pipe, D′, that when the device is in use leads to a suitable receiving-vessel.

In operation the nozzle at the lower end of the pipe X is submerged in a vessel of water. The nozzle at the lower end of the pipe B′ is submerged in a vessel containing a medicinal solution. The cock is first turned so as to establish communication between the tube P and the pipe D′. The syringe is inserted in the vagina, first having been provided with a ring, *h*, of suitable size, and the tube P is moved so that its inner end engages the arms N of the dilators and turns them sufficiently on their pivots to cause their arms O to distend the vagina or cervex uteri and expose its surface. The bulb W is then operated to cause water to be forced through the pipe Y into the outer tube of the syringe and through the radial perforations I in jets against the walls of the vagina or cervex uteri, so as to thoroughly wash

the same. The fluid or water, together with the washings, escape through the openings R into the tube P and from the latter past the cock through the pipe D′ and into the receiving-vessel. The head of the syringe being provided with a ring, *h*, of suitable size prevents the escape of fluid from around the outside of the syringe, and consequently prevents the linen and bedding of the patient from being soiled.

When the washing or cleansing process has been completed, the operation of the bulb W is discontinued, the cock is turned so as to establish communication between the pipe C′ and the tube P, and the bulb A′ is operated, thereby causing the medicinal solution to be forced into the vagina or cervex uteri from the openings in the said pipe P.

The adjusting nut or stop by coming in contact with the head B enables the tube P, when forced in, so as to distend the dilators, to be held at any desired adjustment, as will be readily understood.

Having thus described my invention, I claim—

1. A syringe having the outer tube, A, provided with the perforated head or cap, and the central tube, P, extending through the said outer tube and through the cap or head, substantially as described.

2. The syringe having the head or cap provided with the concavo-convex radially-perforated diaphragm, substantially as described.

3. The combination, in a syringe, of the pivoted dilators having the outer arms, O, and inner arms, N, and the longitudinally-movable tube P, adapted to engage the arm N, for the purpose set forth, substantially as described.

4. The syringe having the head or cap and the interchangeable rings of different external diameters adapted to be secured to said head or cap, substantially as specified.

5. The combination of the outer tube, A, having the heads B and F at opposite ends, the latter being perforated, the tube E, arranged in the tube A and screwed to the heads, and the tube P, extending through the tube E and through the heads, substantially as described.

6. In a syringe, the combination of the cylinder, the dilators pivoted at one end thereof, the tube movable longitudinally through the cylinder and acting on the dilators to operate the same, and the adjustable nut on the outer end of said tube, as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOHN M. COOMBS.

Witnesses:
J. C. RYAN,
GEO. B. WILSON.