## W. B. SPENCER. VAGINAL SYRINGE

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

### United States Patent Office,

WILLIAM BARTON SPENCER, OF CHICAGO, ILLINOIS.

#### VAGINAL SYRINGE.

SPECIFICATION forming part of Letters Patent No. 474,506, dated May 10, 1892.

Application filed June 26, 1891. Serial No. 397,650. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BARTON SPENCER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Vaginal Syringe, of which the following is a

specification.

My invention relates to improvements in vaginal syringes; and it has for its object to to provide a syringe that will adjust and support itself upon the person while conducting the water or medicated solutions to and from the vagina during the ordinary injections or washings without permitting the hands or ad-15 jacent parts or clothing being wet or soiled, and at the same time to provide an instrument in which there shall be a continuous and uninterrupted circulation through the vaginal canal when desired, and, lastly, to 20 provide a syringe that is designed for application to the person while in a standing posture, when the parts are all in their normal and natural position and most favorable to receive the douches, thus avoiding the disa-25 greeable and disadvantageous manner of having to stoop low to make the ordinary injections.

With these objects in view the invention consists of a series of telescopic tubes or a vertical adjustment of the outlet-pipe, combined with a discharge-receiving cup, and special details of construction hereinafter more fully described, illustrated in the accompanying drawings, and specifically pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a vertical section of a syringe constructed in accordance with my invention in connection with supply and drain receptacles. Fig. 2 is 40 a similar view of a modification. Fig. 3 is another modification. Fig. 4 is a plan view

of the discharge-receiving cup.

Referring to the drawings by letter, A designates the back-receiving reservoir or cup, which is constructed of any suitable material and is made in an elliptical shape and in conformity to the anatomy of the body at the point of application. Depending from the tapering end of this cup is a conducting-tube B, that is designed to conduct the discharge

from the cup, and is jointed at b to the extended tube C of smaller diameter than the same. Upon said tube C a telescoping section D is designed to work and automatically adjust itself upon tube C, working against the 55 tension of the coiled spring E, wound around said tube and secured to the upper flanged end d of the tube D. Within the lower end of said spring-pressed tube D a supplemental sliding tube F slides and is adjusted in 60 length by means of the set-screw f, located at the lower extremity of tube D, thus completing the full length of the discharge-tube, which, as can be readily seen, can be adjusted to suit the height of person upon which the 65 same may be used and to give to any pressure that may be exerted upon the same. The tube F is provided with a series of outletopenings f' for permitting the free escape of the liquids and also with a cushion or non- 70 metallic foot  $f^2$ , which is designed to rest upon the bottom of the receptacle G.

A sliding tube H works within the upper end of the depending tube B and the cup A, and is provided with a top convex shield or 75 cap h and lateral elongated slots h', which allow the escaping liquids access through the conducting-tubes to the discharge-pail. The shield or cap h serves the function of a shield to the parts with which it may come in contact and is provided with a centrally-located perforation  $h^2$ , through which the supply-tube I passes, the enlarged end i, upon which is mounted the nozzle J, being supported upon said cap or shield, and is adjusted to any 85 height desired by means of the sliding tube H.

The supply-pipe I enters the discharge-receiving cup A through a lateral perforation a, located somewhat near its apex, and communicates by means of a suitable nipple connection, as i', with the pipe  $i^2$  of an ordinary fountain-syringe or the pipe  $i^3$  of any other desired syringe, but in this case is preferably in connection with the bulb-syringe K, which draws the liquid used in the irrigation or washing from the pail or receptacle L. To the end of the syringe-tube within the pail a perforated metallic nipple M joins the same with the section of tubing N, which is attached to the stopcock O, located at the lower end of the extended

tube B and designed to return the solution to its source, and thus provides a continuous circulation of the liquid back and forth, the tube B at this point being provided with a corked

5 joint b to effect the circulation.

The requisite adjustment of the syringenozzle and length of the whole apparatus is obtained by a slight modification of the telescoping discharge-tubes, as shown in Fig. 2. 10 In lieu of the spring-actuated sections and the sliding tube supporting the cap or shield h, a rod P, of steel or other suitable flexible material, constructed of the desired length by means of a series of jointed sections p, is de-15 signed to support the nozzle up within the vagina. Rod P is provided with an adjustable lower section p', regulated by the setscrew  $p^2$ , and is designed to enter the apex of the cup A through the perforation q in the 20 discharge-tube Q, that is designed to replace the spring-actuated and telescopic sections of Fig. 1. The perforation is located at the bottom of said discharge-tube Q when the same is used to direct the discharge directly to the 25 discharge-pail; but the same may be easily reversed when arranging for the continuous circulation of warm water or other solutions. The upper end of this rod is suitably secured to the cap or shield h, which carries and sup-30 ports the nozzle, and is adjusted to and from the body, according to the length of insertion desired, by means of the set-screw R, located at or near the apex of the cup. The operation is identical with that of the main apparatus, 35 and otherwise is the same in all its parts, with the exception of the syringe return-pipe, the pipe being connected with the cup at or near its lower end.

The other modification illustrated in Fig. 40 3 shows a simplification of the other forms, but with a retention of their principles and primary construction. The rod P is dispensed with, excepting a sufficient length below the apex of the cup, so as to allow the adjustment of the crown or shield attached thereto, while the discharge-tube is in direct communication with the syringe or escape-water pail. An encircling band S, passing around the body of the cup and provided with a handle S', re-50 places the adjustable sections and rod of the other forms and provides a support for the instrument during use.

The operation of the apparatus is thought to be apparent without further description.

Having described my invention, what I claim is—

1. In a vaginal syringe, a conico-elliptical back-receiving reservoir, a supply-pipe and nozzle communicating with the interior there-60 of, and a vertically-adjustable telescoping discharge-pipe, substantially as set forth.

2. In a vaginal syringe, the combination, with the conico-elliptical back-receiving reservoir and discharge-pipe, of a suitable support, 65 a supply-pipe and nozzle communicating with the interior of said reservoir, and a returnpipe in connection with the discharge of the

reservoir and in circuit with the syringe and supply-pipe, substantially as set forth.

3. In a vaginal syringe, a back-receiving 70 reservoir provided with a lateral perforation and extended discharge-pipe, a supply-pipe and nozzle communicating with the interior of said reservoir through said perforation, and telescopic discharge-sections connecting 75 said extended pipe with the receiving-receptacle, substantially as set forth.

4. In a vaginal syringe, a back-receiving reservoir provided with a lateral perforation and extended discharge-pipe, a supply-pipe 80 and nozzle communicating with the interior of said reservoir through said perforation, telescopic discharge-sections connecting said extended pipe with the receiving-receptacle, and a spiral spring interposed between said 85 sections to adjustably regulate the height of the instrument, substantially as set forth.

5. In a vaginal syringe, a back-receiving reservoir provided with a lateral perforation and extended discharge-pipe, a sliding tube 90 vertically adjustable in said discharge-pipe and reservoir and provided with lateral outlet-openings, a crown or shield secured to the upper end of said sliding tube, a supply-pipe and nozzle communicating with the interior 95 of said reservoir through said lateral perforation and supported vertically upon said crown or shield, and spring-actuated telescopic sections connecting said discharge-pipe with the receiving-receptacle, substantially as set forth. 100

6. In a vaginal syringe, a back-receiving reservoir provided with a lateral perforation and extended discharge-pipe, a sliding tube vertically adjustable in said discharge-pipe and reservoir and provided with lateral out- 105 let-openings, a crown or shield secured to the upper end of said sliding tube, a supply-pipe and nozzle communicating with the interior of said reservoir through said lateral perforation and supported vertically upon said crown 110 or shield, a return circulating-pipe connected with the lower end of said extended dischargepipe and the syringe-supply pipe, and springactuated telescopic sections connecting said discharge-pipe with the receiving-receptacle, 115 substantially as set forth.

7. In a vaginal syringe, a back-receiving reservoir provided with a lateral perforation and extended discharge-pipe, a sliding support vertically adjustable in said pipe and res- 120 ervoir, a convex crown or shield secured to the upper end of said sliding support and provided with a centrally-located perforation, a supply-pipe and nozzle communicating with the interior of said reservoir through said lat- 125 eral perforation and passing through the perforated crown or shield and vertically supported thereupon, a return circulating-pipe connected with the lower end of said dischargepipe, a perforated nipple joining said return- 130 pipe with the syringe-supply pipe, and a suitable adjustable support for the instrument, substantially as set forth.

8. In a vaginal syringe, a back-receiving

reservoir provided with a lateral perforation, a discharge-tube, a vertically-adjustable support passing through said tube and within the reservoir, a convex crown or shield secured to the top of said support and provided with a perforation, a supply-pipe and nozzle communicating with the interior of said reservoir through said lateral perforation and passing through the perforated crown or shield, and a return circulating-pipe connected with the

discharge of the reservoir, substantially as set forth.

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

### WILLIAM BARTON SPENCER.

Witnesses:

WILLIAM E. NILES, ASA D. HYDE.