A. L. MARSH.

VAGINAL SYRINGE.

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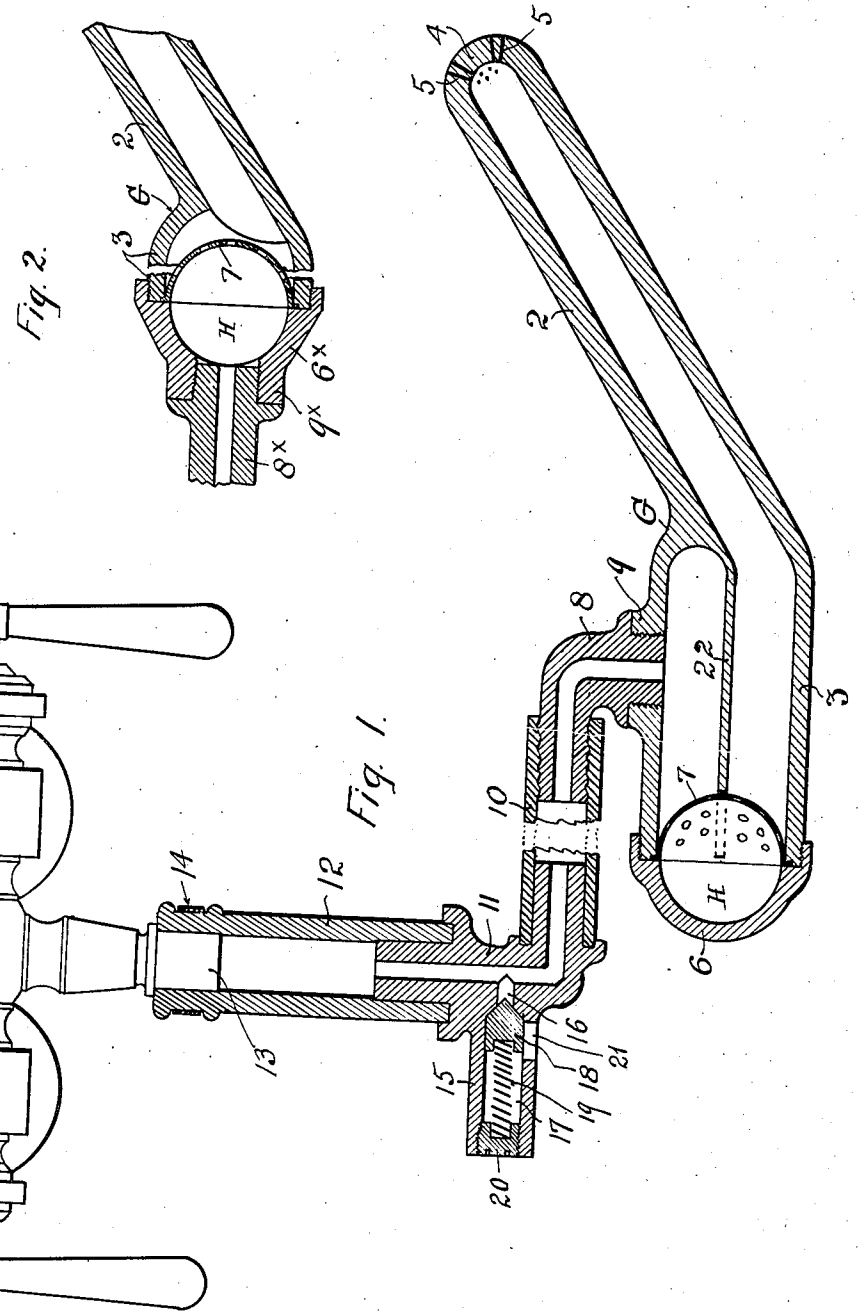
1,007,468.

Patented Oct. 31, 1911.



Witnesses:
Emil L. Aaron
Walter Zeglin.

Inventor:
Alfred L. Marsh,
By his Attorney,
Richard W. Barkley.

UNITED STATES PATENT OFFICE.

ALFRED L. MARSH, OF RICHMOND HILL, NEW YORK.

VAGINAL SYRINGE.

1,007,468. Specification of Letters Patent. Patented Oct. 31, 1911.

Application filed February 28, 1911. Serial No. 611,351.

To all whom it may concern:

Be it known that I, ALFRED L. MARSH, a citizen of the United States, and a resident of Richmond Hill, in the county of Queens and State of New York, have invented certain new and useful Vaginal Syringes, of which the following is a specification.

This invention relates to vaginal syringes, the primary object being to provide a simple, efficient, compact and durable instrument, a further object being to mix a medicament with the douche.

In the practice of the invention, I provide two tubes of unequal diameters, the free end of the smaller of which tubes is closed but perforated to form a rose or the like, while the larger tube joins on to the other end of said smaller tube and is provided with a perforated diaphragm behind which one or more tablets of the medicament may be placed, and the douche is directed through the holder formed by said diaphragm and the tube-end adjacent thereto. The tubes are joined by a shoulder or the like, which forms a guard; by preference, the tubes intersect at an angle to each other's axis. The smaller tube, at least, is circular or rounded in transverse section.

The invention consists of features of construction and combinations of devices hereinafter described and more particularly set out in the appended claims.

The invention is embodied in the forms or constructions illustrated in the accompanying drawing, forming part hereof, in which—

Figure 1 is a view, partly in longitudinal section, of one arrangement; and Fig. 2 is a sectional view of a modification, partly broken away.

In the drawing, the reference numeral 2 designates the smaller tube, which is adapted to be inserted, and 3 marks the larger tube. The free end 4 of the tube 3 is perforated at 5 to allow the liquid used to escape, while the free end of the tube 3 is closed by a removable cap 6, shown as a hemisphere. A hemispherical perforated diaphragm 7 is clamped between the end of the tube 3 and the cap 6, or is otherwise held in place at that end of the tube 3. The medicament holder H, formed by the end 6 and the diaphragm 7, may be supplied with spherical or other shaped tablets. A partition 22 in the tube 3 extends down to the diaphragm and directs the liquid into the holder H, whence it flows out into the tube 3 and on into the tube 2.

In the instance shown in Fig. 1, the liquid is brought to the tube or mixing chamber 3 by an elbow 8 (which screws into the boss 9), the flexible tube 10, the elbow 11, the flexible hose 12, and the bathtub fixture 13. The tube or hose 12 may be held on the nozzle 13 by a clamp ring 14 of any approved form and operation. In order to keep the pressure low, I prefer to provide an outlet 15 in the elbow 11, which outlet-tube 15 connects by the passage 16 with the passage-way of the elbow 11. A valve 18 is adapted to slide in the enlarged chamber 17 of the tube 15, being seated by a spring 19 which abuts thereagainst and against a screw plug 20, whereby the tension of the spring may be varied. An opening 21 in the side of the tube 15 provides for the escape of surplus liquid. Or the cap 6 may be substituted by the cap $6^{\times}$ which is provided with a boss $9^{\times}$ into which the connection $8^{\times}$ screws as shown in Fig. 2 of the drawing, such connection $8^{\times}$ taking the place in the train of the elbow 8 aforesaid, whereby the liquid is directed in the first instance into the holder H, and the partition 22 is omitted.

The rounded juncture G between the intersecting tubes 2 and 3 forms a guard or stop-device.

The tubes 2 and 3 are made (by preference) of hard rubber; it is evident that the syringe formed by them may be separated or be taken apart readily for purposes of cleansing it and be reassembled at will, as the cap 6 ($6^{\times}$) screws on to the tube 3, and the other parts shown are separable with ease for the like purpose.

What I claim as new and desire to secure by Letters Patent of the United States is—

1. A syringe consisting of two tubes of unequal diameters the larger diameter tube joining by its end to one end of the smaller tube and the smaller tube having a closed but perforated free end, a removable cover for the free end of the larger tube, a perforated hemispherical diaphragm held in place by said cover, and a water-inlet.

2. A syringe consisting of two tubes of unequal diameters the larger tube joining by its end to one end of the smaller tube and the smaller tube having a closed but perforated free end, a removable hemispherical cover for the free end of the larger tube,

a hemispherical perforated diaphragm held in place by said cover, and a water-inlet.

3. The combination with a tube provided with a removable hemispherical end, of a perforated diaphragm between said end and the main part of the tubing, and a partition within said tube extending substantially to said diaphragm, said tube being provided with an inlet and an outlet at opposite sides of said partition, whereby liquid is caused to flow through said diaphragm.

4. The combination with a tube provided with a hemispherical pocket or cavity, of a hemispherical diaphragm covering said pocket or cavity and provided with holes therein and with said pocket forming a spherical medicament-holder, said tube being provided with an inlet and an outlet opening, and a partition in said tube between said inlet and said outlet and extending substantially to said diaphragm.

Signed at New York city in the county of New York and State of New York this 25th day of February A. D. 1911.

ALFRED L. MARSH.

Witnesses:
ALBERT N. LESINSKY,
RICHARD W. BARKER.