

No. 826,188.

PATENTED JULY 17, 1906.

A. W. NICHOLLS.

SYRINGE.

APPLICATION FILED AUG. 8, 1904.

Fig. 1.

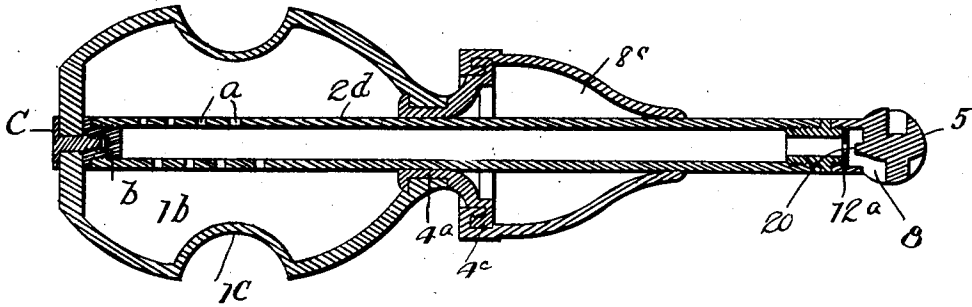


Fig. 2.

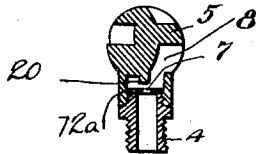
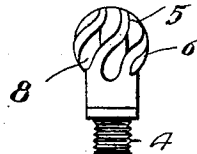


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

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SYRINGE.

No. 826,188.

Specification of Letters Patent.

Patented July 17, 1906.

Application filed August 8, 1904. Serial No. 219,948.

To all whom it may concern:

Be it known that I, ALBERT W. NICHOLLS, 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; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to syringes in general, but has especial relation to vaginal syringes of the compressible bulb type and to attachments therefor.

One of the principal objects of my invention is to overcome what has been deemed the greatest defect in syringes of this character—viz., the tendency to throw the liquid with excessive force against a delicate organ. To overcome this difficulty, it has been proposed to make the outlet-openings in the nozzle quite small; but with such small openings the liquid does not readily return, and hence other methods had to be employed. I have also sought to remedy the defect which exists in many of the syringes in use, such defect consisting in the tendency to grab or contract the sides of the vagina or the womb on releasing the bulb. These and other objects are attained by means of the construction illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal sectional view of a syringe made in accordance with my invention. Fig. 2 is a sectional view of the nozzle, and Fig. 3 is a side elevation of the same.

Referring to the drawings for a more particular description of my invention, 1^b designates the compressible bulb having a central reduced portion or neck 1^a and provided with a plain unthreaded nipple 4^a, fitted to the smaller end thereof. A rubber guard 8^c is fitted to the threaded end 4^c of the nipple. The tube 2^a extends through the guard and into the bulb and is secured by means of a thread-

ed plug *b* and a screw *C* within the bulb. The tube 2^a is provided with a series of openings *a*. The nozzle 5 is provided with a series of spirally-disposed deflectors 6, and an outlet-duct 8 between the deflectors. A valve 12^a is seated upon a threaded nipple 4 and provided with a central opening 7. A stud 20 projects downward from the head of the nozzle to open and close the aperture 7.

In use the tube 2^b is projected, and the liquid is ejected in a swirling or whirling manner, as will be understood.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A syringe comprising a compressible bulb having a central reduced neck of less thickness than the end portions of the bulb, and a tube connected to said bulb and adapted to be projected from said bulb when the latter is compressed.

2. A syringe-nozzle comprising a valve, spirally-arranged deflectors and outlet-ducts between the deflectors.

3. A syringe-nozzle comprising a valve-seat, a perforated disk valve, a stud to fit the perforation in the valve, spirally-disposed deflectors, and outlet-ducts between the deflectors.

4. A syringe-nozzle comprising a perforated disk valve, a duct leading from the valve into the nozzle, radial outlets in the nozzle-body, and deflectors surrounding the outlets.

5. A syringe-nozzle comprising radial outlets, a valve seated in the nozzle, a deflector consisting of a forwardly-inclined wall provided with an outlet-duct surrounding said wall in the rear thereof.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ALBERT W. NICHOLLS.

Witnesses:

BENJ. E. COWL,
L. O. HILTON.