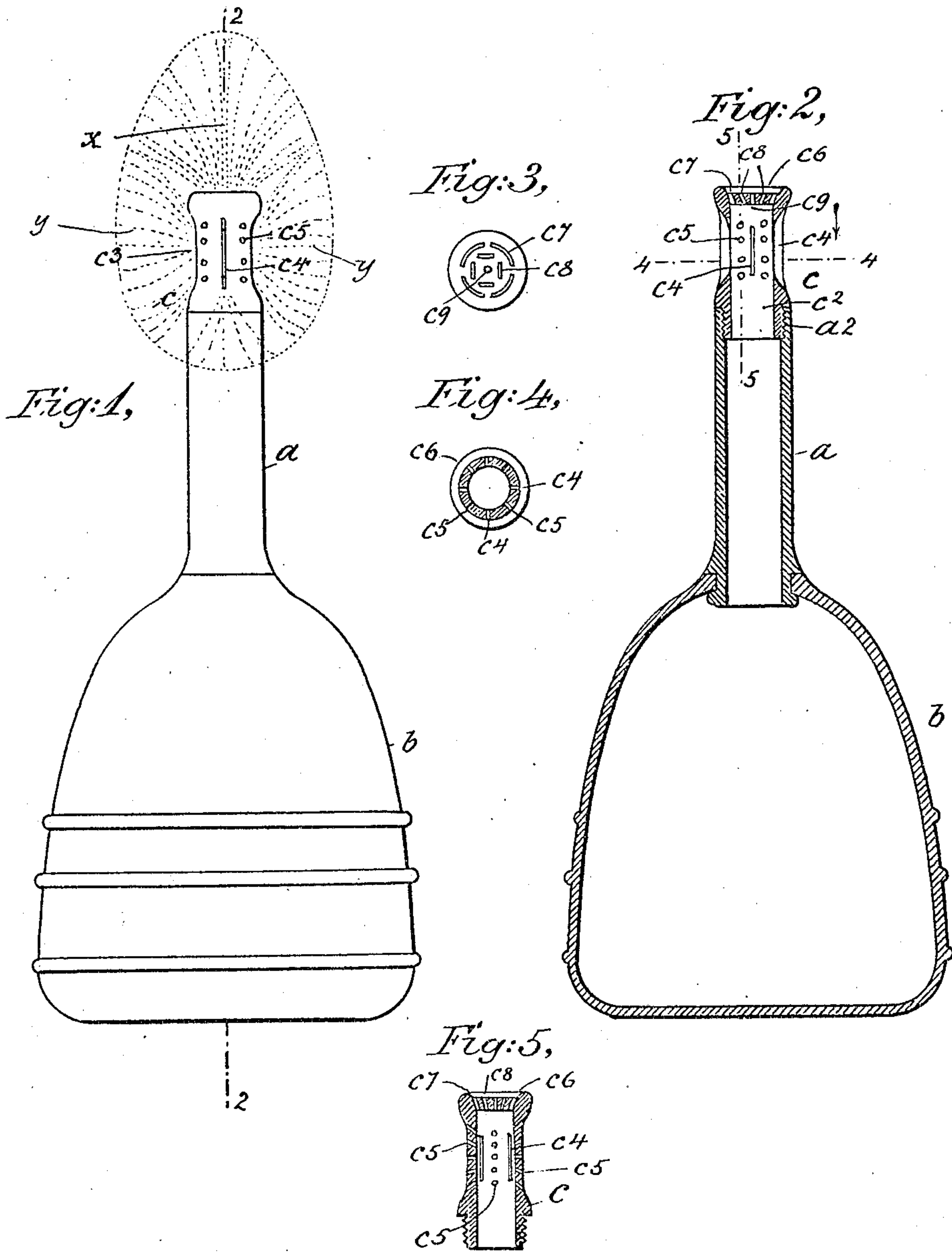


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PATENTED APR. 30, 1907.

M. BARIFFI.
SYRINGE.

APPLICATION FILED JAN. 16, 1906.



WITNESSES

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MARTIN BARIFFI, OF NEW YORK, N. Y.

SYRINGE.

No. 852,154.

Specification of Letters Patent.

Patented April 30, 1907.

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To all whom it may concern:

Be it known that I, MARTIN BARIFFI, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Syringes, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to syringes and particularly to what are known as vaginal syringes, and the object thereof is to provide an improved device of this class which will discharge water or other liquids in practically all directions, and which will completely flush any passage or organ into which the syringe is inserted; and with this and other objects in view the invention consists in a syringe of the class specified constructed as hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which;—

Figure 1 is a side view of my improved syringe; Fig. 2 a longitudinal section thereof on the line 2—2 of Fig. 1; Fig. 3 an end view of the discharge nozzle or head of the syringe; Fig. 4 a transverse section on the line 4—4 of Fig. 2; and, Fig. 5 a longitudinal section of the nozzle or head end of the syringe taken on the line 5—5 of Fig. 2.

In the practice of my invention, I provide a tube *a* preferably composed of hard rubber and provided at one end with the usual compressible bulb *b* composed of rubber, rubber and canvas, or any other suitable material. The tube *a* is provided at the end thereof opposite the bulb *b* with a discharge nozzle or head *c*, the general form of which is that of a tube, said nozzle or head being provided with a longitudinal bore *c*³, and in practice the inner end of said nozzle or head is reduced in size and provided with a thread, and the corresponding end of the tube *a* is similarly threaded as shown at *a*² in Fig. 2 so, that the said nozzle or head may be conveniently connected with said tube.

The end portions of the nozzle or head *c* are preferably of substantially the same size diametrically as the tube *a*, but the central body portion of the said nozzle or head is of less transverse dimensions, whereby said nozzle or head is provided with a central reduced

or neck portion *c*³, and the reduced central portion of the nozzle or head is provided with longitudinally arranged slots or openings *c*⁴, the end portions of which are flared outwardly longitudinally of said nozzle or head as shown in Fig. 2, and between the slots or openings *c*⁴ are longitudinally arranged rows of perforations *c*⁵. The perforations *c*⁵ may be arranged in direct radial lines or they may be arranged at different angles to the longitudinal axis of the nozzle or head *c* as shown in Fig. 5.

The outer end *c*⁶ of the nozzle or head *c* in the form of construction shown is counter-sunk, and is also shown as composed of a separate piece, but said outer end portion may be formed integrally with the nozzle or head if desired, and need not necessarily be counter-sunk. The outer end *c*⁶ of the nozzle or head is also provided with arc-shaped slots or openings *c*⁷ arranged around the outer edge portion thereof and inwardly of which are arranged other slots or openings *c*⁸, and centrally of said outer end portion *c*⁶ is a perforation *c*⁹, and the slots or openings *c*⁸ are so arranged as to overlap the space between the slots or openings *c*⁷. The slots or openings *c*⁷ are also arranged at an angle to the longitudinal axis of the nozzle or head, and the slots or openings *c*⁸ may be similarly arranged, if desired, but my invention is not limited to the exact forms of the slots, openings or perforations of the outer end portion *c*⁶ of the nozzle or head, the only object in this connection being to provide said outer end portion with a plurality of ports or passages which will discharge the contents of the bulb *b* in line with the axis of the tube *a*, and also laterally thereof as indicated by the dotted lines *x* in Fig. 1.

My invention is also not limited to the exact style of slots or openings *c*⁴ and *c*⁵ in the body portion of the nozzle or head, the only object in this connection being to provide this part of the said nozzle or head with ports or passages which will discharge the contents of the bulb in radial lines, and also at angles to the radial lines as indicated by the dotted lines *y* in Fig. 1, and in this way the contents of the bulb *b* will be discharged in all directions from the central portion of the nozzle or head.

By reducing the central portion of the nozzle or head as shown and described, the discharge through the ports or passages therein formed by the slots or openings *c*⁴ and per-

forations c^5 is facilitated, and the enlarged end portions of the nozzle or head also serve to facilitate this operation as the said ports or passages are not closed by the walls of the passage or organ into which the nozzle or head is inserted.

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

- 10 1. A discharge nozzle for syringes, said nozzle being oblong and tubular in form and open at one end and reduced in size at said end, the other or discharge end being counter-sunk, and the central body portion thereof being reduced in size longitudinally so as to form enlarged annular portions at the discharge end and adjacent to the open end, the counter-sunk or discharge end and the reduced body portion being both provided
- 20 with ports or passages, the ports or passages in the body portion being arranged radially to the longitudinal axis and also at an inclination thereto in both directions, and the ports or passages in the counter-sunk or discharge end portion being arranged in line
- 25 with the longitudinal axis of the nozzle and also at an inclination thereto.

2. A discharge nozzle for syringes, said

nozzle being oblong and tubular in form and open at one end and reduced in size at said end, the other or discharge end being counter-sunk, and the central body portion thereof being reduced in size longitudinally so as to form enlarged annular portions at the discharge end and adjacent to the open end, said reduced body portion being also provided with longitudinal slots forming ports or passages, the counter-sunk or discharge end and the reduced body portion being both provided with other ports or passages, the ports or passages in the body portion being arranged radially to the longitudinal axis and also at an inclination thereto in both directions, and the ports or passages in the counter-sunk or discharge end being arranged in line with the longitudinal axis of the nozzle and also at an inclination thereto.

In testimony that I claim the foregoing as my invention I have signed my name in presence of the subscribing witnesses this 13th day of January 1906.

MARTIN BARIFFI

Witnesses:

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C. E. MULREANY