

(No Model.)

G. E. PHILBRICK.
SYRINGE.

No. 321,850.

Patented July 7, 1885.

Fig. 1.

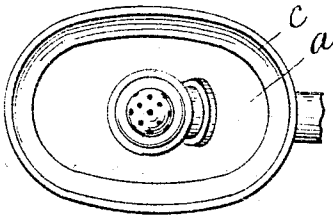


Fig. 3.

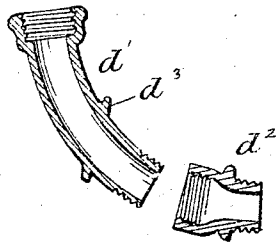


Fig. 2.

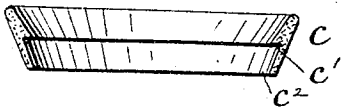


Fig. 4.

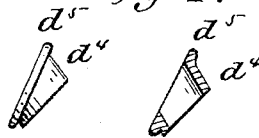
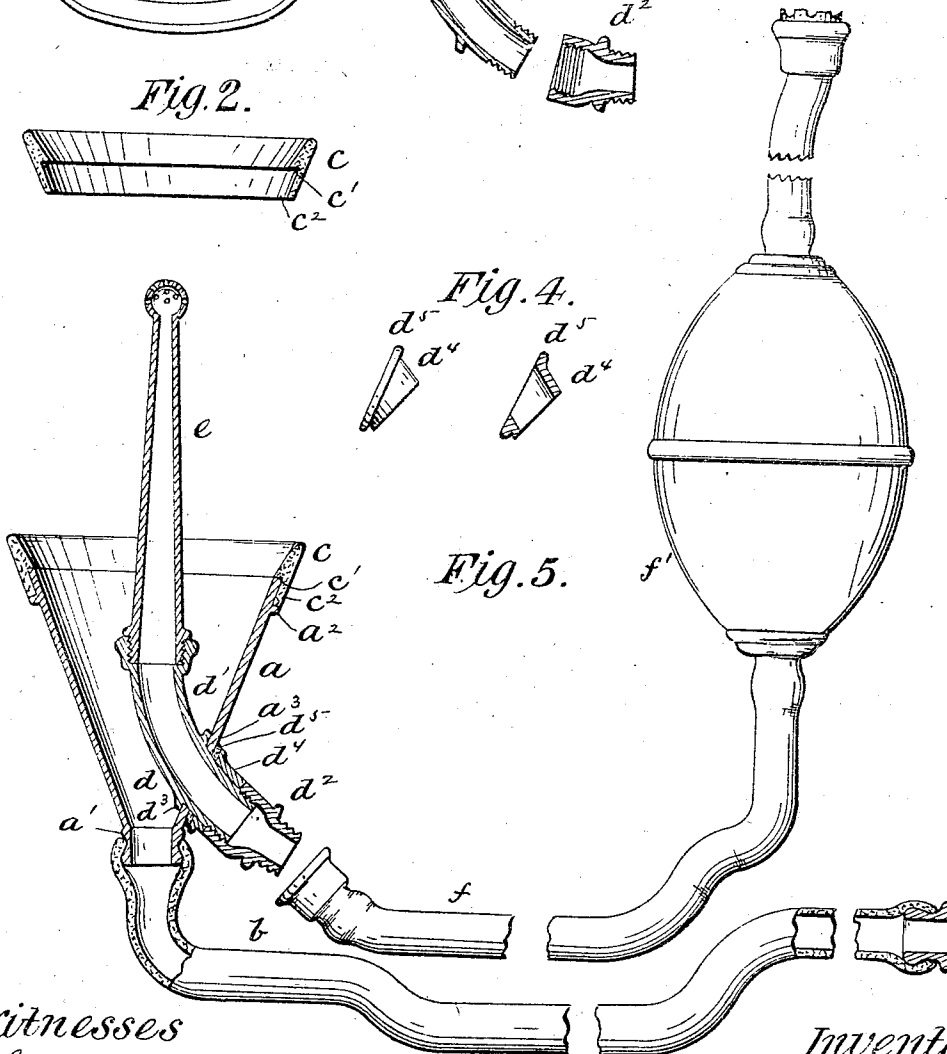


Fig. 5.



Witnesses

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SYRINGE.

SPECIFICATION forming part of Letters Patent No. 321,850, dated July 7, 1885.

Application filed April 30, 1885. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. PHILBRICK, a citizen of the United States, residing at Manchester, in the county of Hillsborough and State of New Hampshire, 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

15 This invention relates to improvements in vaginal syringes; and it consists in the construction and combination of the several parts hereinafter fully described, and pointed out in the claims.
20 In the drawings, Figure 1 is a plan or top view of the back receiving-reservoir. Fig. 2 shows a view of the cushion. Fig. 3 shows the two-part inlet-pipe. Fig. 4 shows a side view and a sectional view of the flanged washer; and
25 Fig. 5 is the complete syringe, having the reservoir, the inlet-pipe, and the spray-tube in section.

a is the back receiving-reservoir, made preferably of non-corrosive metal or hard rubber, and made funnel-shaped, and provided with a nipple, *a'*, surrounding the exit-opening, adapted to receive the end of the discharge-tube *b*. The nipple may be constructed, as shown, so that the flexible rubber tube can be sprung on it; or it may be provided with a screw-thread to receive a correspondingly-threaded coupler-ring held in the end of the pipe *b*. The reservoir is made funnel-shaped, so as to present no angular surfaces to catch and retain any mucus
40 or other material carried in the outflowing water. An annular cushion, *c*, of soft rubber or other suitable material, is placed on the upper edge of the reservoir. It is formed with an inwardly-projecting shoulder, *c'*, which extends
45 over and rests upon the upper edge of the reservoir. It also has the depending flap or wing *c''*, which is made tapered or funnel-shaped in form, corresponding to the shape of the reservoir. The wing *c''* is sprung over the upper
50 end of the reservoir, and, by reason of its shape, holds the cushion firmly in place and draws the shoulder *c'* firmly against the said upper

edge. The inner face of the cushion is tapered to correspond approximately with the taper of the inner side of the reservoir. It is preferably tapered so as to make its upper edge thin, as shown, so as to increase its elasticity and permit it more readily to conform to the locality against which it is pressed. In order to prevent the cushion from being displaced when
60 too great pressure is exerted upon it, a small annular flange, *a''*, is formed around and near the upper end of the reservoir. The wing of the cushion draws down against this flange, but is prevented thereby from being forced any farther.

Near the lower end, and at one end of the axis of the oval reservoir, an opening, *a'''*, is formed to receive the inlet-pipe. The arrangement of the opening *a'''* on the longer axis of the oval reservoir is for the purposes apparent to any one acquainted with the use of syringes of the class to which this invention belongs. The inlet-pipe *d* is composed of the inner tube, *d'*, and the outer tube, *d''*. The inner tube has a
75 suitably-threaded end to receive the spray tube or nozzle *e*, whereby the latter may be attached or detached at pleasure. It is made in a gradual curve, as shown, so that its outer end will project through the opening *a'''* and its inner end stand at or near the center of the reservoir. Its upper end is arranged just below the plane of the upper edge of the reservoir, so that the spray tube or nozzle may be readily attached thereto. It is made preferably
85 in the arc of a circle, so that it may readily be inserted through the opening *a'''*. It has a circumferential flange, *d''*, arranged to fit snugly against the inner side of the reservoir and make a water-tight joint. Its end projects to the outer side, and is provided with threads to receive the correspondingly-threaded socket on the end of the outer tube, *d''*. On the projecting end of the tube *d* a tapered washer, *d'''*, is placed, as shown, which is adapted to fit
95 snugly against the outer side of the reservoir and make a water-tight joint; or, in place of the washer, a boss may be made on the outside of reservoir. The end of the outer tube, *d''*, jams against the outer side of the washer or boss, as shown. The washer, when used, is provided with an annular rim-flange, *d'''*, in order to give it greater bearing-surface and thereby make a better joint. If desired, a gasket, *d''''*,
100

of rubber or other suitable material, may be placed between the washer or boss and the reservoir, in order to make a more perfect joint or to close small leaks consequent upon imperfect construction of the opening a^2 and pipe d' . To the pipe or tube d' the end of the supply-pipe f , with its bulb f' , is attached, as shown.

The manner of using the syringe is obvious, and need not be explained at length.

10 The results secured by this syringe are, first, perfect cleanliness; second, freedom from leakage; third, ease with which it may be applied and held in place; the projecting end of the pipe affords support for one or more of the fingers, while the other fingers may be clasped
15 around the lower smaller end of the reservoir; fourth, the coaptation is such that it can be used in a standing, sitting, or reclining position; fifth, the several parts may be easily separated for packing or other desired purpose, and
20 be as easily and quickly put together.

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

1. The combination, with the funnel-shaped back receiving-reservoir, of the inner curved pipe, d , pipe provided with annular flanges d^2 , the outer pipe, d' , threaded onto the outer projecting end of the pipe d' , and the tapered washer or boss b' , substantially as set forth. 25 30

2. The combination, with the funnel-shaped or tapered back receiving-reservoir, of the annular cushion provided with an inwardly-projected shoulder covering the upper edge of the reservoir and having the depending annular tapered flap or wing to be sprung over the outer side of the upper end of the said reservoir, and the annular sustaining-ring a^2 , projecting from the reservoir, substantially as set forth. 35

In testimony whereof I affix my signature in presence of two witnesses. 40

GEORGE EDWIN PHILBRICK.

Witnesses:

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NEWTON H. WILSON.