(No Model.)

A. C. EGGERS. VAGINAL SYRINGE.

No. 559,690.

Patented May 5, 1896.

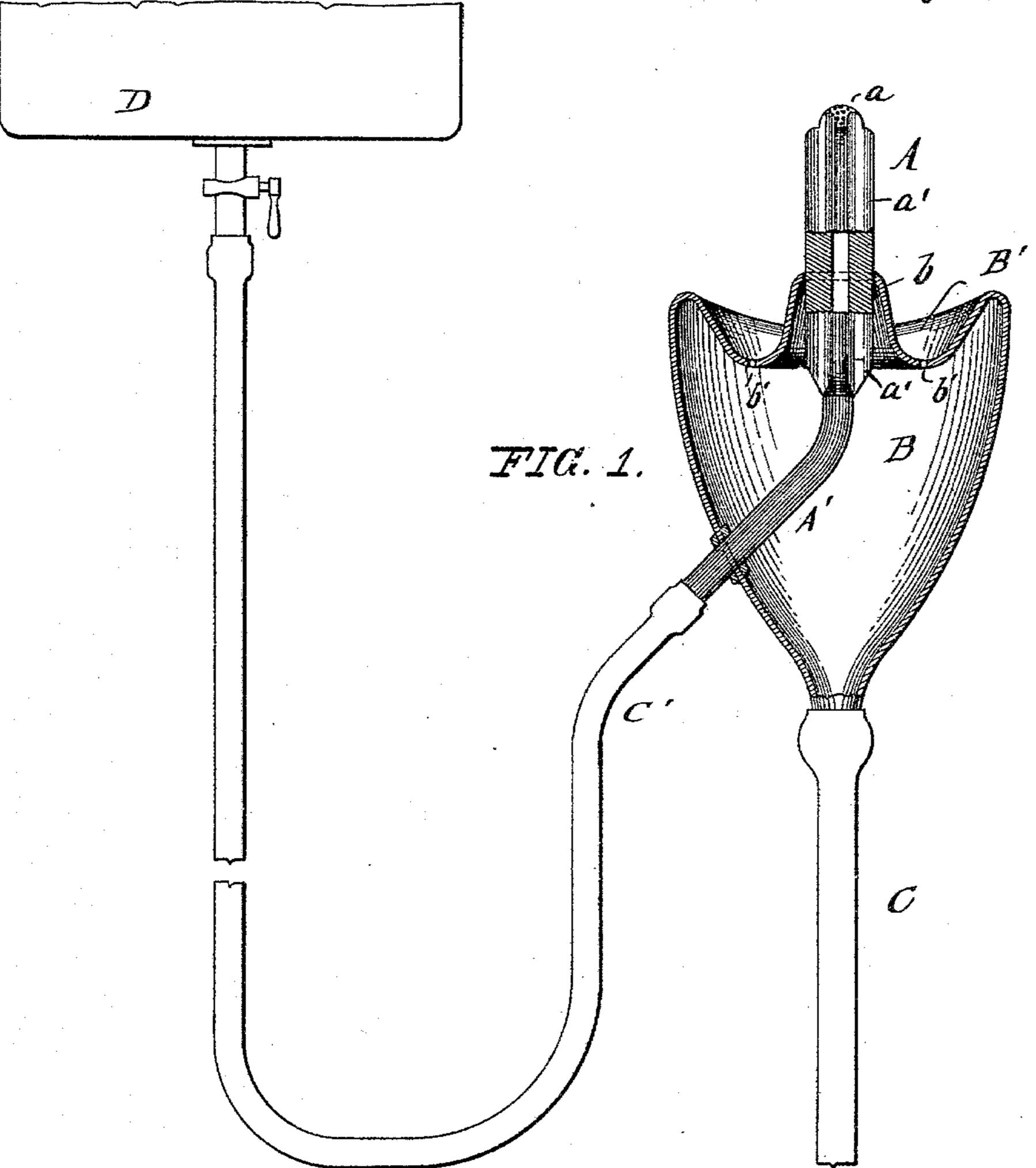
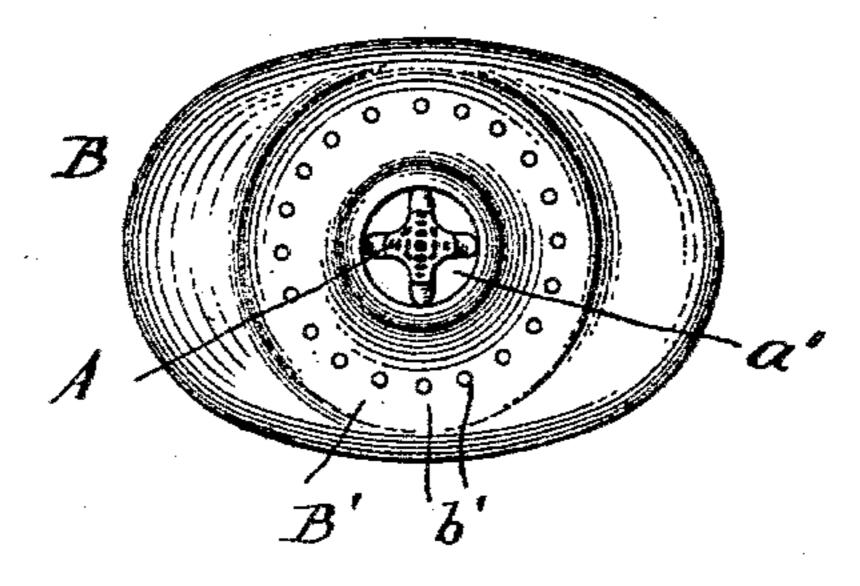


FIG.2.



WITNESSES:

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VAGINAL SYRINGE.

SPECIFICATION forming part of Letters Patent No. 559,690, dated May 5, 1896.

Application filed January 20, 1892. Serial No. 418,626. (No model.)

To all whom it may concern:

Be it known that I, Anton C. EGGERS, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Vaginal Syringes, of which the following is a specification.

This invention relates to an improved vaginal syringe of that class in which a drain-10 age-bulb is provided for receiving the liquid injected into the vagina and in which the annoying spilling of the liquid is effectively prevented; and the invention consists in the hereinafter-described novel construction of 15 the drainage-bulb, with its annular trough and central opening through which the nozzle by which the liquid is injected into the vagina is passed, said nozzle being provided with longitudinal grooves, so as to facilitate 20 the outflow of the injected liquid, while the annular trough, with its perforated lower part, takes up any surplus liquid, so as to prevent the spilling of the same.

In the accompanying drawings, Figure 1 represents a vertical central section of my improved vaginal syringe, and Fig. 2 is a top view of the same.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the nozzle of my improved vaginal syringe, which nozzle is provided with openings a at its upper end, through which the medicated or other liquid is injected into the vagina. The nozzle A is preferably constructed of hard rubber or other suitable material and provided with longitudinal grooves a', so as to have a cross-shaped transverse section. The peculiar shape of the nozzle serves to distend the walls of the vagina, while leaving channels for conducting off the liquid after the same has cleansed the walls of the vagina.

The nozzle A passes through an upwardly-tapering cone-shaped annulus b of the drain-age-bulb B, which is made either of hard rubber or soft rubber of sufficient thickness. The conical annulus b is arranged at the center of the top part of the drainage-bulb B, which is preferably made of oval shape and tapering toward its lower end, where it is connected with a drain-pipe C, that leads to a suitable receptacle. The annulus b is sur-

rounded by an annular depression or trough B', which is provided with perforations b' at its lowermost part or bottom, which perforations serve for the purpose of draining off all the liquid which is not discharged directly along the nozzle into the drainage-bulb B. The lower end of the nozzle A is connected to a curved tube A', that passes through the 60 side wall of the drainage-bulb B and is connected by a flexible tube C' with a liquid-supply fountain D, that is suspended at a suitable height above the syringe or with a bulb that acts as a suction and force-pump 65 in the usual manner.

In using my improved vaginal syringe the nozzle is inserted into the vagina as far as permitted by the drainage-bulb, the conical annulus being likewise extended to some ex- 70 tent into the vagina, while the external circumference of the drainage-bulb abuts or rests against the outside of the vagina. The injection is then effected in the usual manner, the surplus of the liquid passing freely along 75 the channels of the nozzle into the drainagebulb and from the same by the drain-pipe into the receiving vessel. Any surplus liquid instead of being spilled, as heretofore, will run off into the trough B' and pass through 80 the bottom openings of the same into the bulb and drain in the same manner. It will also be clear that the outer edge of the trough, or, in other words, the periphery of the top of the bulb will be placed against the body and 85 thus more effectually prevent the escape of fluid, except through its proper channel. In this manner the syringe can be used with great facility and in a perfectly convenient and cleanly manner.

It has the additional advantage that it can be used by the female whether in standing or lying position, so that it is especially useful for patients that are confined to their beds and could make use of the syringes heretofore in use only with great inconvenience.

I am aware that it is old in vaginal syringes to form the nozzles thereof with longitudinal grooves adapted to serve as channels for conducting off the liquid after the walls of the roo vagina have been cleansed, and also that it is not new in syringes to form a drainage-bulb around the base of the nozzle and to pass an eduction-tube thereinto for conduct-

ing off the liquid escaping from the vagina into the bulb, and I do not, therefore, claim those constructions.

Having thus described my invention, what 5 I claim as new, and desire to secure by Letters

Patent, is—

In a vaginal syringe, a drainage-bulb provided with an annular trough in its upper part, having bottom perforations, the outer 10 edge of which trough joins the greater circumference of the bulb, and with a central outwardly-extending conical annulus, merging from the inner portion of and encircled

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by said trough, in combination with a longitudinally-grooved nozzle passing through and 15 engaged by said annulus, and a supply-tube connected with the base of the nozzle, said base terminating in the upper part of the bulb, substantially as set forth.

In testimony that I claim the foregoing as 20 my invention I have signed my name in presence of two subscribing witnesses.

ANTON C. EGGERS.

Witnesses:

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PAUL GOEPEL,
CHARLES SCHROEDER.