(Model.)

F. WILHÖFT.

URETHRAL SYRINGE.

No. 254,579. Patented Mar. 7, 1882.

Fig. 1,

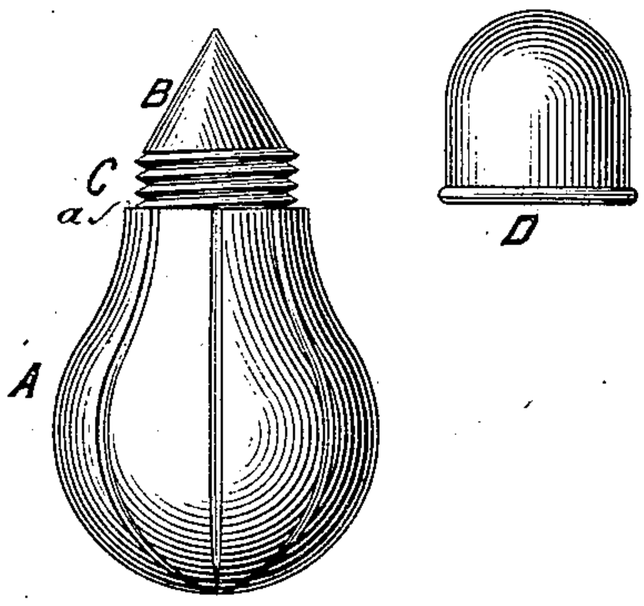


Fig. 2,

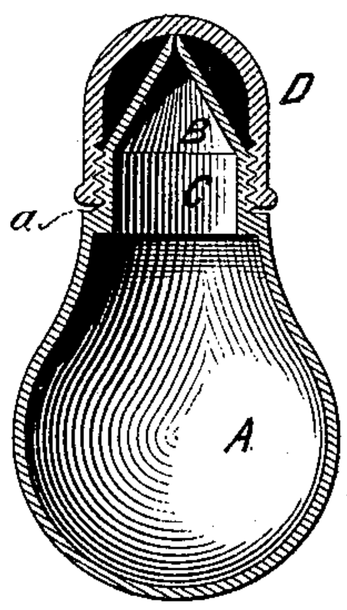
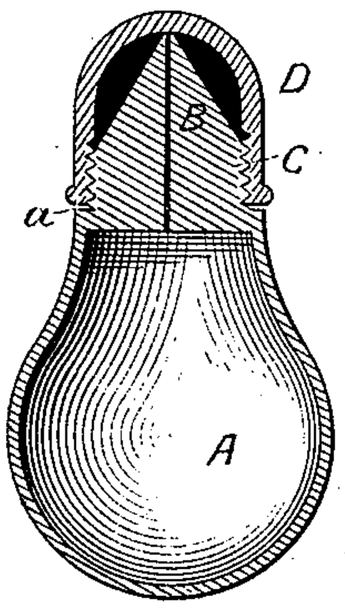


Fig. 3,



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UNITED STATES PATENT OFFICE.

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URETHRAL SYRINGE.

SPECIFICATION forming part of Letters Patent No. 254,579, dated March 7, 1882.

Application filed December 12, 1881. (Model.)

To all whom it may concern:

Be it known that I, FRANZ WILHÖFT, 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 Urethral Syringes, of which the following is a specification, reference being had therein to the accompanying drawings.

The object of this invention is to provide a urethral syringe which shall combine the properties of simplicity of construction and convenience of use.

The invention consists in a urethral syringe composed of a bulb or reservoir provided with a sharp-pointed conical nozzle, the end of which is adapted to fit into the urethral orifice, the whole being constructed of soft rubber in one piece. By this construction the use of a piston is avoided and extreme simplicity attained, while the elastic nozzle is adapted to fit like a stopper into the neck of any ordinary vial, and the operation of filling is rendered automatic.

The invention consists, further, in certain constructions and combinations hereinafter pointed out in the claims.

In the drawings, Figure 1 is an elevation of this improved syringe with its cap detached. Fig. 2 is a longitudinal section of the syringe with the cap in position. Fig. 3 is a modification of the form shown in Fig. 2, showing a solid nozzle.

This syringe is composed of a flexible bulb or reservoir, A, and a tapering sharp-pointed nozzle, B, the latter being adapted to fit into the neck of a bottle when the syringe is being filled and into the urethral orifice when the syringe is being discharged. The bulb is constructed of vulcanized soft rubber, in oval or other suitable form, and the nozzle is preferably of the same material and integral with the bulb. Between the shank of the nozzle or nozzle proper and the bulb is a short tubular neck, C, having an external shoulder, *a*. The neck and nozzle may be of solid rubber having a channel of uniform size through it. A cap, D, composed of hard rubber, metal, boxwood, or other suitable material, serves to cover and close the nozzle, excluding dust and confining the liquid within the syringe. This cap is detachably fastened to the syringe by means of internal and external screw-threads upon the cap and neck respectively, or by other suitable means. The lower end of the cap fits against the shoulder of the neck and forms a water-tight joint.

If desired, the cap, when the nozzle is of soft rubber, may be made slightly shorter than the distance between the shoulder and the tip of the nozzle, so that when screwed down upon the shoulder the end of the cap will press against the tip of the nozzle and close the orifice thereof, thereby preventing the access of liquid to the space between the cap and nozzle and the spilling of liquid when the cap is removed.

This syringe is designed to hold sufficient liquid for a number of injections, and may be carried in the pocket and used, without refilling, at such intervals as may be prescribed.

What I claim as my invention is—

1. A urethral syringe consisting of a flexible bulb, a nozzle made conical to enter the urethra, and an intermediate screw-threaded neck, all of soft rubber, in one piece, and adapted to receive a cap, substantially as described.

2 A urethral syringe consisting of a flexible bulb, a conical nozzle adapted to enter the urethra, and an intermediate screw-threaded neck, all of soft rubber, in one piece, in combination with a screw-threaded cap composed of hard rubber or other suitable material, and slightly shorter in length than the combined lengths of the nozzle and neck, whereby said cap is adapted to press upon the point and close the orifice of the nozzle when in position on the syringe, substantially as described.

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

F. WILHÖFT.

Witnesses:
WM. A. DEERING,
JOHN F. KAVANAGH.