

(No Model.)

A. BIHLER.

SYRINGE.

No. 318,535.

Patented May 26, 1885.

Fig. 1.

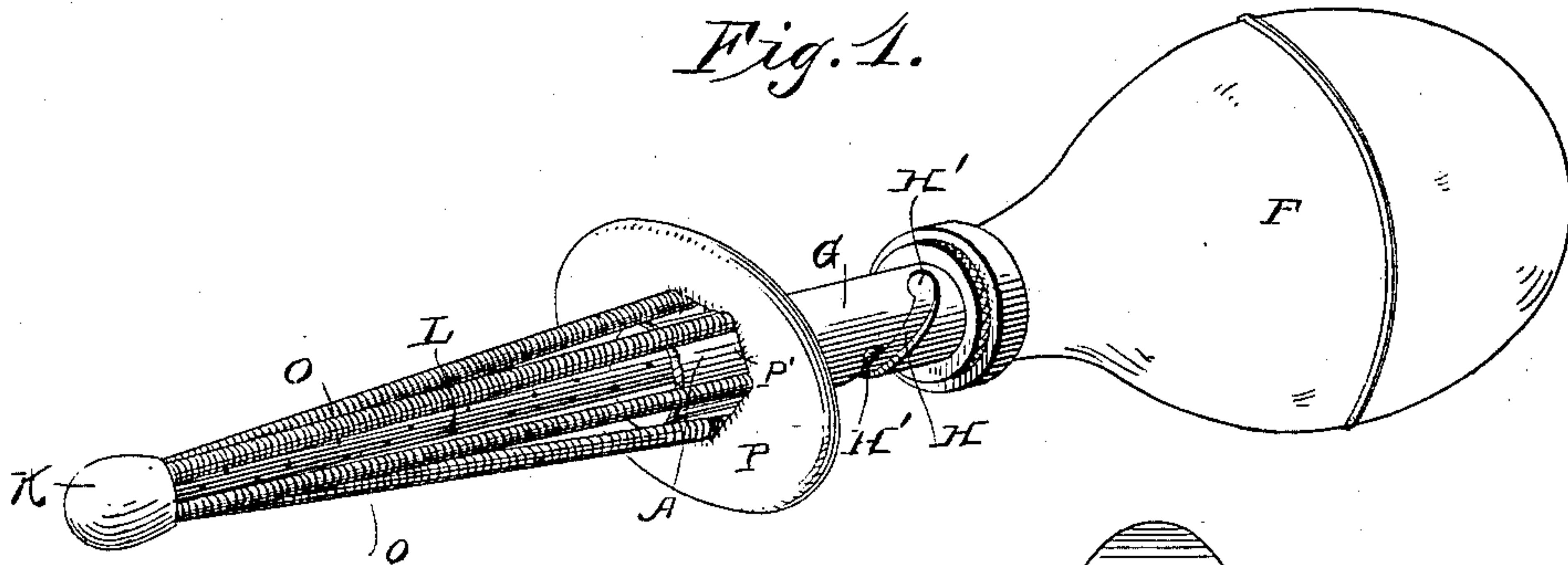


Fig. 2.

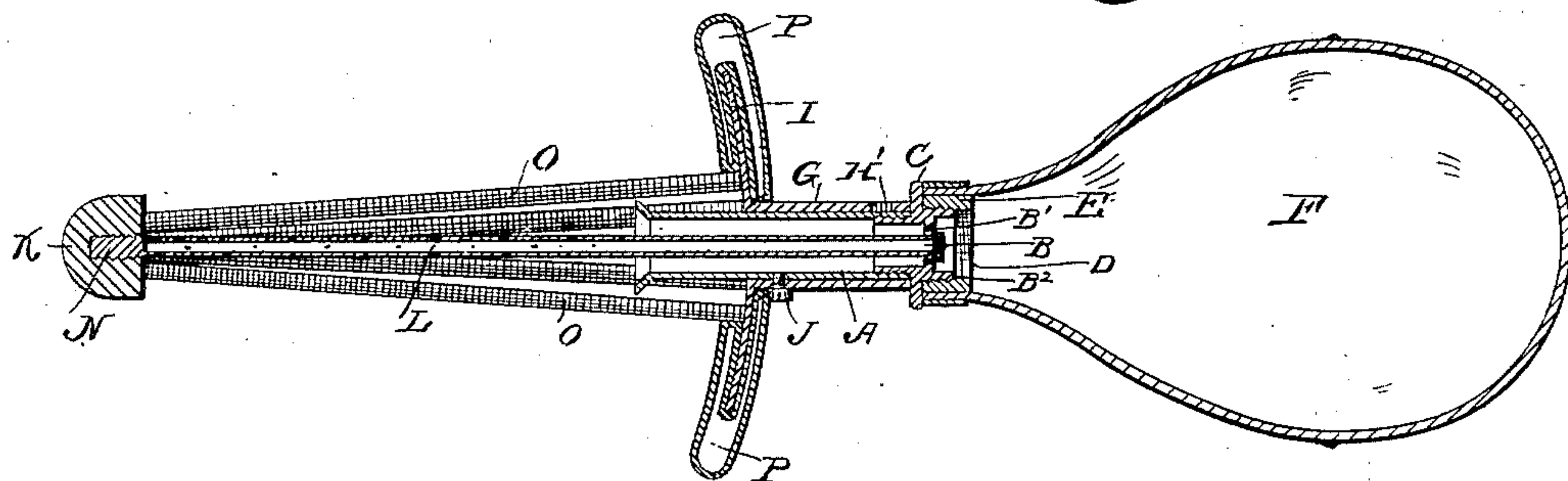


Fig. 3.

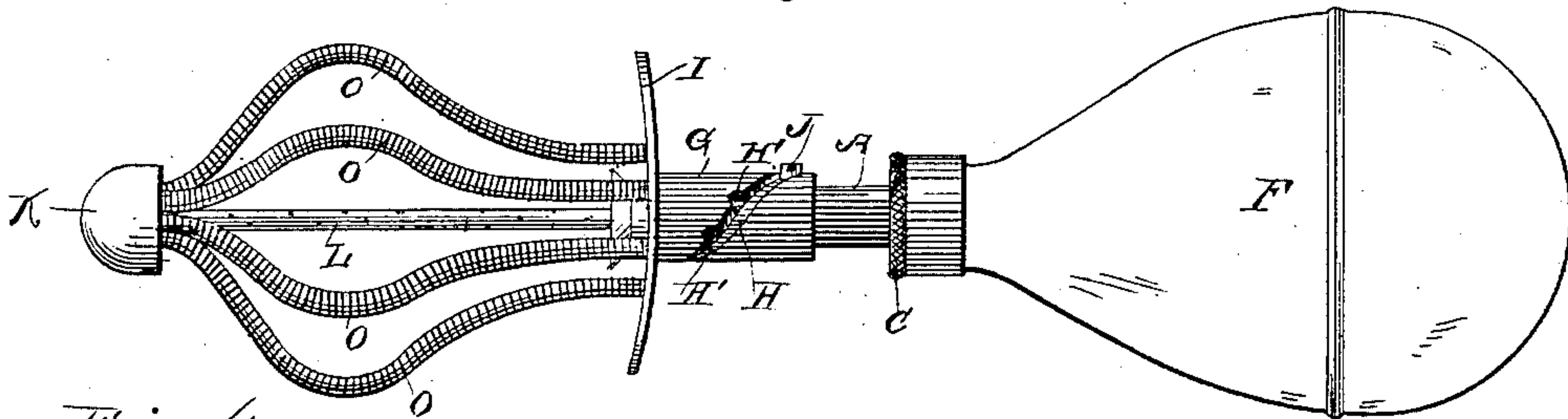
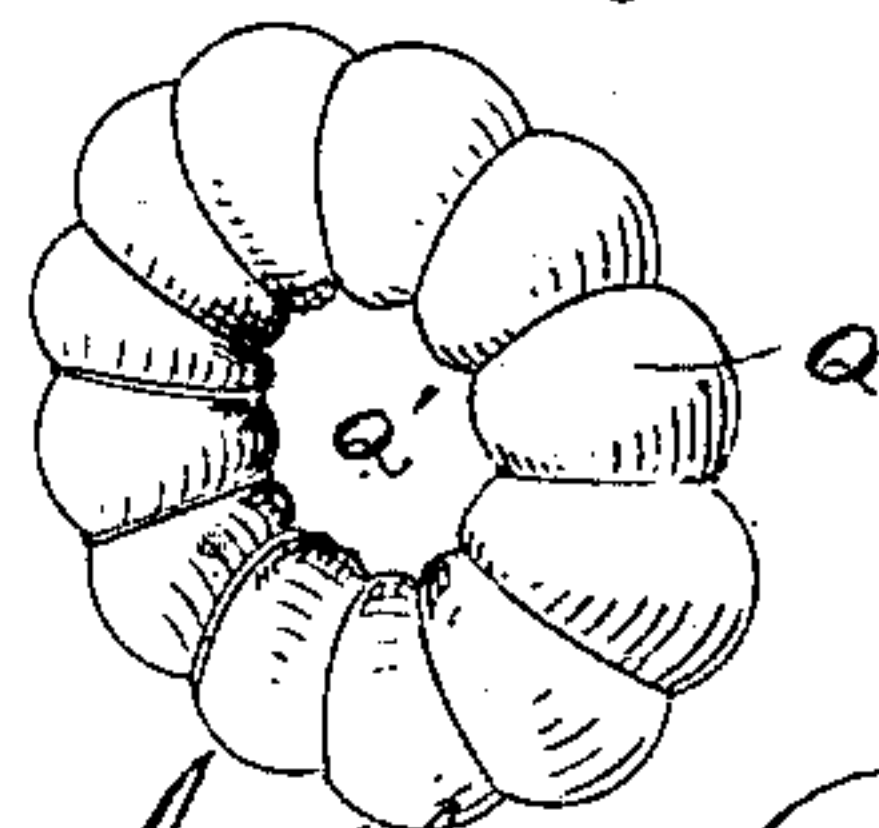
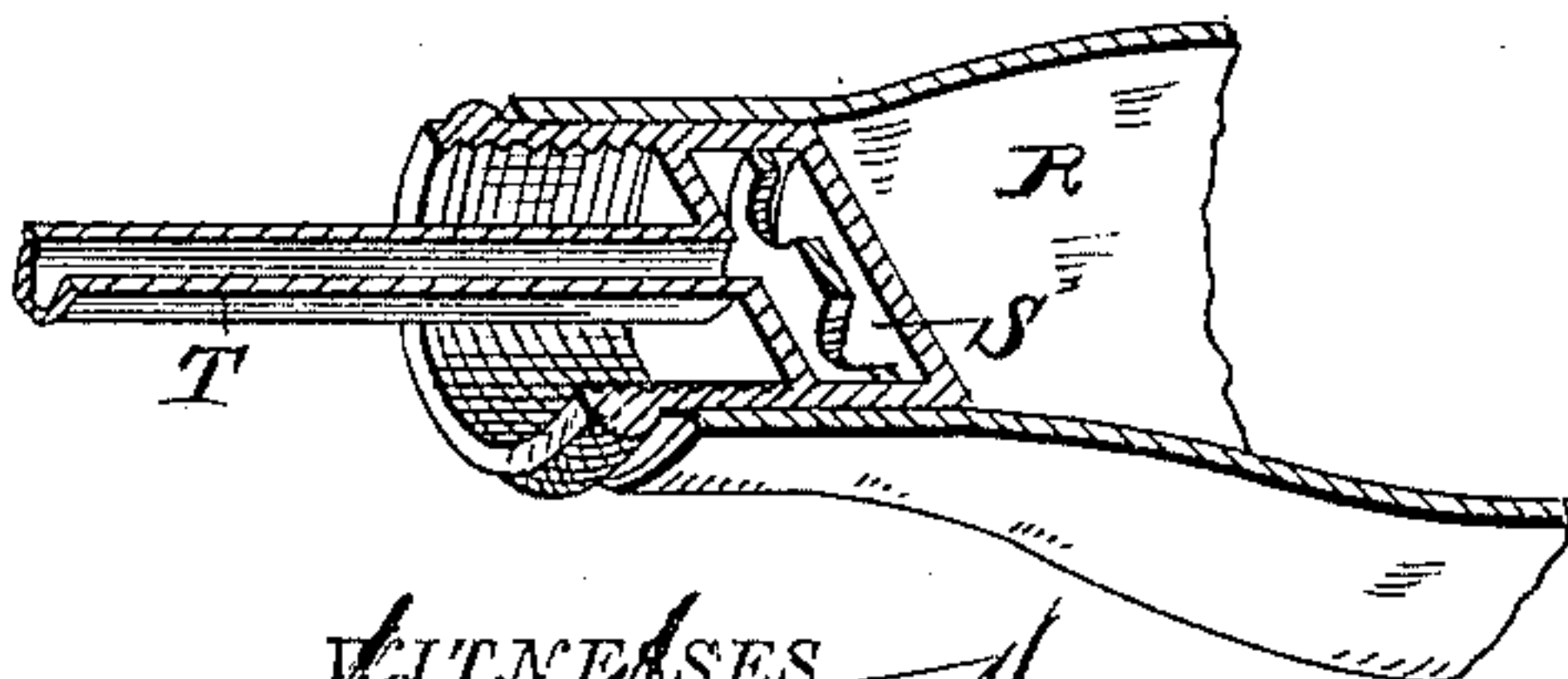


Fig. 4.

Fig. 5.



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UNITED STATES PATENT OFFICE.

ANTHONY BIHLER, OF ROCHESTER, NEW YORK.

SYRINGE.

SPECIFICATION forming part of Letters Patent No. 318,535, dated May 26, 1885.

Application filed July 14, 1884. (No model.)

To all whom it may concern:

Be it known that I, ANTHONY BIHLER, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented a new and useful Syringe, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to syringes designed for use in the vaginal canal of the female sex, and my object is to provide a syringe of the class referred to that shall possess superior advantages in point of simplicity, convenience, durability, and general efficiency; and my invention consists in the construction and novel arrangement of parts, as will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a view in perspective of a vaginal syringe embodying my improvements. Fig. 2 is a longitudinal sectional view. Fig. 3 is a view of the syringe with the shield removed. Fig. 4 is a detached view of an attachment which is used in lieu of the bulb shown in Fig. 1 for injecting medicated liquids into the vagina through the small central perforated tube of the syringe, and Fig. 5 is a view in perspective of a sponge-shield which takes the place of the shield shown in Fig. 1 at times.

Referring by letter to the accompanying drawings, A designates the movable sleeve of the syringe, which is provided near its lower end with a diaphragm, B, having openings B' around its central opening, B². The sleeve A is also provided with an annular laterally-extending milled flange, C, and a vertically-depending externally-threaded flange, D, by which it is secured to the internally-threaded seat E in the mouth of the bulb F, which is of rubber. Over the sleeve A is slipped a shorter sleeve, G, having a spiral slot, H, in its side, and a plate, I, at its upper end. A screw, J, is passed through the slot H into a hole in the sleeve A, and the upper side of the slot H is provided with a series of notches, H', to engage the stem of the screw and hold the sleeve A in place within the sleeve G.

L designates a centrally-located perforated tube, which is screw-threaded on its upper end, and is provided with a collar, M, on its

lower end. The threaded upper end of the perforated tube L is screwed into a threaded seat, N, in the center of the solid top K. The solid top K is connected with the plate I on the stationary sleeve G by six or more flexible springs, O, which are preferably of silver-plated or other plated wire coiled spirally around a flat spring bowed slightly outward to insure the proper expansion of the spring when in use; but the springs may be of other suitable construction and material. The springs O are preferably connected at their lower ends to vertical pins O' on the upper face of the plate I on the slotted sleeve G.

The parts hereinbefore described may be made wholly or in part of metal, rubber, celluloid, or other suitable material.

The plate I is provided with an inflated soft-rubber cushion or shield, P, having a central opening, P', through which the solid top K, small perforated tube, and flexible springs are passed to get it to place, and an attaching-ring, P², of rubber, for removably securing it to the plate I. This shield may be of metal and rubber combined, or of rubber alone, and is designed to be held against the body of the person receiving treatment and prevent loss of the fluid injected to the vagina until it is designedly withdrawn.

In lieu of the shield P and to be used to prevent wetting the clothing or bedding, &c., when the syringe is worn by the patient, I provide a shield, Q, which is interchangeable with the shield P, made of sponge, and tied in shape by rubber cords, and having a central hole, Q', as shown in Fig. 5. This shield Q is a more effectual means of preventing waste or loss of fluid than the shield P in treatment of the nature mentioned. With this construction of syringes but one size is needed for persons of different growths.

The syringe is entered into the vaginal canal by the patient, who holds the shield against her body with the left hand, while with the right hand she gently draws the movable sleeve A outwardly by drawing on the bulb, and this movement causes the springs O to be expanded within the vagina to any extent necessary to enable any medicated wash or fluid to be applied to the internal surface thereof.

The attachment for injecting medicated fluids to the vagina through the central perforated tube, L, consists of a common rubber bulb, R, having an internally-threaded metal-valved cup, S, in its mouth, provided with a centrally-located tube, T. The tube T enters the central perforated tube, L, of the syringe, the bulb R being first removed, and the threaded cup screws onto the threaded flange D of the syringe. The parts being distended as before, the medicated liquid is injected by squeezing the bulb R, and escapes to the parts through the perforations in the tube L.

I do not confine myself to the material herein described, but intend to use any material or combination of materials I may deem proper in the construction of my improved vaginal syringes. The pressure of the springs O holds the sliding sleeve in engagement with the screw in any of the positions to which it may have been moved in the stationary sleeve.

The parts may be kept distended for any required length of time.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A vaginal syringe provided with flexible distending-springs connected with a stationary sleeve provided with a flexible shield, substantially as specified.

2. A vaginal syringe provided with flexible distending-springs connected to a plate on the stationary sleeve, and having a flexible porous shield on said plate, substantially as specified.

3. The combination, with the movable sleeve, the solid top, and the central tube connecting said sleeve and solid top, of flexible springs connecting said solid top with the spirally-slotted stationary sleeve on the movable sleeve, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ANTHONY BIHLER.

Witnesses:

EUGENE A. WITT,

DANIEL W. BULLARD.