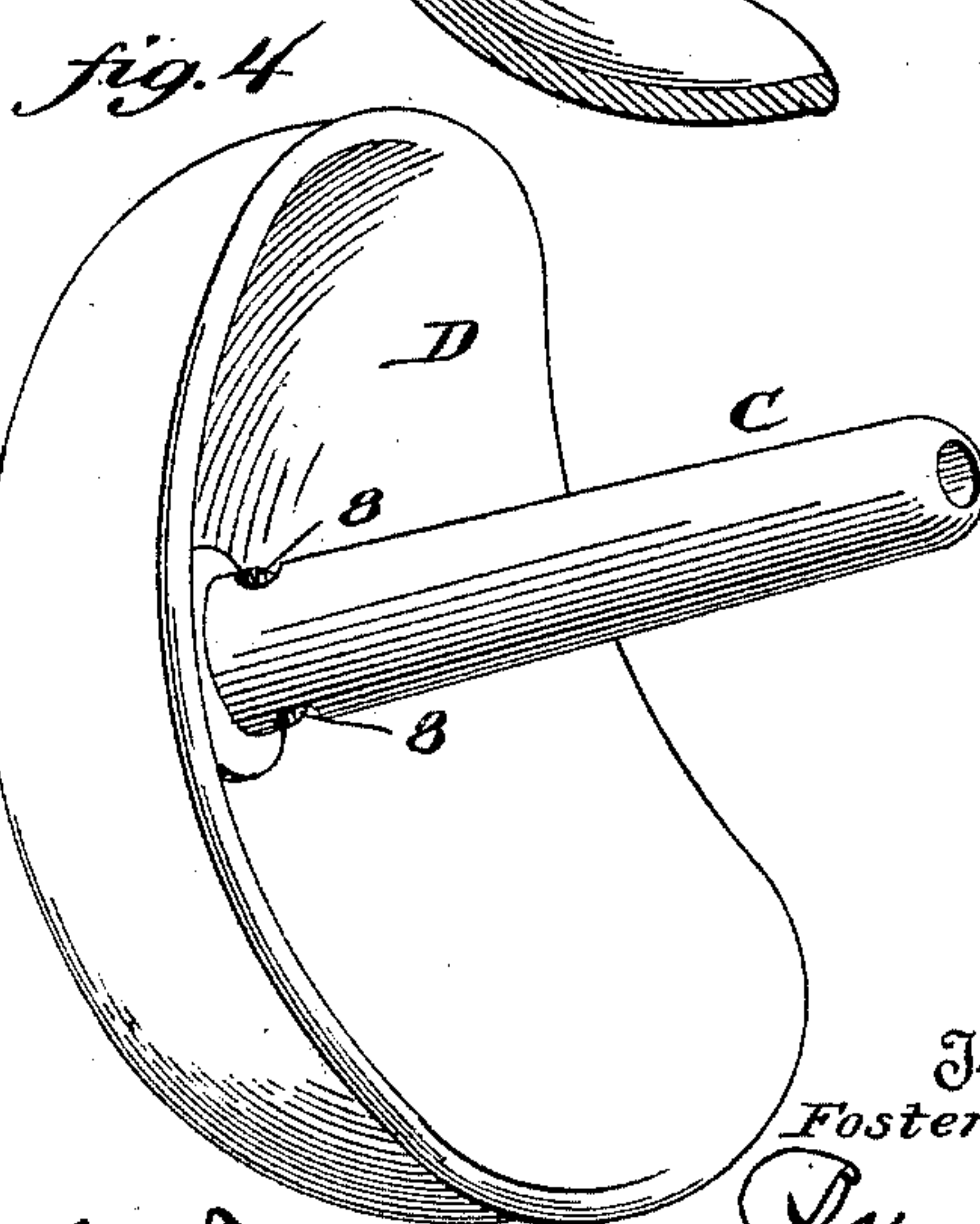
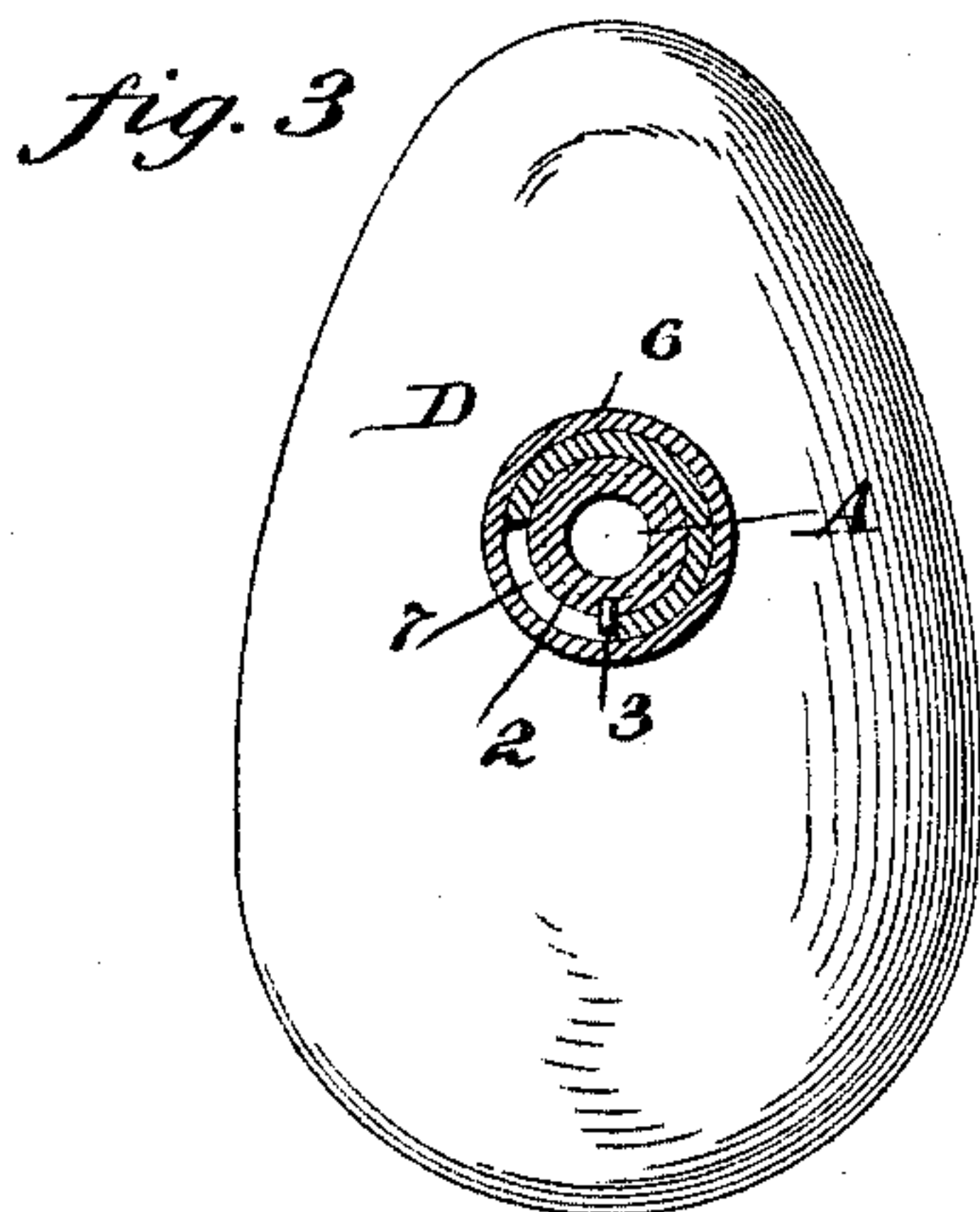
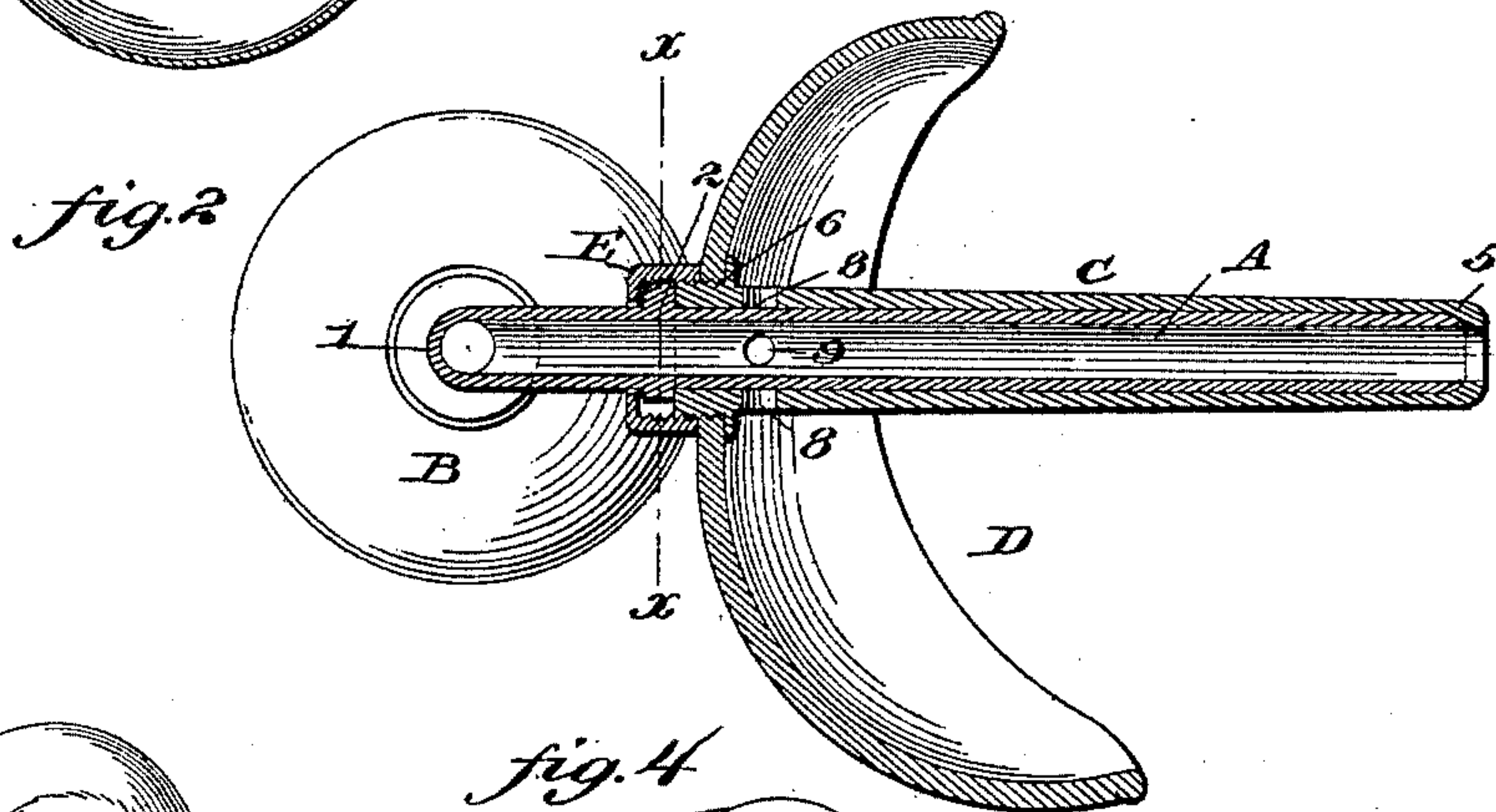
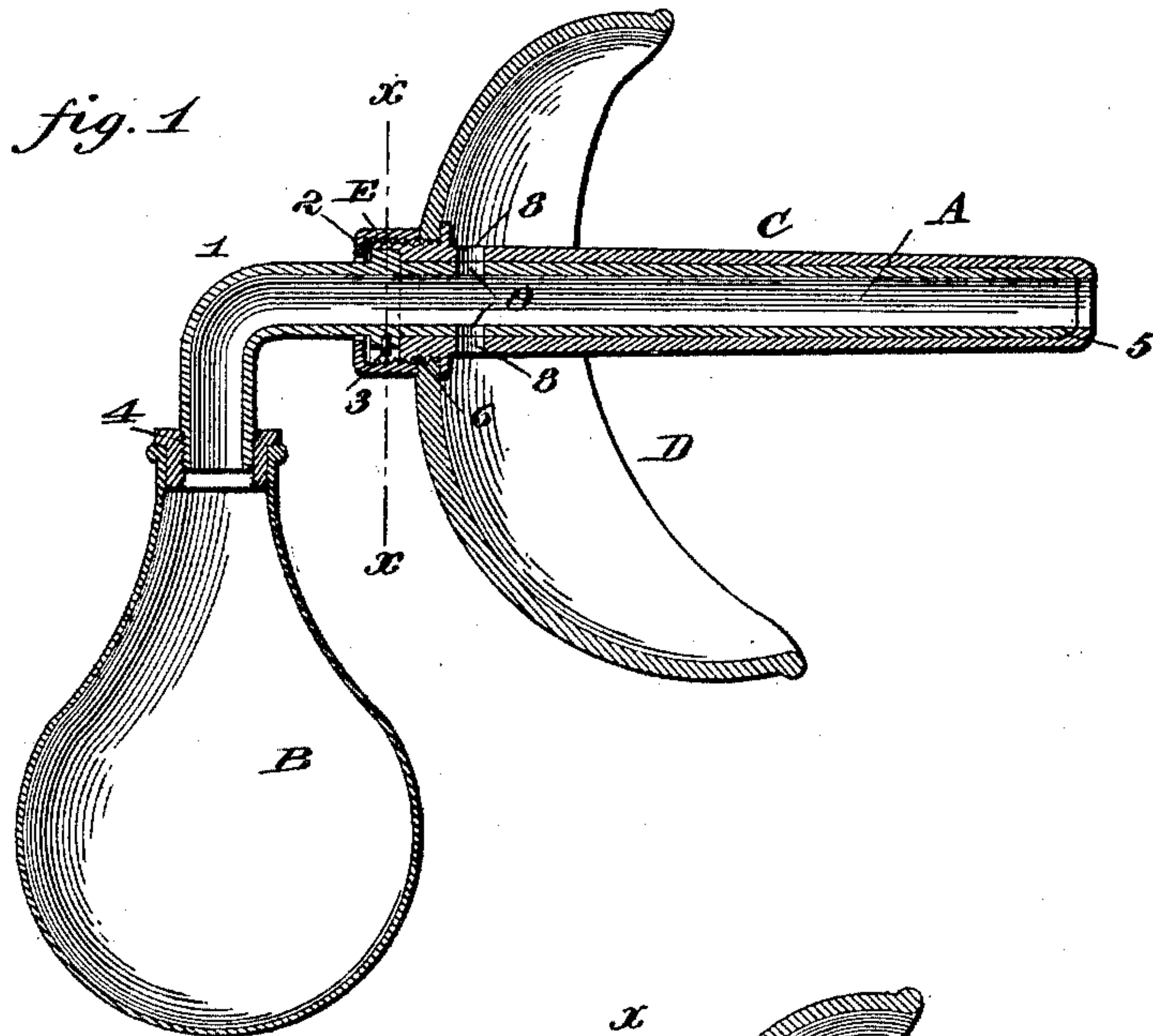


(No Model.)

F. E. ACKLEY.
VAGINAL SYRINGE.

No. 497,757.

Patented May 23, 1893.



Witnesses
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UNITED STATES PATENT OFFICE.

FOSTER E. ACKLEY, OF HAMILTON, MISSOURI.

VAGINAL SYRINGE.

SPECIFICATION forming part of Letters Patent No. 497,757, dated May 23, 1893.

Application filed January 31, 1893. Serial No. 460,422. (No model.)

To all whom it may concern:

Be it known that I, FOSTER E. ACKLEY, a citizen of the United States, residing at Hamilton, in the county of Caldwell, State of Missouri, have invented certain new and useful Improvements in Vaginal Syringes; and I do hereby 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.

My invention relates to an improved vaginal syringe.

The invention will first be described in connection with the accompanying drawings, and then pointed out in the claims.

In the drawings Figure 1 is a longitudinal sectional view of my improved syringe in its open position. Fig. 2 is a similar view of the syringe in its closed position. Fig. 3 is a transverse section on the line $x-x$ Figs. 1 and 2. Fig. 4 is a perspective view of the shield.

Referring to the drawings, A is an interior tube, bent through an arc of about ninety degrees, as shown at 1, and having a shoulder or collar 2, in which is fixed a projecting stop pin 3. The lower end of the interior tube A is screw-threaded, as at 4, for attachment to a soft rubber bulb B.

C is an exterior tube, adapted to fit neatly over the interior tube at its outer end, and having its end flared inward, as shown at 5, thereby covering the joint between the two tubes. The exterior tube has a hard rubber shield D near its base, and is provided with a screw-threaded portion 6, which is cut away or slotted for the reception of stop-pin 3, this slot extending but one-fourth way around, as will be seen at 7 in Fig. 3.

E is a screw-collar adapted to be slipped over the bent end of tube A, before the bulb is attached, bearing loosely against the shoulder 2 and screw-threaded for engagement with the screw-threaded portion 6 of the base of the exterior tube C.

It will be apparent from the foregoing that the interior tube may be revolved or rotated within the exterior tube by holding the latter and using the bent portion 1 of the former as a crank to turn by; it will also be plain that this rotation is limited by the stop-pin 3 striking the ends of the slot 7.

Each tube is provided with a series of holes

so arranged that when the stop-pin is at one end of the slot these holes will be in apposition, whereas when the stop-pin is at the other end of the slot, the holes will be turned away from each other and all communication between the interior tube and the external air cut off except at the forward end of the tube. The holes 8 in the exterior tube C are located directly above the face of the shield D, while the holes 9 in the interior tube A are located, as before stated, so as to be turned in apposition with the holes 8.

In using my improved syringe, the bulb is first compressed to drive out the air, the end of the syringe inserted in the liquid to be injected, and the bulb allowed to expand, whereby the liquid is drawn up and the bulb filled. The syringe is next inserted with its tubes projecting into the vagina, the shield coming in contact with the soft external parts of the body, where it is held by pressure applied to the shield. The contents of the bulb are now injected into the vagina in the usual manner by compressing the bulb, and the interior tube rotated within the exterior tube, so as to bring the holes 8 and 9 in line with each other. It will be plain that when the bulb is now allowed to expand it will withdraw its former contents from the vagina, not only through the open outer ends of the tubes, but also through the holes 8 and 9, thus catching all the liquid which usually escapes around the tubes of those syringes with which I am acquainted. The hard rubber cup-shaped shield fitting closely against the body entirely prevents the inlet of air, thus serving not only to catch any liquid which may run down outside the tubes, but also preventing such liquid from flowing by the exclusion of air from the vagina.

Any one skilled in the art will fully appreciate the clear lines and ease of operation of my device.

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

1. In a syringe, the combination, with an exterior tube having radial openings, of an interior tube having a straight portion revolvable within the exterior tube and a rear portion bent at an angle to the axis of the portion within the exterior tube, the straight por-

tion of the interior tube being provided with radial openings arranged to be turned into or out of register with the openings in the exterior tube by means of the bent portion, substantially as described and for the purpose set forth.

2. In a syringe, the combination, with a concave oval shield having a concave posterior rim and an opening at its minor focus, of an exterior tube secured in the opening and provided with radial holes just above the shield, and an interior tube revoluble within the exterior tube and having radial holes arranged to be brought into register with the radial holes of the exterior tube, substantially as described and for the purpose set forth.

3. The combination, with a perforated inte-

rior tube bent at one end and having an integral collar, a stop-pin inserted in the collar, and a bulb attached to the bent end; of a perforated exterior tube screw-threaded on its base and having a slot in its end for the reception of the stop-pin, a shield above the screw-threaded base, and a collar adapted to bear against shoulder on the interior tube and to engage with the screw-threaded base of the exterior tube, substantially as described and for the purpose set forth.

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

FOSTER E. ACKLEY.

Witnesses:

J. A. CANNON,
D. P. MARTIN.