

No. 743,662.

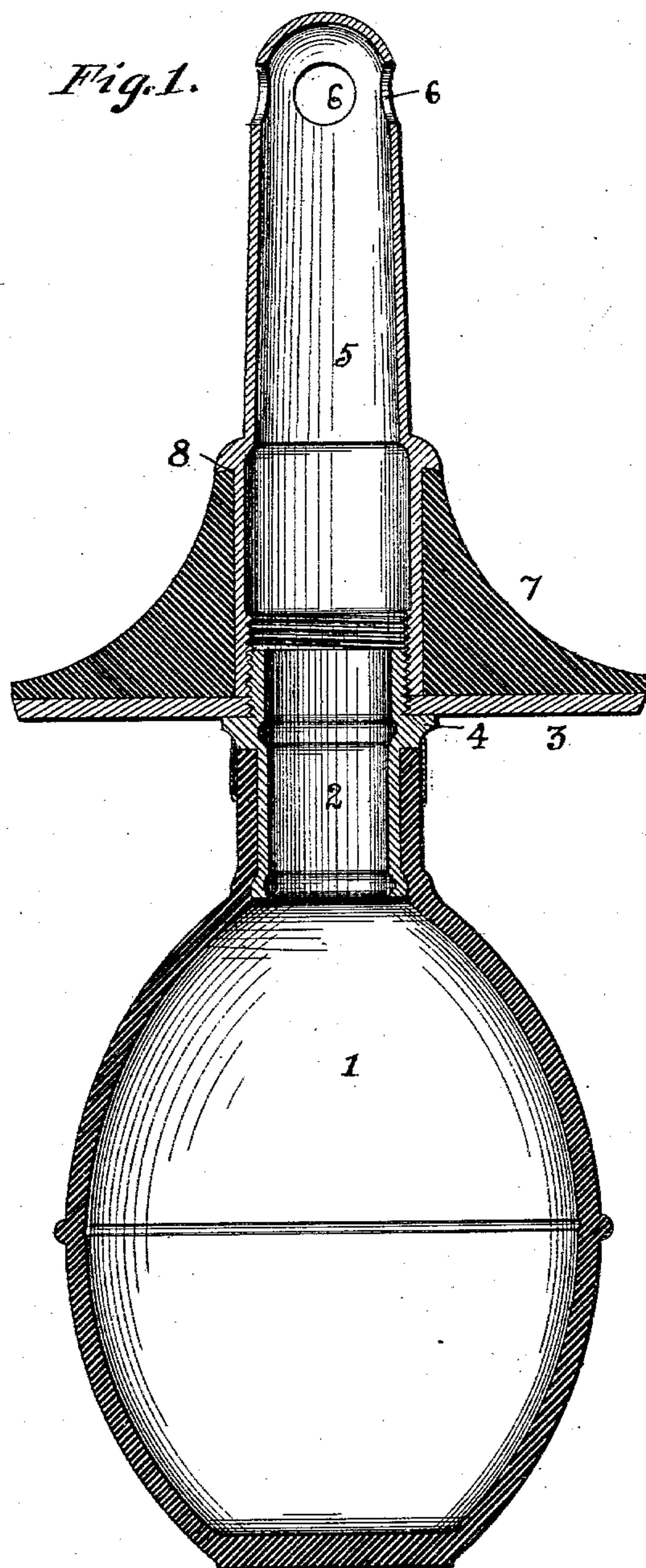
PATENTED NOV. 10, 1903.

C. S. RUCKSTUHL.
SYRINGE.

APPLICATION FILED JUNE 15, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Attest:

Edw. L. Dillon

J. G. Hanson

Inventor:

C. S. Ruckstuhl,

by Cant & Carr

Attys.

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2 SHEETS—SHEET 2.

Fig. 2.

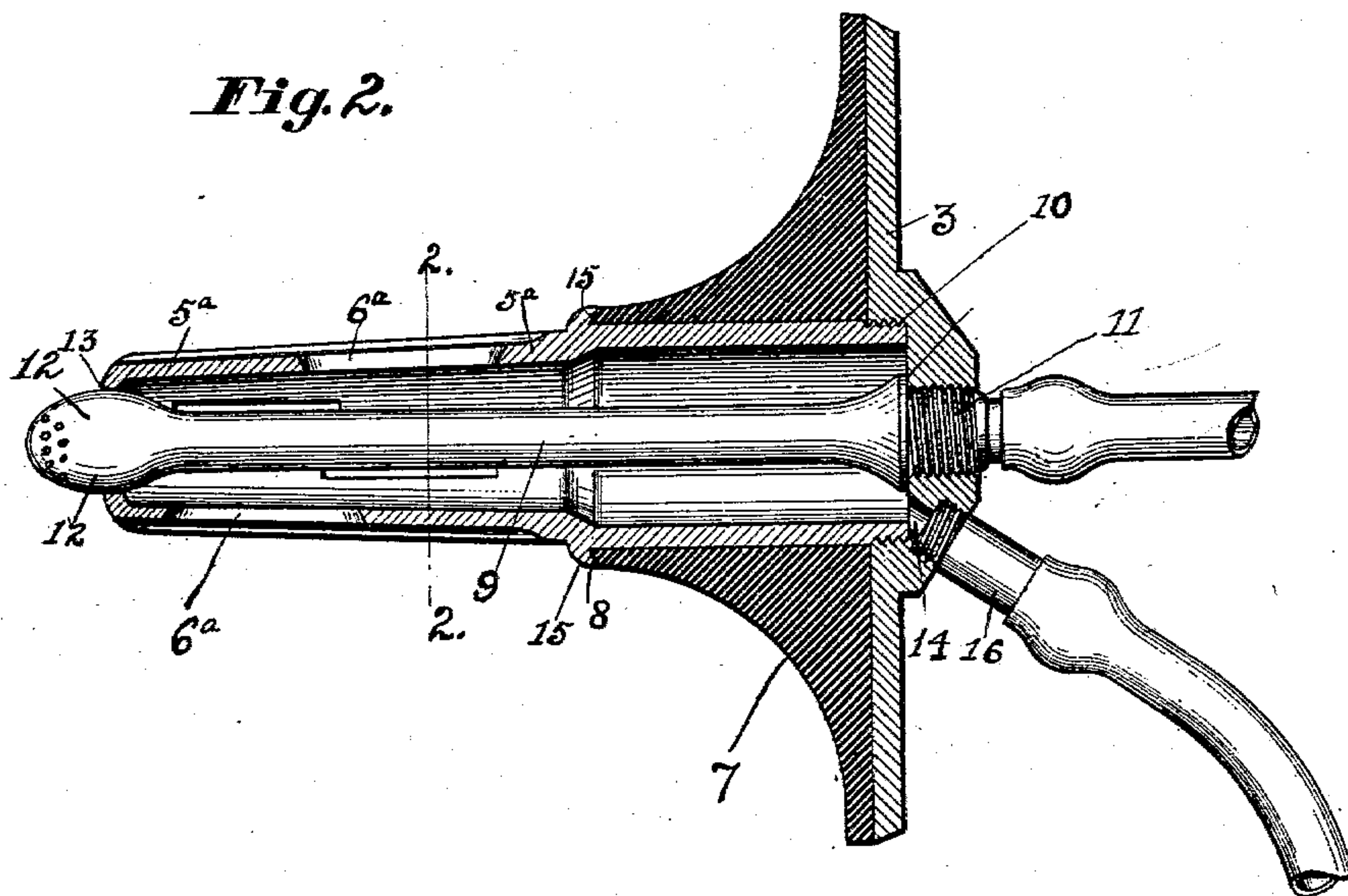
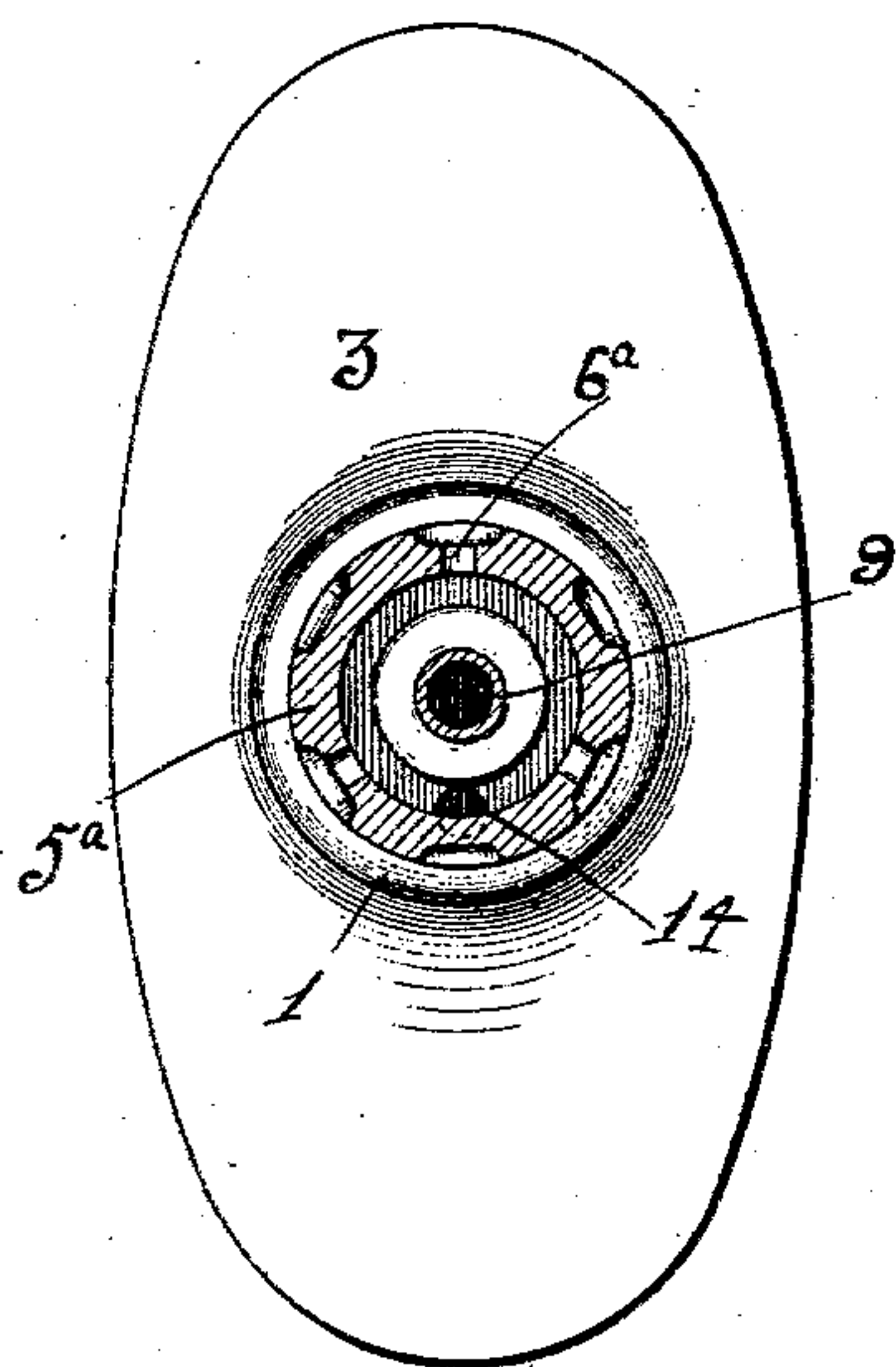


Fig. 3.



Attest:

Edw. L. Dillon
J. G. Hanson

Inventor:

C. S. Ruckstuhl,
by Carr & Carr,
Att'ys

UNITED STATES PATENT OFFICE.

CHARLES S. RUCKSTUHL, OF ST. LOUIS, MISSOURI.

SYRINGE.

SPECIFICATION forming part of Letters Patent No. 743,662, dated November 10, 1903.

Application filed June 15, 1903. Serial No. 161,417. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. RUCKSTUHL, a citizen of the United States, and a resident of the city of St. Louis and State of Missouri, have invented a new and useful Syringe, of which the following is a specification.

My invention relates to syringes, and has for its principal objects to produce a sanitary device to facilitate the charging thereof and to provide for the proper holding of the wedge-shield.

It consists principally in a circumferential rib on the tubular member arranged to hold the wedge-shield in position.

It also consists in making the tubular member separable from the bulb.

It also consists in the arrangements and in the combinations of parts hereinafter described and claimed.

In the accompanying drawings, which form part of this specification, and wherein like symbols refer to like parts wherever they occur, Figure 1 is a longitudinal section of a vaginal syringe embodying my invention. Fig. 2 is a longitudinal section of a fountain-syringe embodying my invention, and Fig. 3 is a cross-section of said fountain-syringe on line 2 2 of Fig. 2.

The soft-rubber bulb 1 has a threaded nipple 2 secured thereto. Preferably this nipple is threaded externally for sanitary reasons, and the end of the bulb opposite said nipple is made flat, so as to constitute a base for the bulb to rest upon while liquid is being poured into it through said nipple. Working on the projecting threaded end of the nipple is a threaded base-plate 3, which abuts against a shoulder or limiting-stop 4, provided therefor on said nipple. Also screwing on said projecting threaded end of the nipple is a tubular member 5, whose rear end portion is interiorly threaded for the purpose. The front end of this tubular member is rounded or curved, and in the side near said end are a number of holes 6. The plurality of holes and their lateral location avoid the danger of entraining the membrane. Said tubular member has a circumferential rib 15 thereon, preferably integral therewith. Also mounted on said tubular member is a wedge-shield 7, of soft rubber or other suitable material. This wedge-shield has a hole extending there-

through of proper size to permit it to be slipped over the tubular member and to bind thereon. The wedge-shield is of oval section at the rear end and tapers forwardly to a thin annular wall at its front. The rear side of the rib on the tubular member is undercut, as shown at 8. Normally the soft-rubber wedge-shield is mounted next to the base-plate, so that when the tubular member is screwed into the nipple the soft-rubber wedge-shield will be clamped between the base-plate and the rib, and the front end of the wedge-shield will thereby be crowded under the overhanging face of the rib. The front end of the wedge-shield is thus prevented from curling and fouling. It is desirable, however, to be able to use the wedge-shield at a more forward position. For this purpose the front side of the rib is beveled or curved, so that the yielding wedge-shield can be crowded over it from the front end of the tubular member. When the wedge-shield is in the desired position, the rubber tightens about and on both sides of the rib and holds it firmly in place, so as to permit the device to be safely used as thus adjusted.

Figs. 2 and 3 illustrate a fountain-syringe embodying my invention. In this construction the wedge-shield is mounted on the tubular member and clamped between the base-plate and the rib, as in the construction hereinbefore described. The tubular member, however, contains a spraying-tube 9, arranged axially thereof, and itself constitutes the outlet-tube. The rear end of the tubular member screws into an internally-threaded socket 10, provided therefor in the base-plate, and the spraying-tube has a threaded portion 11, which fits in a threaded hole provided therefor in the socket portion of the base-plate. The front end or head 12 of the spraying-tube is spherically enlarged and perforated and extends through a hole 13 provided therefor in the front end of the tubular member. The tubular member has holes in its side for the admission of the liquid and is drained by a hole 14 extending angularly through the base-plate and provided with a suitable pipe or connecting-piece 16.

Obviously the constructions hereinbefore described admit of considerable variation without departing from my invention, and I

do not wish to restrict myself to said constructions.

What I claim is—

1. A syringe comprising a detachable tubular member having a circumferential rib intermediate of its ends, and a wedge-shield adapted to slip on over either end of said tubular member and to be held in position by said circumferential rib.
2. A syringe comprising a tubular member having a circumferential rib undercut at its rear side, and a wedge-shield fitting over said tubular member and arranged to have its front end engaged by said rib.
3. A syringe comprising a detachable tubular member having holes in its side and a circumferential rib intermediate of its ends, and a wedge-shield adapted to slip on over either end of said tubular member and to be held in position by said circumferential rib.

4. A syringe comprising a detachable tubular member having a circumferential rib undercut at its rear side, and a wedge-shield adapted to slip over either end of said tubular member and to be held in position by said circumferential rib.

5. A syringe comprising a bulb, an externally-threaded nipple secured thereto, the bore of said nipple being unobstructed, a rigid screw-threaded base-piece on said nipple, a threaded tubular member working on said nipple and separable therefrom and having a circumferential rib, the bore of said tubular member being unobstructed, and a wedge-shield mounted on said tubular member and abutting said base-piece and said rib.

CHARLES S. RUCKSTUHL.

Witnesses:

HENRY A. HAMILTON,
JAMES A. CARR.