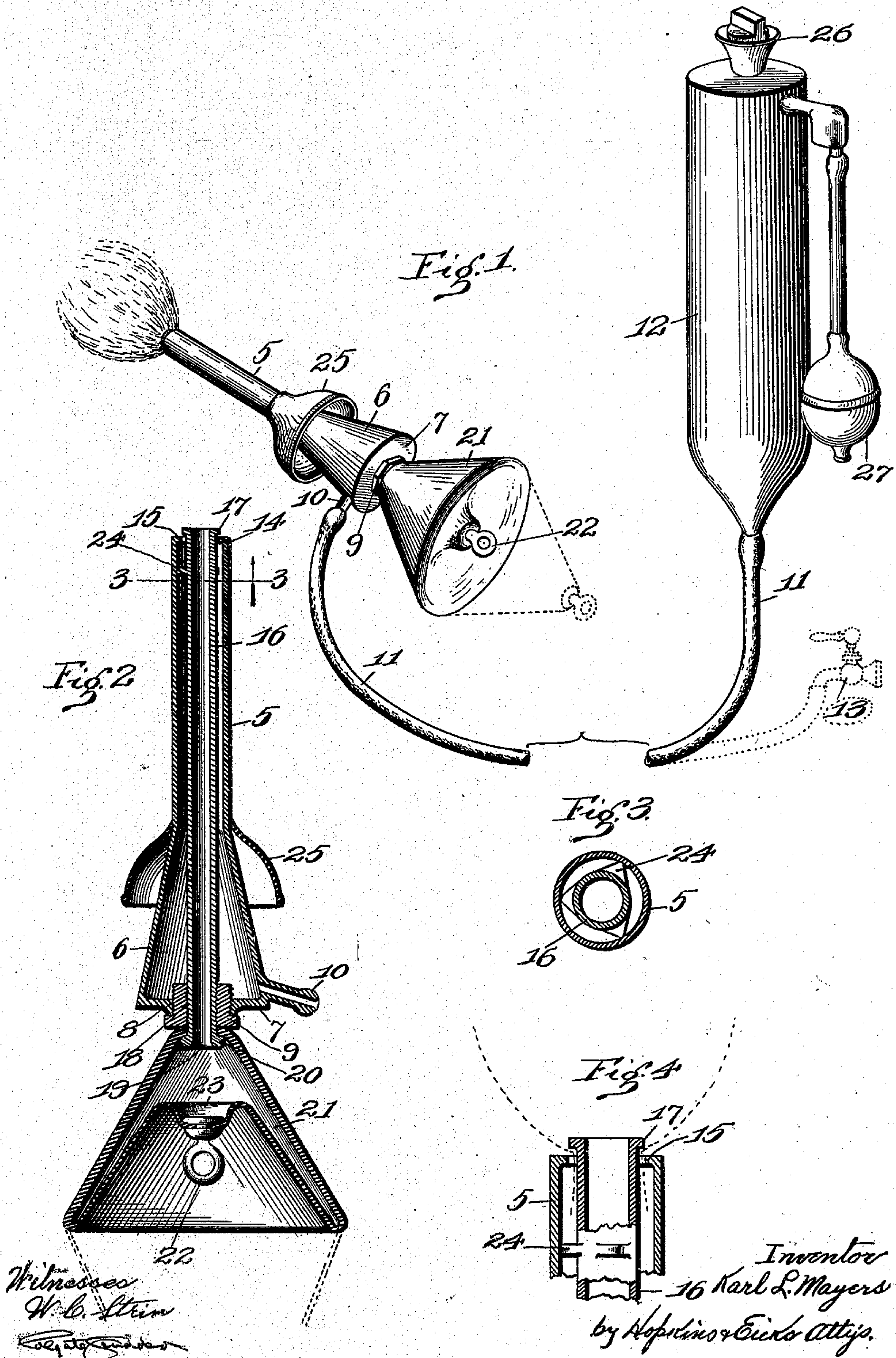


K. L. MAYERS.
 SYRINGE.
 APPLICATION FILED OCT. 23, 1906.

900,182.

Patented Oct. 6, 1908.



UNITED STATES PATENT OFFICE.

KARL L. MAYERS, OF ST. LOUIS, MISSOURI.

SYRINGE.

No. 900,182.

Specification of Letters Patent.

Patented Oct. 6, 1908.

Application filed October 23, 1906. Serial No. 340,212.

To all whom it may concern:

Be it known that I, KARL L. MAYERS, citizen of the United States, and resident of St. Louis, Missouri, have invented certain new and useful Improvements in Syringes, of which the following is a specification.

This invention relates to improvements in syringes, and consists in the novel arrangement, construction and combination of parts as will be fully hereinafter described and claimed.

The object of this invention is to construct a syringe to be used by the female sex for the treatment of vaginal diseases.

A further object of this invention is to construct a syringe to produce a globular spray for flushing and washing the vagina, retaining the fluid therein, and to remove the fluid by suction created by a bellows.

In the drawings—Figure 1 is a perspective view of my complete invention. Fig. 2 is a central sectional view of the same. Fig. 3 is a cross sectional view taken on the line 3—3 of Fig. 2. Fig. 4 is an enlarged detail sectional view of the spray end of the syringe.

In the construction of my invention I provide an outer tube 5 having an outwardly tapering portion 6, its end 7 provided with an internal screw-threaded opening 8 in which is inserted an external screw-threaded bushing 9. The tapering portion 6 is provided with a nipple 10 to which is attached a hose or tube 11 to admit fluid into the tube 5 from a fountain reservoir 12 or faucet 13. The outer end 14 is provided with an internal flange 15 which has a tendency to direct the fluid inwardly against an inner tube 16 contacting with the under surface of the flange 17 formed thereon and directing the fluid outwardly forming a globular spray as shown in Fig. 1 and by dotted lines in Fig. 4. The inner tube 16 extends through the tube 5 and is provided with external screw-threads 18 which engage with internal threads formed in the bushing 9. The end 19 of said tube 16 is provided with a flange 20; between the same and the bushing is firmly held a bellows 21, by which the fluid is extracted from the vagina by suction caused by expanding the

bellows. This is accomplished by pulling upon the eye 22 secured to the end 23 of the bellows.

The bellows 21 is formed preferably of rubber; the section connected to the tubes is of a thicker material than the portion to be extended. By this construction the bellows can be more easily manipulated than where both sections are of the same thickness. The bellows is absolutely leak-proof, and contains the fluid removed from the vagina and the same is emptied by inverting the syringe, holding the same with the tube end downward. The tube 16 is properly spaced in the outer tube 5 by lugs 24 formed integral with the inner tube. (See Fig. 3.) Upon the outer tube 5, immediately at the intersection of said tube and tapering portion 6, I place a shield 25 which is of sufficient size and flexible material to close the passage to retain the fluid in the vagina while spraying.

In using my device, and in instances where the patient wishes only to cleanse the vagina by flushing it with water, the hose 11 is attached to the faucet of a hydrant as shown by dotted lines in Fig. 1, but in instances where hydrant pressure is not available, or in instances where the patient desires to use an antiseptic fluid preparation, the reservoir 12 is used, which consists of an air-tight receptacle provided with an inlet 26, and pressure is imparted upon the fluid by means of the air bulb 27.

With the use of my syringe the entire wall of the vagina is thoroughly washed, the contents remaining in the vagina while being washed and then removed by expanding the bellows into which the fluid is conveyed.

Having fully described my invention, what I claim is:

A syringe comprising an inner tube; a flange formed on the end of the inner tube; lugs formed on the inner tube; an outer tube; an inwardly projecting flange formed on the end of the said outer tube and located directly beneath the flange of the inner tube so as to deflect the liquid, forming a globular spray, the said lugs on the inner tube con-

tacting with the inner surface of the outer tube to hold the inner tube in central position, the said outer tube having a tapered portion; a nipple formed on the tapered portion for the admission of the liquid; a bel-
5 lows located on the opposite end of the inner tube; a bushing supporting the inner tube within the outer tube and supporting the bellows on the outer tube and forming a leak-

proof connection; a shield located upon the 10 outer tube, substantially as specified.

In testimony whereof, I have signed my name to this specification, in presence of two subscribing witnesses.

KARL L. MAYERS.

Witnesses:

ALFRED A. EICKS,
COLGATE SCUDDER.