

No. 695,470.

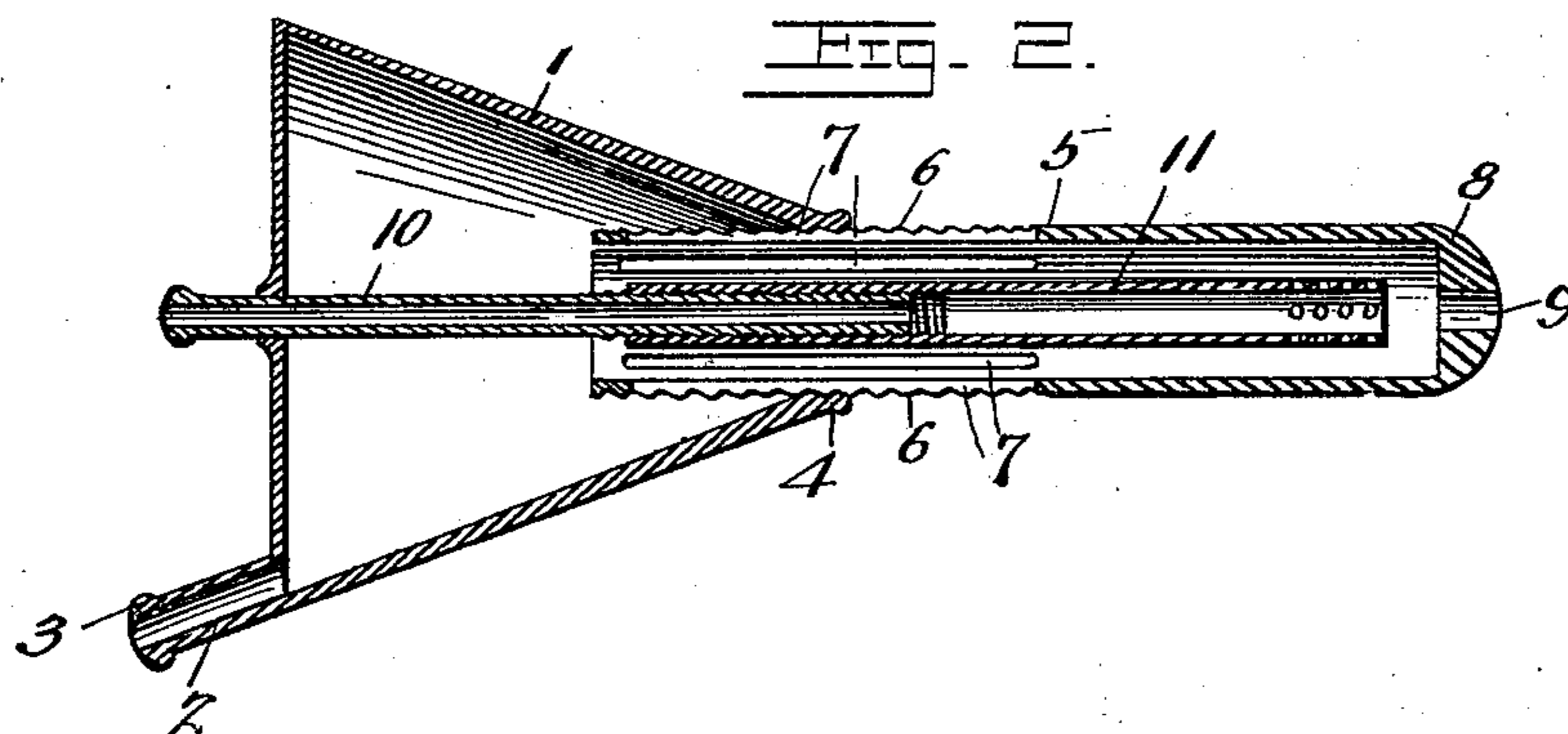
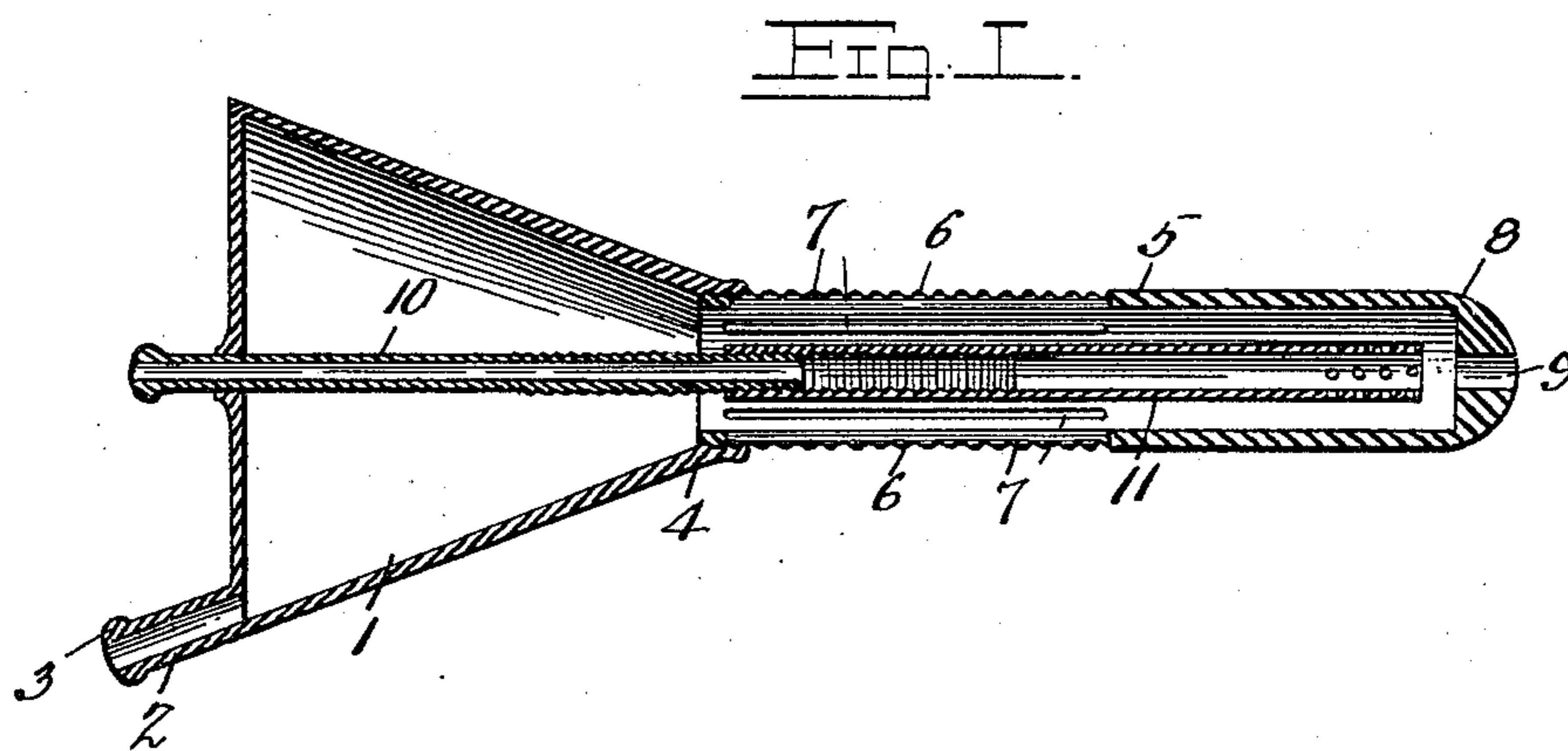
Patented Mar. 18, 1902.

Y. M. MILAM.
SYRINGE.

(Application filed Apr. 29, 1901.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses
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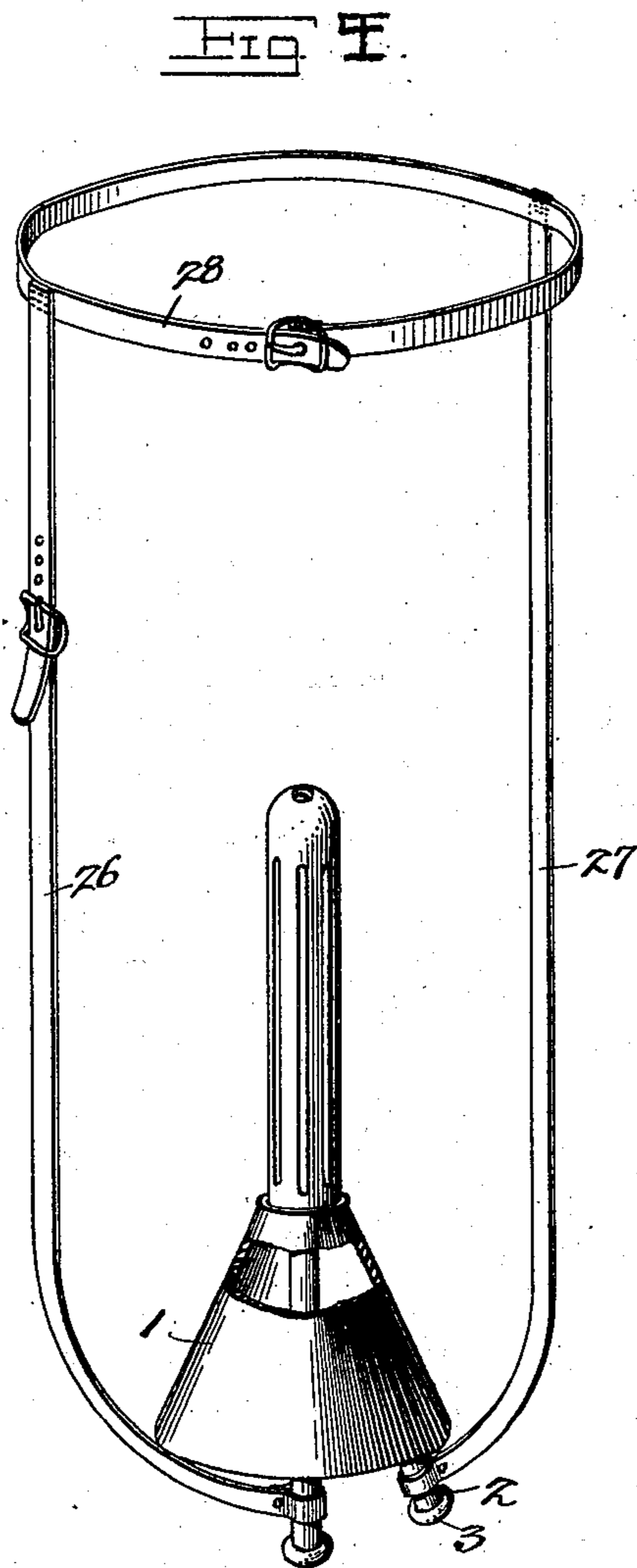
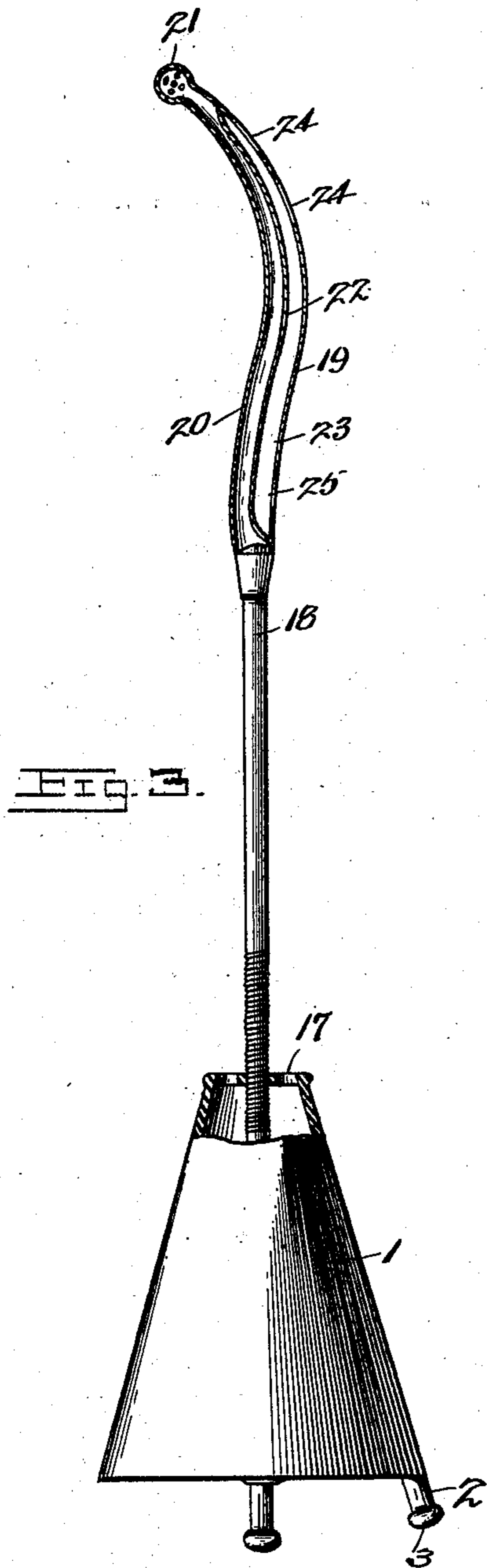
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2 Sheets—Sheet 2.



Witnesses
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UNITED STATES PATENT OFFICE.

YOUNG M. MILAM, OF LAKE CHARLES, LOUISIANA, ASSIGNOR OF ONE-FOURTH TO RUDOLPH KRAUSE, OF LAKE CHARLES, LOUISIANA.

SYRINGE.

SPECIFICATION forming part of Letters Patent No. 695,470, dated March 18, 1902.

Application filed April 29, 1901. Serial No. 57,997. (No model.)

To all whom it may concern:

Be it known that I, YOUNG M. MILAM, a citizen of the United States, residing at Lake Charles, in the parish of Calcasieu and State of Louisiana, have invented a new and useful Syringe, of which the following is a specification.

This invention relates to syringes for general application, but specially adapted for vaginal usage; and the object of the same is to provide a simple and effective device of this class having positive means for delivering the injected fluid to the portion of the organ desired to be effectually treated to occlude the entrance-orifice of the organ treated in a reliable manner, so that the garments of the patient or bedclothing will not become soiled by the outflow liquid and cause the latter to pass directly into the occluding portion of the syringe, which has a chamber to receive the same, and also in some instances to have the injecting-nozzle adjustable for variation in penetration or insertion into the organ treated.

The invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is a longitudinal vertical section through a syringe embodying the features of the invention. Fig. 2 is a similar view showing the parts of the syringe adjusted and shortened. Fig. 3 is an elevation of a modified form of the syringe shown partially in section and adapted for uterus insertion. Fig. 4 shows the improved form of syringe as illustrated by Figs. 1 and 2 or any of the other forms as provided with body-engaging straps for holding the syringe up in applied condition.

Similar characters of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates a frusto-conical body with an outer smooth surface and hollow to form a chamber to receive the outflow fluid after it has served its purpose. This body is used in all the forms shown and not only serves as a chamber for the purpose set forth, but also as an occluding-plug for the orifice of the organ treated, and to make the

drainage from the body effectual it is provided with a drainage-nozzle 2 at the periphery of the bottom and which is arranged at the bottom portion of the body when the latter is applied, the said nozzle having the same inclination as the body side, so that the body will be fully drained, and also having a terminal bead 3 for securement of a conveying-pipe thereto.

In the form of device shown by Figs. 1 and 2 the interior of the reduced end 4 of the body is screw-threaded to adjustably receive an outer nozzle 5, having screw-corrugations 6 to movably engage said end and formed with elongated slots 7, where said corrugations are located, the nozzle beyond the corrugations being closed except at its rounded entrance end 8, which has a central aperture 9 therethrough. The end of the said nozzle which engages the body is open to the full diametrical extent of the nozzle, and the slots 7 permit the return fluid to pass into the body and from the latter pass off and enter a suitable receptacle. The object of having the nozzle adjustable is to adapt the device for varying insertion lengths and to accommodate different conditions of the organ treated, so that the injected fluid or medication may be directly applied to the affected part. The injecting-tube comprises two sections 10 and 11, the section 10 being secured to the center of the bottom of the body and extending upwardly through the center of the latter and also having one end projecting below the said body bottom for attachment of a pipe or like device, which will be supplied with a compression-bulb for forcing the fluid to be injected forcefully through the said section. The section 10 also projects centrally into the nozzle 5 and has exterior screw-threads for the adjustable or telescopic attachment of the lower extremity of the section 11, which has its opposite or upper end open and perforated, so that the injected fluid may be forced out therefrom and through the aperture 9 of the rounded entrance end 8 of the said nozzle. The sections 10 and 11 are adjustable to compensate for the adjustment of the nozzle, so that a proper correspondence of the nozzle and injecting-tube as an entirety may be preserved as to

their relative projections. The injecting-tube is fully inclosed and protected, and insertion of the nozzle into the organ can be effected without pain or irritation to the patient or other injury to the organ operated upon.

The form of the syringe shown by Fig. 3 embodies the body 1, which has an upper open end 17 to adjustably receive an elongated injecting-tube 18, to the upper end of which an elongated nozzle 19 is secured and adapted for insertion in the uterus. The nozzle 19 comprises a duct 20 for passage therethrough of the injected fluid from the tube 18 and terminates in a spherical probe end 21, and separated from the said duct by an intermediate partition 22 is an outlet-duct 23, having upper ingress-openings 24 and a lower outlet-opening 25. The said lower opening 25 will be situated below the neck or mouth of the uterus when the nozzle 19 is inserted in the latter, and the return fluid will come down through the duct 23 and the vagina around the tube 18 and pass into the body 1. The adjustment of the tube 18 will regulate the degree of insertion of the nozzle proportionate to the dimensions of the organ treated or the elevation of the uterus.

The syringe shown by Fig. 4 is for the sake of illustration that shown by Figs. 1 and 2, and to the lower portion thereof straps 26 and 27 are secured and also attached to an upper waist belt or strap 28. The strap 26 is adjustable and the waist belt or strap may be likewise lengthened or shortened or increased or decreased in size to suit different body dimensions. The use of this body-harness is to hold the syringe well up in applied position and is particularly intended for use when long periods of injection are to be pursued.

The improved syringe in its various forms will be found exceptionally efficient for treating the vagina and urethra and is comparatively simple and inexpensive in its construction. Syringes for other uses may also embody the same structural features, and as before noted all embody the chambered occluding plug or body into which the return or outflow fluid and the effete or other matter carried thereby so as to have this one device

serve the double purpose of a plug and a receptive chamber.

The size, form, proportions, and minor details may be varied without departing from the principle of the invention.

Having thus described the invention, what is claimed as new is—

1. A syringe comprising a frusto-conical body having a single thickness of wall at the side and bottom and provided with a smooth outer surface to serve as an occluding-plug, the bottom of the body being closed and flush with the lower terminal of the side wall, the body being hollow for full occupancy by the outflowing injected liquid which enters the same at the upper reduced end, the latter end having an interior screw-threaded portion and the body having an outlet-nozzle extending away from the bottom at the periphery and partaking of the same inclination as the side of the said body to form a perfect drain, an injecting-tube extending through the center of the body and adjustable in relation to the upper reduced end thereof to regulate the projection of the same above the said reduced end, and a nozzle fitted over the upper extremity of the said injecting-tube and having means for permitting the outflow of the injected liquid and openings in the side portion below said means to permit the return flow of the said fluid to pass down to and through the upper reduced end of the body.

2. A syringe comprising a frusto-conical hollow body, an injecting-tube held by the said body and comprising adjustable sections, and a nozzle adjustably mounted in the upper reduced end of the body over the tube and having an outlet for the injected fluid and longitudinal slots for the passage of the return flow of the said fluid therethrough into the body, said longitudinal slots being controlled as to extent of exposure by the adjustment of said nozzle in relation to the body.

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

YOUNG M. MILAM.

Witnesses:

H. B. MILLIGAN,

W. R. JORDAN.