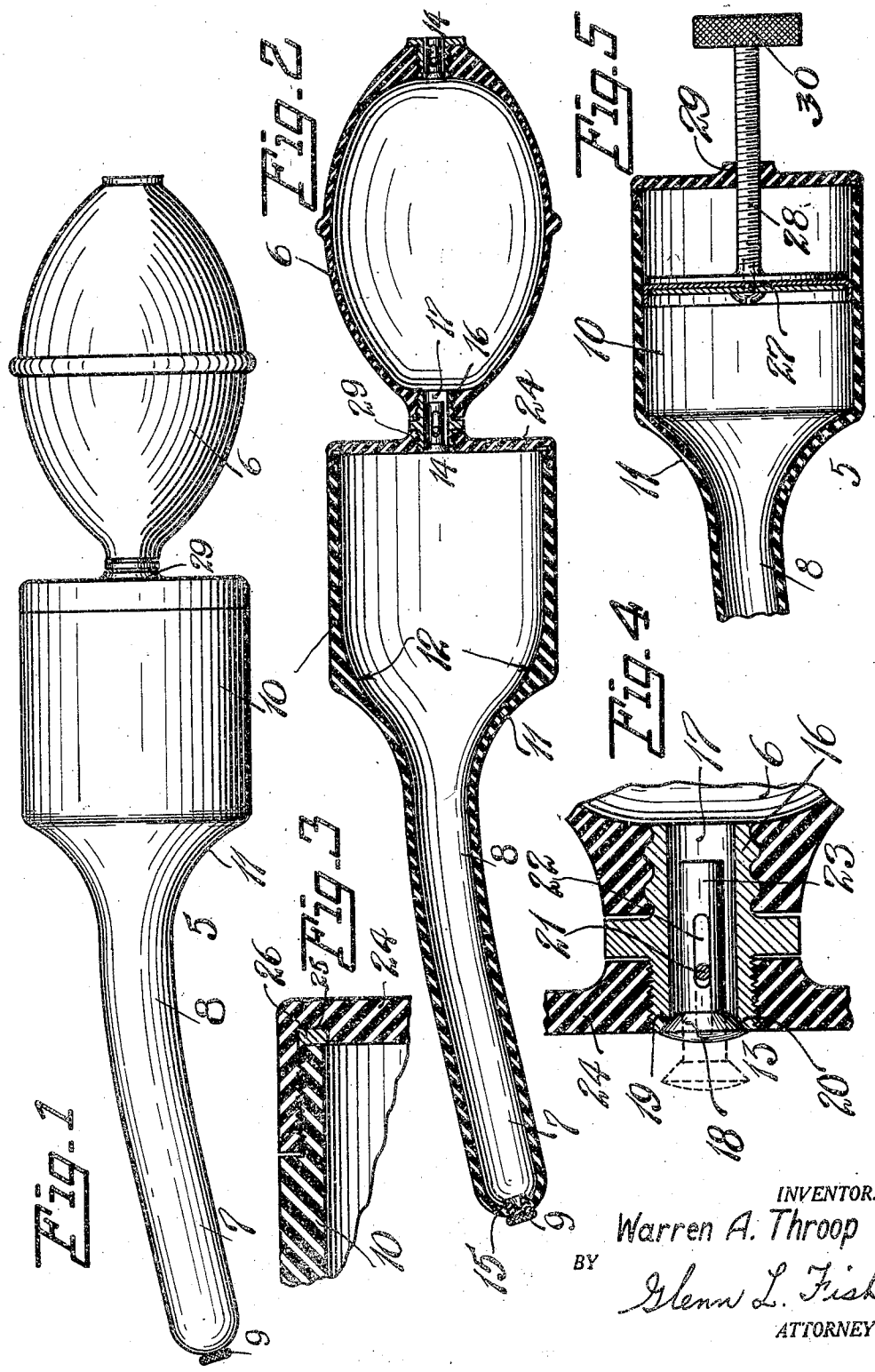
Sept. 20, 1932. W. A. THROOP 1,878,026

SYRINGE

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SYRINGE

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My invention relates to improvements in syringes and especially the type used for discharging a jelly like substance into the vaginal cavity. The device consists of a tube having a bulb attached thereto for the purpose of forcing the substance into the cavity.

The syringe can be quickly and easily operated, conveniently carried, and easily refilled.

Another object of the invention is the production of the syringe which is simple in construction, efficient in operation, and consists of a comparatively small number of parts.

With these and other objects in view the invention consists in the novel details of construction and arrangement and combination of parts hereinafter described and illustrated in the accompanying drawing.

The accompanying drawing illustrates one embodiment of the invention, but it will be understood that the invention is not necessarily limited to the specific construction shown.

In the drawing Figure 1 is a side elevation of the syringe embodying my invention.

Figure 2 is a view in cross section showing the interior construction.

Figure 3 is a fragmentary view showing the sealing means for the cap.

Figure 4 is a view of the valve enlarged shown in cross section.

Figure 5 is a view showing a slightly modified form of the invention in which a plunger is shown for discharging the mass instead of a bulb as shown in Fig. 2.

Referring particularly to the drawing, my invention comprises a syringe body 5, to which is attached a bulb 6 for furnishing the power. The body 5 consists of a tubular end portion 7 which is slightly curved at 8, thus providing a tube that can be easily inserted into the cavity without inconvenience to the operator. The screw cap 9 seals the tube 7 and, when the syringe is to be used the cap 9 is removed.

To provide capacity for the syringe a large portion 10 is used, thus the device can be used over a period of time without refilling. On the exterior of the body a curved portion 11 acts as a stop when the device is inserted into the cavity. A gradual curved inner wall 12, prevents the jelly from lodging and permitting a free flowing jelly substance upon the application of the air pressure.

To provide a means for power, a bulb 6 is utilized, and is operated by hand. In either end of the bulb valves 13, and 14 are located, and provide the necessary controls for the bulb. By exerting pressure on the bulb the valve 14 is forced closed while the valve 13 is forced open. This action causes the air blast to pass into the syringe, thus forcing the jelly substance, through the outlet 15 of the tube 7. The valve 13 consists of a casing 16, which is provided with a cylindrical opening 17, through which the air passes into the syringe 10. After the pressure has been applied, and upon the release of the bulb, the valve core head 18 having a seating face 19 contacts with a corresponding face 20 thus sealing the opening 17. To securely hold the valve core in place a pin 21 is provided and is secured to the valve casing 16. The pin extends thru a slot 22 in stem 23 of the valve core. Thus the pin 21 prevents the core from becoming dislodged. The valve 14 is of a similar construction to that of 13 and therefore the description of the valve 13 is sufficient for both.

To procure an air tight syringe, a cap 24 is provided and, having a recessed groove 25 wherein a gasket 26 is inserted, the cap may be screwed in place, thus rendering the device air tight. The valve casing 16 acts as a connection between the bulb and syringe body.

A syringe body may be provided with operating means other than the air blast. As designated in Figure 5 whereby the syringe body is provided with a plunger valve 27 which is attached to a threaded shaft 28. The cap 24 having a threaded portion 29 allows the plunger to be impelled or repelled by twisting the screw cap 30.

With the construction described I have provided a simple, practical and economical syringe device for use with a jelly like substance, for discharging a desired amount of the substance or other medicinal matter into a cavity which can only be reached by the insertion of a tube or nozzle of some kind.

It is evident that minor changes may be made in the construction without departing from the spirit of the invention, and such changes are therefore contemplated as being within the scope of the following claim:

What is claimed is:

A syringe for depositing a jelly like substance into the vaginal cavity having in combination a large cylindrical container body with a reduced and curved nozzle end portion and having smooth inner walls joining said nozzle and cylindrical body, a cap threadedly installed on the container body and having a recessed groove therein, a gasket within the groove, a bulb connected closely and directly to the container body, a valve arranged to threadedly connect the bulb with the container body, a slidable valve for the outer end of the bulb slot and pin guide means for both of said slide valves, the first-named valve adapted to open and the second-named valve adapted to close when pressure is applied to the bulb, and the first-named valve adapted to close and the second-named valve adapted to open when pressure is released from the bulb.

In testimony whereof I affix my signature.

WARREN A. THROOP.