G. J. DUGGAN.

URETHRITIC SYRINGE.

APPLICATION FILED MAY 20, 1915.

1,166,338. Patented Dec. 28, 1915.

Fig. 1.

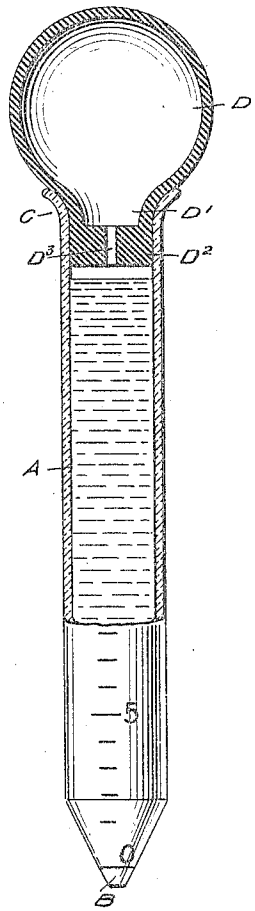
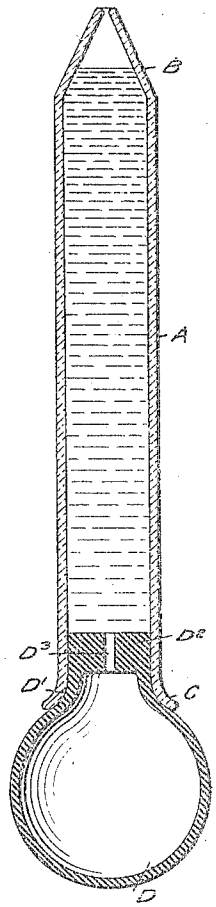


Fig. 2.



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URETHRITIC SYRINGE.

1,166,338. Specification of Letters Patent. Patented Dec. 28, 1915.

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To all whom it may concern:

Be it known that I, GEORGE J. DUGGAN, a citizen of the United States, and a resident of Rutherford, in the county of Bergen and State of New Jersey, have invented a new and Improved Urethritic Syringe, of which the following is a full, clear, and exact description.

The invention relates to urethritic syringes consisting of a glass barrel and a rubber bulb for drawing the medicated liquid into the barrel and ejecting it through the nozzle thereof to an affected part.

The object of the invention is to provide a new and improved syringe of the type mentioned, and arranged to prevent the liquid drawn into the barrel from flowing into the bulb on holding the barrel with the nozzle upward.

In order to accomplish the desired result, the neck of the bulb fitting into the barrel is provided with thickened walls to leave but a small aperture in the neck and to form a large supporting surface for the liquid in the barrel, to prevent the liquid from flowing into the bulb, and to allow of ejecting the liquid from the barrel in any position in which the barrel may be held at the time.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in both views.

Figure 1 is a sectional side elevation of the syringe with the nozzle end of the barrel shown in elevation and with the liquid drawn into the barrel; and Fig. 2 is a sectional side elevation of the same with the nozzle pointing upward.

The barrel A of the syringe is preferably made of glass and is provided at one end with a nozzle B and at the other end with a flaring mouth C and a rubber bulb D is used at this end of the barrel and is provided with a neck D′ fitting snugly into the barrel and on to the flaring mouth C, as plainly shown in Figs. 1 and 2. The neck D′ is provided with an integral thickened wall D^2 having a minute aperture D^3 through the same for the passage of air into and out of the bulb D on releasing and pressing the bulb in the usual manner. It will be noticed that by providing the thickened wall D^2 and the small aperture D^3, a large supporting surface is provided for the liquid to rest on at the time the barrel A is held in position with the nozzle B upward so that the liquid is not liable to flow through the aperture D^3 into the bulb D.

It is understood that when using the syringe, the nozzle B is immersed in the liquid after the bulb D has been squeezed, and then on releasing the bulb the liquid is drawn into the barrel A, as indicated in Fig. 1. The user can now turn the syringe upside down or into any inclined position without danger of the liquid flowing through the small aperture D^3 into the bulb D. As the syringe is held but temporarily in this position for application to the affected part on a subsequent pressing of the bulb D for ejecting the liquid, it is evident that the liquid has not sufficient time to pass into the bulb D especially as large supporting surfaces are provided by the thickened walls D^2 of the neck D′, as above explained. Practically, the neck D′ of the bulb D forms a support for the flaring mouth end of the barrel A with a small aperture for the passage of air into and out of the bulb without danger of the liquid passing into the bulb.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A syringe comprising a barrel provided at one end with a discharge nozzle and at its opposite end with a flaring mouth, a compressible bulb having a neck and a thickened end wall fitting within said flaring mouth, said end wall having a minute air passage therethrough, said wall forming a support for a body of liquid held within the barrel and preventing passage of the liquid from the barrel into the bulb upon holding the syringe with the nozzle upward.

2. A syringe comprising a cylindrical barrel provided at one end with a constricted discharge nozzle and having its opposite end flaring, a compressible air bulb having a neck inserted in said flaring end, a thickened wall closing the neck of the bulb, said bulb neck and wall being integral, the thickened wall having a minute air aperture therethrough, and its outer face being of a width to entirely fill the cylindrical barrel, whereby a relatively large surface is presented to the liquid in the barrel to support the same when the nozzle of the barrel is

held upward, the aperture through the end wall permitting air to be forced against the liquid in the barrel, but preventing passage of the liquid into the bulb.

3. A syringe comprising a cylindrical barrel provided at one end with a constricted discharge nozzle and having its opposite end rounded and flared outwardly, a compressible air bulb having a reduced chamber at one end having a thickened wall closing the same and forming the neck of the bulb, the neck and bulb being integral, said thickened wall having a minute air aperture therethrough, and its outer face being of a width to entirely fill the flared mouth of the cylindrical barrel whereby a relatively large surface is presented to liquid in the barrel to support the same when the nozzle of the barrel is held upward, the aperture through said end wall permitting air to be forced against the liquid in the barrel, but preventing passage of the liquid into the bulb.

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

GEORGE JOSEPH DUGGAN.

Witnesses:
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