

May 19, 1925.

1,538,679

J. S. BLINN
SUPPOSITORY INJECTOR

Filed May 8, 1923

Fig. 1.

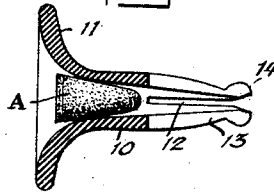


Fig. 2.

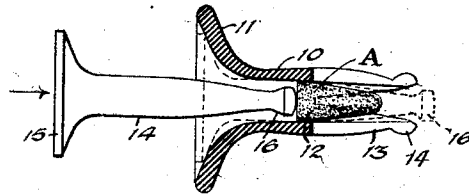


Fig. 3.

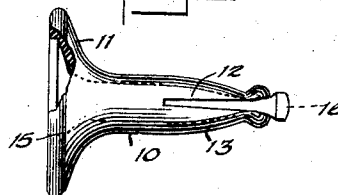


Fig. 4.

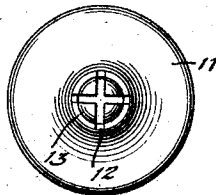
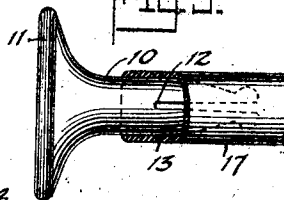


Fig. 5.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOSEPH SYLVESTER BLINN, OF NEW HAVEN, CONNECTICUT.

SUPPOSITORY INJECTOR.

Application filed May 8, 1923. Serial No. 637,548.

To all whom it may concern:

Be it known that I, JOSEPH S. BLINN, a citizen of the United States of America, and a resident of New Haven, in the county of New Haven and State of Connecticut, have invented a new and Improved Suppository Injector, of which the following is a description.

My invention relates to an injector or applicator for the insertion of a suppository in a cavity of the human body.

The present invention is intended more particularly as an improvement on the injector forming the subject matter of an application filed by me February 24, 1923, Serial No. 620,996.

The object of the present invention is to prevent the resilient fingers formed on the injector body from gripping the membrane with the liability of the membrane being injured by the withdrawal of the injector from the cavity.

Reference is to be had to the accompanying drawing forming part of this specification, it being understood that the drawings are merely illustrative of one example of the invention.

Figure 1 is a longitudinal sectional view of the body of the injector;

Figure 2 is a longitudinal sectional view of the body of the injector and a side elevation of the plunger in the act of forcing out a suppository from said body;

Figure 3 is a side elevation of the body and plunger when not in use, a portion of the body being broken out;

Figure 4 is a front end view of the body;

Figure 5 is a side elevation of the body with a cap thereon to prevent the resilient fingers from losing their resiliency, said cap being shown partially broken away and in section.

In carrying out my invention in accordance with the illustrated example a tubular injector body 10 is provided, having a flared rear end 11. The front end of the body is formed with longitudinal slits 12, thereby producing a plurality of resilient fingers 13.

In association with the body 10 I employ a plunger 14 having an enlarged rear end 15 and a sufficiently enlarged head 16 at the front end to engage and displace the suppository A when the latter is inserted in the body 10.

In use a suppository is inserted in the

tubular body 10 and said body inserted in the cavity where the suppository is to be emplaced. The plunger 14 is now employed to displace the suppository A and deposit the same in the cavity.

In order to prevent the possibility of the membranes at the interior of the cavity from being caught or pinched between the fingers 13, the head 16 is made of sufficient size so that when it is forced forwardly beyond the front ends of the fingers 13, said head will effect a locking engagement with the ends of the fingers to prevent withdrawal of the plunger. The plunger tapers in the rear of the head 16 and has such a diameter a short distance from the head 16 that the plunger will maintain the fingers 13 in spread form. Thus, when the plunger is fully inserted with its head 16 beyond the ends of the fingers 13 the shank of the plunger will prevent the fingers from assuming a closed position. In the fully inserted position of the plunger 14 its rear end 15 will lie flush with the flared rear end 11 of the body so that said rear end 15 is not readily accessible for being grasped by the user, while the flared rear end 11 of the body affords convenient means for withdrawing the injector. In this way the injector will be withdrawn bodily with the plunger in position and the fingers spread.

In order to prevent loss of resiliency in the fingers 13 when the device is not in use, I provide a cap 17 to fit over said fingers for holding them in closed position as shown in Figure 5 and thus under tension which tends to prevent loss of resiliency in the fingers.

I would state in conclusion that while the illustrated example constitutes a practical embodiment of my invention, I do not limit myself strictly to the exact details herein illustrated, since, manifestly, the same can be considerably varied without departure from the spirit of the invention as defined in the appended claims.

Having thus described my invention, I claim:

1. As a new article of manufacture, an injector comprising a tubular body having longitudinally disposed fingers at the front end, and a plunger adapted to be inserted in said body for forcing a suppository through said body, said plunger having a shank of transverse dimensions to cause engagement

thereof with said fingers and hold the fingers spread when the plunger is in position in the body.

2. As a new article of manufacture, an
5 injector comprising a tubular body having longitudinally disposed fingers at the front end, and a plunger adapted to be inserted in said body for forcing a suppository through said body, said plunger having a
10 shank of transverse dimensions to cause

engagement thereof with said fingers and hold the fingers spread when the plunger is in position in the body; said body having an enlarged rear end and the said plunger having an enlarged rear end adapted when 15 the plunger is inserted in the body to lie substantially flush with the said rear end of the body.

JOSEPH SYLVESTER BLINN.