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C. H. HUNTER
SUPPOSITORY INJECTOR
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2,589,388

Fig. 1

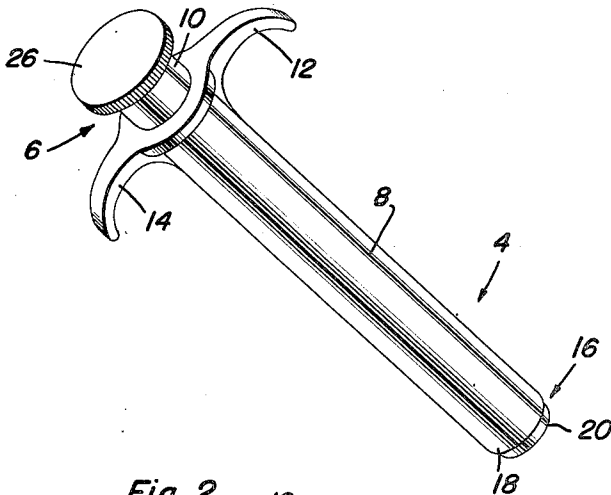


Fig. 2

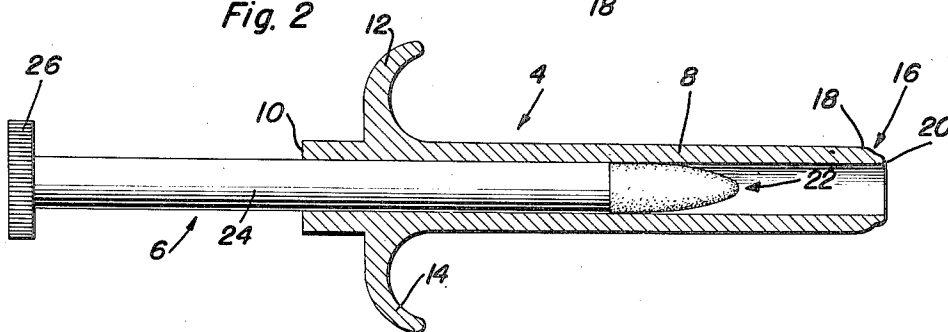
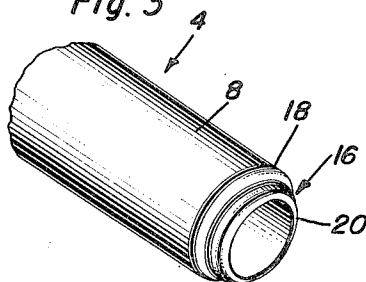


Fig. 3



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SUPPOSITORY INJECTOR

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1 Claim. (Cl. 128—264)

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The present invention relates to improved ways and means whereby a suppository may be easily and readily handled and aptly injected and lodged in place in a rectal or equivalent canal.

The general object of the invention is to provide a simple, practical, efficient and structurally distinct suppository holder and injector in which manufacturers, retailers and users will find their essential requirements and needs fully met, contained and effectually available.

More specifically, the invention has to do with a cylindrical barrel of appropriate size and materials, said barrel being of one-piece construction and having diametrically opposite finger-grips at one end and having an annular lubricant holding groove and piloting tip at the opposite end. The suppository is contained in the bore of the barrel and said bore also serves to accommodate a simple smooth surfaced plunger, said plunger having a knob and being reciprocable in the bore and being adapted to readily plunge the suppository from the barrel into the sphincter region of the rectal canal.

Other objects and advantages will become more readily apparent from the following description and the accompanying sheet of illustrative drawings.

In the sheet of drawings, wherein like numerals are employed to designate like parts throughout the views:

Figure 1 is a perspective view of a holder and ejector constructed in accordance with the present invention;

Figure 2 is a view which shows the barrel in section, the plunger in elevation and the suppository in elevation and in position for ejection from the barrel; and

Figure 3 is an enlarged fragmentary perspective view of the discharge end of the barrel showing the manner in which it is specifically fashioned and shaped for safe and practical usage.

As before stated, the complete assembly is made up of two simple units or devices. The holder unit is denoted by the numeral 4 and the plunger unit by the numeral 6. The holder is constructed from plastics or equivalent material. It is characterized by a cylindrical barrel 8 of appropriate diameter and length having a smooth bore from end to end. Adjacent the outward or trailing end, said cylinder or barrel provides a guide neck 10 and spaced inwardly of this and disposed at diametrically opposite points are suitable hook-shaped finger-grips 12 and 14. These are held in a manner similar to the procedure

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followed in holding and manipulating a hypodermic syringe. The opposite leading end of the barrel is formed with a reduced annular groove or channel 16 which merges into a rounding shoulder 18 which forms a smooth juncture between the exterior surface of the barrel and the injectable end thereof. The injectable tip or piloting lip is rounded and thinned as at 20 and provides easy insertion, this without harm or pain to the user. The channel or groove provides a suitable pocket which is adapted to contain a lubricant and which provides a highly satisfactory depository for the lubricant, whereby to aid one in, an obvious manner, in using the device. The suppository, which is conventional, is denoted by the numeral 22 and this is ejected by the cylindrical stem portion 24 of the plunger. The stem is perfectly smooth and fits snugly but slidably in the bore of the barrel. The knurled knob 26 on the plunger stem comes into abutting contact with the neck end and thus limits the ejecting stroke of the plunger in respect to the bore of the barrel.

It will be observed that the injector shown and described is of the utmost in simplicity of construction; that is, it is made up of two parts only. The plunger is a one-piece construction and has a smooth stem with a simple knurled operating knob at the outer end. The barrel has a smooth bore for proper reciprocable association with the plunger. The exterior is also smooth and easy on the anatomy. The materials used may be stainless steel, brass with chrome plating, plastic or hard rubber. The grooved and tapered lip end insures painless insertion and removal. The barrel is of correct length and diameter to insert medication above the sphincter muscle where it cannot be expelled. The design is unusually simple and exceptionally easy to clean and sterilize. This injector will be of great aid to doctors and nurses in the proper and safe and sane insertion of all suppositories, sedative capsules, powders, ointments, and jellies for the rectum and vagina.

It is thought that persons skilled in the art to which the invention relates will be able to obtain a clear understanding of the invention after considering the description in connection with the drawings. Therefore, a more lengthy description is regarded as unnecessary.

Minor changes in shape, size and arrangement of details coming within the field of invention claimed may be resorted to in actual practice, if desired.

Having described the invention, what is claimed as new is:

A suppository holder and injector of the class described comprising a barrel having a cylindrical smooth bore from end to end, said bore being adapted for slidable reception of a correspondingly smooth surfaced plunger, the exterior surface of said barrel being smooth, said barrel being provided adjacent one end with finger grips, the opposite leading end of said barrel being thinned in thickness and defining a taper, said taper being formed with an annular groove, said groove defining a lubricant receiving and containing pocket and simultaneously defining a relatively thin piloting lip, and a plunger mounted for reciprocation in said bore.

CORA H. HUNTER. 15

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The following references are of record in the file of this patent:

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