

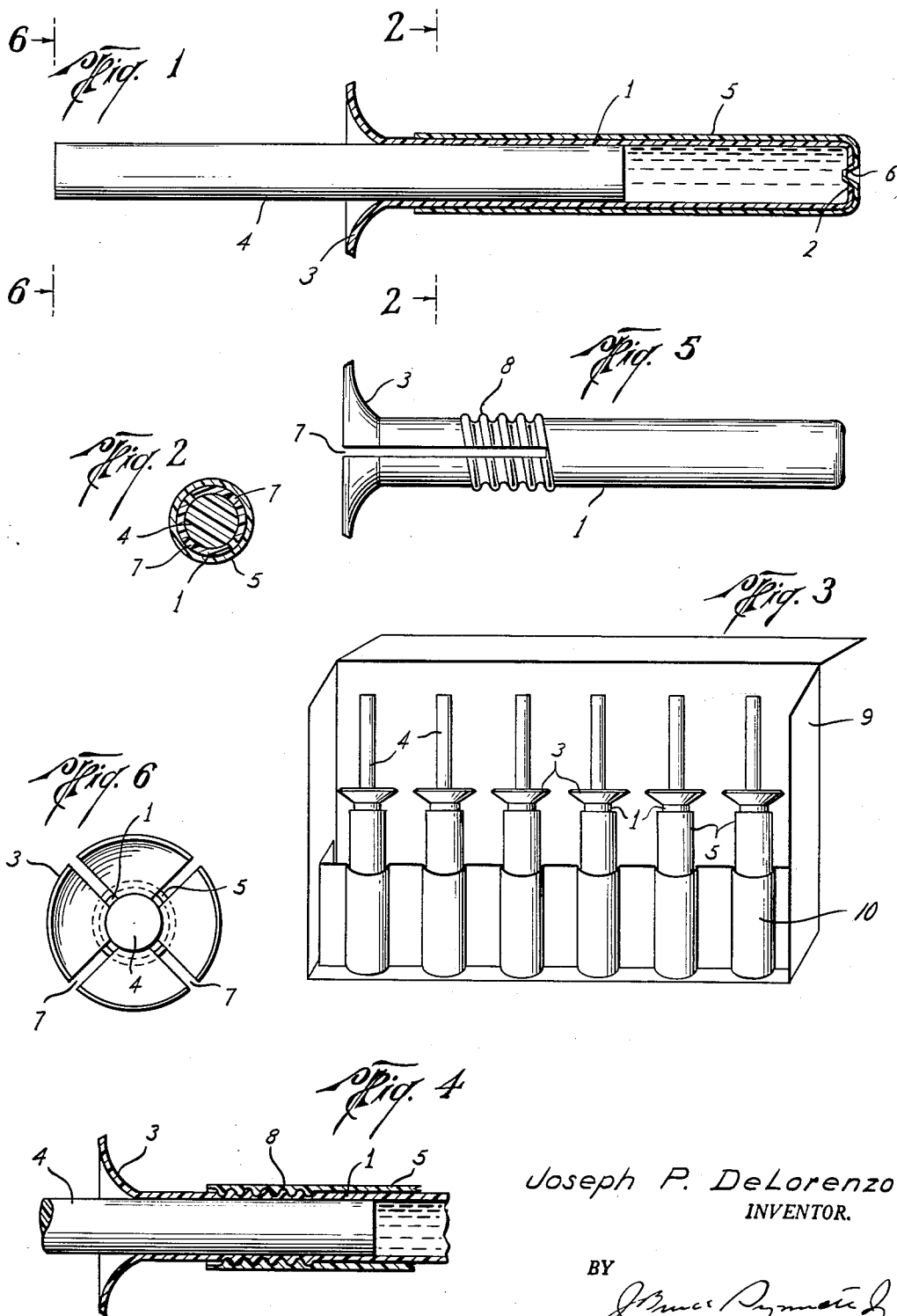
May 29, 1956

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2,747,574

DISPOSABLE PACKAGE AND APPLICATOR FOR SUPPOSITORIES

Filed Sept. 29, 1954



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2,747,574

DISPOSABLE PACKAGE AND APPLICATOR FOR SUPPOSITORIES

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Application September 29, 1954, Serial No. 459,032

2 Claims. (Cl. 128—261)

The invention concerns a disposable package and applicator for suppositories. It concerns more particularly a combined package and applicator, which may be used once and discarded, for use in conjunction with a measured dose of medication, such as anesthetic agents, germicides, fungicides, antispasmodics, barbiturates, etc., which may be employed as rectal and vaginal suppositories.

Suppositories of the type described often employ as a base, in which the active ingredients are suspended, a low melting point material such as cocoa butter, which melts at body temperatures and thereby makes the active ingredients readily available for absorption by body tissue. While base materials such as cocoa butter are desirable, for the reason stated, a disadvantageous feature is that suppositories containing such materials must be stored and shipped under refrigeration. Other base materials have been employed which have higher melting points, and which may be handled without refrigeration, but these materials are less desirable from the standpoint of effective medication.

It is an object of the invention to provide a combined package and applicator which is applicable for use in conjunction with suppositories of all types, regardless of their melting point, but which is particularly useful in the case of suppositories having a low melting point base such as cocoa butter, or a base which is normally liquid or of ointment or cream consistency.

Another object of the invention is to provide a combined package and applicator which serves both as an individual package for a measured dose of medication and as an applicator therefor.

A still further object of the invention is to provide a combined package and applicator of the type described which is fully disposable, and which may be used once and discarded.

An advantageous feature of the invention is that it positively guarantees the cleanliness and sterility of the medication at the moment of application. The medication is fully protected at all times, and is not touched by hand.

Another advantageous feature of the invention is that it provides the medication in a convenient form, ready at all times for immediate use and without any preparation whatever. The nuisance features which ordinarily accompany the use of suppositories are avoided. There are no packages to be unwrapped or perforated. There are no parts to be assembled or connected. There is nothing to be cleaned or washed, nothing to be lubricated, nothing to be measured, nothing to be refrigerated.

The invention will be readily understood by referring to the following description and the accompanying drawing, in which:

Fig. 1 is a sectional view of a disposable package and applicator for suppositories embodying the invention.

Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1.

Fig. 3 is a perspective view of a box containing a

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plurality of the devices of the invention as illustrated in Fig. 1.

Fig. 4 is a fragmentary sectional view of a device similar to the one illustrated in Fig. 1, showing an alternative arrangement.

Fig. 5 is a detail view of a portion of the device illustrated in Fig. 4.

Fig. 6 is an end view taken on the line 6—6 of Fig. 1.

Referring to the embodiment of the invention shown in Fig. 1, the numeral 1 designates a tubular barrel which is closed at one end. A small opening 2 is formed in the closed end of the barrel 1, and the opposite end of the barrel 1 is flared outwardly at 3 to provide a finger grip for use in manipulating a plunger 4, which is receivable within the barrel 1. A measured dose of medication, indicated by the dotted lines, is disposed within the closed end of the barrel 1 and is retained therein by the plunger 4. The closed end of the barrel 1 is receivable bodily within a tubular cap 5, which likewise is closed at one end. A conical depression 6 is formed in the closed end of the cap 5 for engagement with the opening 2 of the barrel 1, whereby the opening 2 may be sealed. A suitable lubricant (not shown) preferably is applied to the portion of the exterior surface of the barrel 1 which is disposed within the cap 5.

If desired openings (not shown) may be provided in the side of the barrel 1 as well as in the end thereof, such openings being normally closed by engagement of the cap 5 with the side of the barrel 1.

As illustrated in Figs. 2, 5 and 6, the barrel 1 may be slotted longitudinally as at 7 throughout a portion of its length, beginning at its open end. The arrangement is such that when the cap 5 is applied the slotted portion of the barrel 1 is compressed somewhat by the cap 5, and the barrel 1 is caused to grip the plunger 4 sufficiently to prevent the plunger 4 from pulling out easily. When the cap 5 is removed the slotted portion of the barrel 1 yieldably engages the plunger 4 and offers no resistance to the longitudinal movement of the plunger 4, so that the plunger 4 is more readily movable with respect to the barrel 1.

The cap 5 may be retained in engagement with the barrel 1 by pressure or friction, as shown in Fig. 1, or alternatively, by threads 8 as illustrated in Fig. 4.

The package and applicator of the invention is fully disposable, and advantageously may be made of plastic material. Fig. 3 shows a box 9 containing a plurality of the devices of the invention sufficient to constitute a convenient supply. The box 9 may have an insert such as the member 10 whereby separate compartments are provided for the several devices.

The invention may be modified in various ways without departing from the spirit and scope thereof.

I claim:

1. A disposable package and applicator for suppositories comprising a tubular barrel and a tubular cap each closed at one end, the closed end of the barrel being received bodily within the cap and the open end of the barrel being flared outwardly, and a plunger received within the barrel, the barrel being slotted longitudinally throughout a portion of its length, beginning at its open end, and the slotted portion of the barrel being acted upon by the cap whereby the barrel is caused to grip the plunger sufficiently to prevent the plunger from pulling out, an opening being formed in the closed end of the barrel and the closed end of the cap having means for engagement with the opening to seal it.

2. A disposable package and applicator for suppositories comprising a tubular barrel and a tubular cap each closed at one end, the closed end of the barrel being received bodily within the cap and the open end of the barrel being flared outwardly, and a plunger received

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within the barrel, the barrel being acted upon by the cap whereby the barrel is caused to grip the plunger sufficiently to prevent the plunger from pulling out, an opening being formed in the closed end of the barrel and the closed end of the cap having means for engagement with the opening to seal it.

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