

June 4, 1935.

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2,004,050

HYPODERMIC NEEDLE PACKAGE

Filed July 26, 1934

Fig. 1.

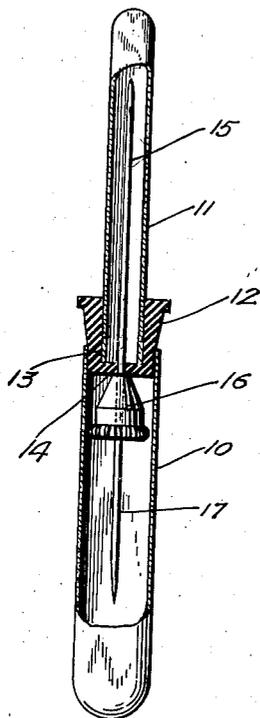
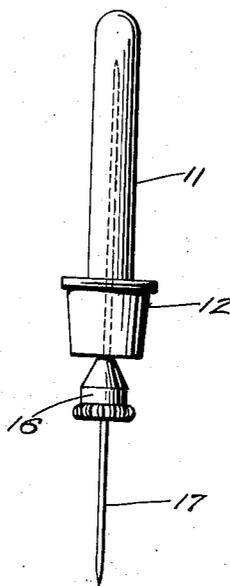


Fig. 2.



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2,004,050

HYPODERMIC NEEDLE PACKAGE

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Application July 26, 1934, Serial No. 736,973

4 Claims. (Cl. 206—43)

This invention relates to hypodermic needle packages, and more particularly to a needle package for conveniently enclosing a hypodermic needle and maintaining the same in a sterile condition after sterilization thereof.

An important object of the invention is the support of a needle in a container in such manner that it may be applied to the ampule without engaging the needle with the fingers, the container affording a holder which will permit such manipulation and which is of such character that, when the needle is applied to the ampule, it is readily withdrawn from the holder to leave the syringe in condition for use.

A further object of the invention is to provide a construction of this character which may be simply and inexpensively manufactured and which is readily applied to and removed from the needle.

These and other objects I attain by the construction shown in the accompanying drawing, wherein, for the purpose of illustration, I have shown a preferred embodiment of my invention and wherein

Figure 1 is a sectional view through a hypodermic needle package constructed in accordance with my invention; and

Fig. 2 is a side elevation showing one section of the container removed to enable the needle to be applied to the ampule.

Referring now more particularly to the drawing, the package comprises large and small tubes 10 and 11, each having their outer and closed end adapted at their inner ends to engage with a stopper 12. The stopper 12 has a central recess 13 opening through one end thereof, the recess being of such depth that it leaves a relatively thin membrane 14 at the opposite end. This recess receives and closely fits the smaller tube 11, and the exterior of the stopper receives the larger tube 10. The side walls of the stopper are tapered as clearly shown, and it will be obvious that the more force which is employed in forcing the tubes upon the stopper, the more effective the seal between the stopper and both tubes.

In use of the package, the insertion end, or that end 15 of the needle which is applied to the patient in making an injection, is extended through the membrane 14 and into the tube 11, the enlargement 16 with which such needles are formed abutting the membrane to limit the movement of the needle therethrough and prevent damaging contact with the end of the tube 11. The friction provided by the engagement of the needle in the membrane will maintain the

needle in its proper position, and the larger tube is placed over the opposite or ampule end 17 of the needle and forced upon the exterior of the stopper 12. When it is desired to employ the needle, the tube 10 is removed, as shown clearly in Fig. 2, and the end 17 of the needle applied to the ampule. During this operation, the engagement of the enlargement 16 with the stopper will enable sufficient force to be exerted to drive the end 17 of the needle through the rubber stopper (not herein shown) with which the ampule is usually provided, following which the stopper 12 and tube 11 may be readily slipped from the end 15 of the needle.

It will be obvious that a package of this type may be very conveniently applied to and removed from the needle, and not only affords a means for maintaining the needle in sterile condition but, likewise, provides a guard preventing damage to the needle. When the tubes are formed of transparent material, it may be very readily determined whether the package contains a needle or not and, accordingly, glass is preferably employed in the construction of tubes 10 and 11.

Since the construction herein described is capable of considerable modification without in any manner departing from the spirit of my invention, I do not wish to be understood as limiting myself thereto except as hereinafter claimed.

I claim:

1. A hypodermic needle package comprising a pair of tubes each having its outer end closed, and a stopper engaging both of said tubes and connecting adjacent ends thereof, said stopper having a relatively thin membrane confronting the bore of each tube, which membrane is readily pierceable by an end of the needle.

2. In a hypodermic needle package, a pair of tubes each having its outer end closed, and a stopper connecting said tubes, at least one of the tubes being engaged in a recess in the stopper, said recess providing a relatively thin wall confronting the bores of the tubes and readily pierceable by a hypodermic needle.

3. A hypodermic needle package comprising a pair of tubes each having its outer end closed and having their combined length greater than the needle that they are to receive, and a stopper connecting adjacent ends of the tubes, said stopper fitting into one of the tubes and having a recess receiving the other of the tubes, said recess being of a depth such that it affords at the closed end of the stopper a relatively thin membrane readily pierceable by the needle.

4. A hypodermic needle package comprising a

pair of tubes each having its outer end closed and having their combined length greater than the needle that they are to receive, and a stopper connecting adjacent ends of the tubes, said stopper fitting into one of the tubes and having a recess receiving the other of the tubes, said re-

cess being of a depth such that it affords at the closed end of the stopper a relatively thin membrane readily pierceable by the needle, the side walls of the stopper being tapered.

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