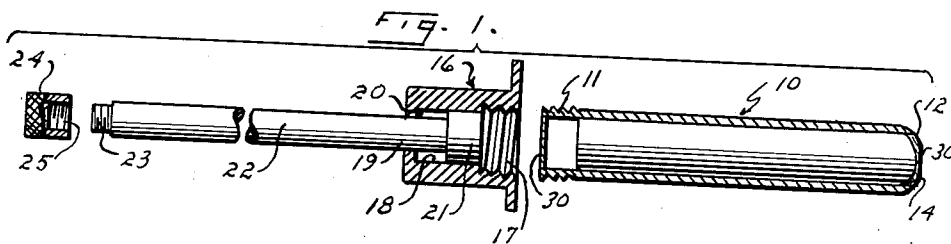
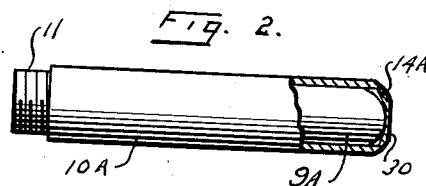
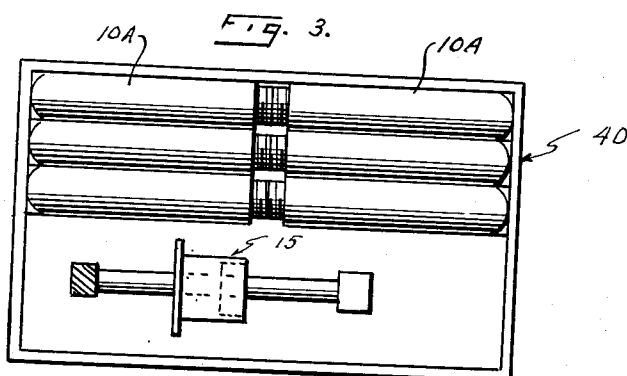


June 8, 1954

F. L. LINZMAYER
DISPOSABLE SUPPOSITORY CASING

2,680,442

Filed April 4, 1952



INVENTOR
FRANK L. LINZMAYER
BY
Howard V. Jeanson
ATTORNEY

UNITED STATES PATENT OFFICE

2,680,442

DISPOSABLE SUPPOSITORY CASING

Frank L. Linzmayer, Keyport, N. J.

Application April 4, 1952, Serial No. 280,591

2 Claims. (Cl. 128-264)

1

This invention relates to casings for suppositories and more particularly to disposable casings that are formed to retain a suppository. The casing is formed to be affixed to a holder which provides the means to eject the suppository from within the casing. This invention further includes a novel means of packing in which each suppository is mounted in a sanitary sealed casing and in which a plurality of these casings may be packed in a container with a single casing holder and plunger ejecting device.

An object of this invention is to provide a sanitary sealed container for suppositories in which the seal is not ruptured until the suppository is ejected from the casing.

A still further object of this invention is to provide a plurality of suppositories in which each one is sealed within a container shell and in which each shell may be attached to a holder for manipulation and use and in which the casing is disposed of after use.

A further object of this invention is to provide both adult and juvenile size suppositories mounted within disposable sealed casings in which all casings may be fitted to a single holder for easy manipulation and use.

Further objects of this invention may be apparent by reference to the accompanying detailed description and the drawings in which

Fig. 1 is an exploded view of a suppository casing and holding means for the casing illustrated in a cross sectional view,

Fig. 2 illustrates the adult size suppository and casing shown partially in cross section, and

Fig. 3 illustrates a package containing a plurality of sealed suppository casings and a holder for the use of said suppositories.

Referring to Fig. 1 there is illustrated a suppository 9 and casing 10 which is approximately the size utilized for a juvenile suppository. Casing 10 is formed as an elongated barrel provided with an exterior thread 11 on one end of the barrel. The opposite end 12 of the barrel is rounded around the complete periphery to provide a smooth external surface similar to a finger. In the end 12 there is provided an aperture 14 of a diameter equal to the diameter of the suppository that is to be mounted within barrel 10. The casing or barrel 10 is preferably constructed of a stiff but cheap material such as one of the plastics or possibly of a light sheetmetal or one of the specially prepared and stiffened cardboard compositions. A modification of this casing is to form the casing of a similar material but not too rigid. The casing should be fairly flexible

2

and it will depend upon the suppository mounted within the casing to supply the required rigidity in use but after the suppository has been ejected from the casing, the casing will be flexible and not likely to produce any discomfort or injury in use. The casing holder 15 includes a socket 16 provided with an internal thread 17 to mate with the external thread 11 of the casing 10. The socket 16 is also provided with a bore 18 and an aperture 19 of less diameter than the bore 18 thus forming a shoulder 20 between the bore 18 and the aperture 19. It is to be noted that the bore 18 of the socket 16 connects the aperture 19 with the threaded portion 17 of the socket and a piston element 21 is fitted to be reciprocated within the bore 18. The piston 21 is integrally affixed to a shaft 22 which extends through the aperture 19. It is to be noted that shaft 22 is of a smaller diameter than piston 21 thus preventing piston 21 from passing through aperture 19. The opposite end of shaft 22 is provided with an external thread 23 to permit mounting a handle or socket 24 thereon, socket 24 being provided with an internal thread 25 to match with thread 23 so that socket 24 may be quickly and easily attached to shaft 22. It is to be noted that the diameter of piston 21 is slightly less than the internal diameter of casing 10. When a suppository is mounted in casing 10 and casing 10 is attached to socket 16, the manipulation of the unit permits the individual to push the socket or handle 24 and thus force piston 21 down or through the barrel 10 thus ejecting the suppository through the aperture 14 and out of the barrel 10.

Referring to Fig. 2 there is illustrated the adult size suppository 9A mounted in a casing 10A. It is to be noted that the barrel of casing 10A is slightly larger than the juvenile size shown in Fig. 1. Casing 10A is similar to casing 10 except that it is slightly larger, likewise smaller or larger casings may be provided for other size suppositories. In all instances the threaded end 11 fits the internal thread 17 of the socket 16. Casing 10A is provided with a larger aperture 14A due to the larger size suppository. Although the casing is shown with a male threaded end 11 and the socket 16 with a female threaded portion 17, this is only one manner of affixing the casing, other methods of joining may be similarly used.

This invention overcomes most of the objections to the use of suppositories. One of the main objections to suppositories is the hygienic point of view and it is apparent that in this in-

vention the suppository may be mounted within the casing 10 or 10A and a sanitary film 30 of any pure and permissible material that is easily dissolved by moisture may be used to cover and hermetically seal the suppository within the casing. The hermetic seal is of considerable advantage as it also prevents the deterioration of the suppository when the suppository is allowed to stand for considerable time before application. The hermetic seal not only prevents the possibility of any foreign matter entering the casing but it also retains the volatile ingredients that may be found in a suppository. It is apparent that with the hermetic seal of the suppository it is a simple matter to apply pressure to the handle which, in turn, causes the piston 21 to rupture the hermetic seal when the seal is provided at the affixed end of the suppository and as the piston 21 advances to eject the suppository the pressure will, in turn, rupture the hermetic seal at the discharge end. It is also apparent that with the suppository mounted within casing 10 or 10A and the casing threadably affixed to socket 16 that the holding unit 15 permits the individual to use a suppository in such a fashion that there is no possibility of the individual soiling his fingers and the holder 15 thus permits the individual to introduce the suppository into the intestine in the most hygienic fashion. The holder also permits the user to pass the suppository further into the intestine and in this position is much easier to retain for the required time interval.

A further modification of this invention is illustrated in Fig. 3 in which the packaging of the holder 15 and a plurality of the casings 10A are illustrated. A box or casing 40 may be provided with ample space to permit a half dozen of the casings 10A to be mounted in the fashion illustrated and sufficient space to mount a single holder 15. With a package 40 as described it is apparent that the individual is provided with a sufficient supply of suppositories for the average use and the suppositories are packed in the most hygienic fashion thoroughly sealed until they are actually used. As already stated each casing is disposable after use thus maintaining a highly hygienic suppository manipulating device. Of course the casing 40 is provided with a cover (not

shown) and may also be provided with a cellophane cover for the complete package to retain the package completely sealed until it is ready for the individual's use.

Although I have described this invention of a suppository retaining and manipulating device in conjunction with the standard formed suppositories, this invention does not preclude the possibility of pouring or filling each casing 10 or 10A with the composition normally used to form suppositories. Thus casing 10 and 10A may be the same of forming the suppository as well as retaining same in a sanitary condition ready for use and this invention shall be limited only by the appended claims.

What is claimed is:

1. The combination with a suppository of a disposable casing for protecting said suppository in a hygienic manner comprising a substantially cylindrical plastic shell in which the suppository is inserted, one end of said shell being hermetically sealed and the opposite end being affixed to a holder, said affixed end being opposed from the discharge end, said holder provided with a central plunger, said plunger fitted to the internal diameter of the suppository holding shell to permit rupturing said seal and ejecting the suppository from within said shell.

2. The combination with a suppository of a casing for protecting said suppository in a hygienic manner comprising a substantially cylindrical shell, both ends of said shell being hermetically sealed with a dissolvable film, one end of said shell being affixed to a holder, said end being opposed from the discharge end, said holder provided with a central plunger, said plunger fitted to the internal diameter of the suppository holding shell.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
1,736,078	Haas	Nov. 19, 1929
2,059,966	Kaufman et al.	Nov. 3, 1936

FOREIGN PATENTS

Number	Country	Date
252,587	Great Britain	June 3, 1926