ABSTRACT

A medicator having an applicator with a medicament container connected thereto. A seal, frangible upon the application of lateral pressure thereto normally blocks communication between the applicator and the container.

2 Claims, 5 Drawing Figures
1 MEDICATOR WITH FRANGIBLE SEAL

This application is a continuation-in-part of my application Ser. No. 877,639 filed Nov. 18, 1969, and now abandoned.

BACKGROUND OF THE INVENTION

Single use articles such as paper gowns and linens, throw away syringes, hypodermic devices, medicament containers and the like, and disposable instrument parts, such as shields for entrance into various orifices in the body have found increasing utility in the medical arts. The advantages of such improvements are the reduction of equipment and labor costs for sterilizing such articles as well as the elimination of possible inter-contamination due to resistant strains of bacteria or improper sterilization of such articles.

Although these articles solve many of the problems of the prior art, an area of possible contamination and handling cost remains in the transfer of medicament from the container to an applicator. Although single use containers for such purposes have been provided heretofore, the danger of contamination of the medicament during transfer to an applicator and the problem of handling expense and storage of separate items prevails in the art.

SUMMARY OF THE INVENTION

This invention provides a single use medicament applicator and container which avoids the problems of the prior art by furnishing a combined throw-away article.

The invention also provides an improved medicament container which can be combined with various types of applicators.

The invention further provides an applicator-container of the type described which can be manufactured at a minimum cost and which is simple to use.

In a preferred embodiment the invention comprises an applicator; a closed medicament container connected to the applicator and a seal between the container and the applicator frangible upon the application of lateral inward pressure thereto to release the medicament on to the applicator.

These and other objects and attendant advantages of this invention will become better understood by those skilled in the art by reference to the following detailed description when viewed in light of the accompanying drawings wherein like components throughout the figures thereof are indicated by like numerals and wherein:

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a sectional, elevational view of an applicator in accordance with the invention;
FIG. 2 is a view similar to FIG. 1 of another applicator in accordance with the invention;
FIG. 2a is a section on line 2a-2a of FIG. 2;
FIG. 3 is a view similar to FIG. 1 of yet another applicator in accordance with the invention; and
FIG. 4 is a view similar to FIG. 1 of still another applicator in accordance with the invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The embodiment illustrated in FIG. 1 comprises an applicator, and a medicament container shown gener-
It will be noted that outturned or the inturned flanges assist in protecting the frangible seal from inadvertent rupture as the inwardly directed force \( F \) to rupture the seal 220 must first overcome the rigidity of the flange.

The embodiment of FIG. 4 corresponds generally to that of FIG. 3 with the exception that the holder 212 thereof is eliminated and the applicator 310 comprises only the wadding 314 joined to the container by adhesion or other suitable means beneath the flange 324.

In use, the seal 20, 120, 220, or 320 is broken and the medicament is fed to the applicator portion for use. In the embodiments of FIGS. 1 through 4 this is accomplished by forming the containers 11, 211 and 311 of a flexible plastic material and the seals 20, 220, and 320 of a material having a bursting strength less than the force which can be generated by compression of the container on the fluid contents thereof.

What has been set forth above is intended as exemplary to aid those skilled in the art in the practice of the invention.

What is new and desired to be protected by Letters Patent of the United States is:

What is claimed is:

1. A medicator comprising:
   - an applicator means;
   - a medicament container connected to said applicator means, said container having walls formed of a flexible material and being deformable upon the application of inwardly directed forces thereto;
   - a frangible seal between said container and said applicator means blocking communication therebetween, said seal having a bursting strength lower than the force which is generated thereagainst by compression of said container to inwardly deform said walls;
   - wherein said applicator means comprises a tubular holder with a fibrous wadding closing one end thereof, the other end of said holder communicating with said seal; and
   - wherein said applicator means is removably connected to said container.

2. A medicator in accordance with claim 1 wherein said frangible seal is provided with score lines to form lines of weakness for said seal.

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