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PACKAGE FOR TAPELIKE MATERIAL

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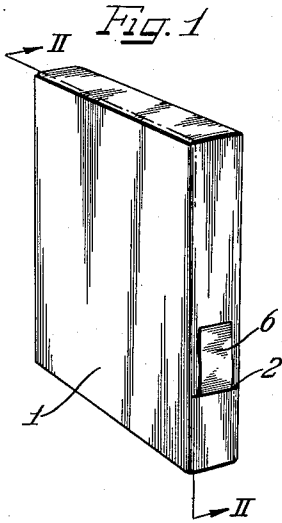


Fig. 2

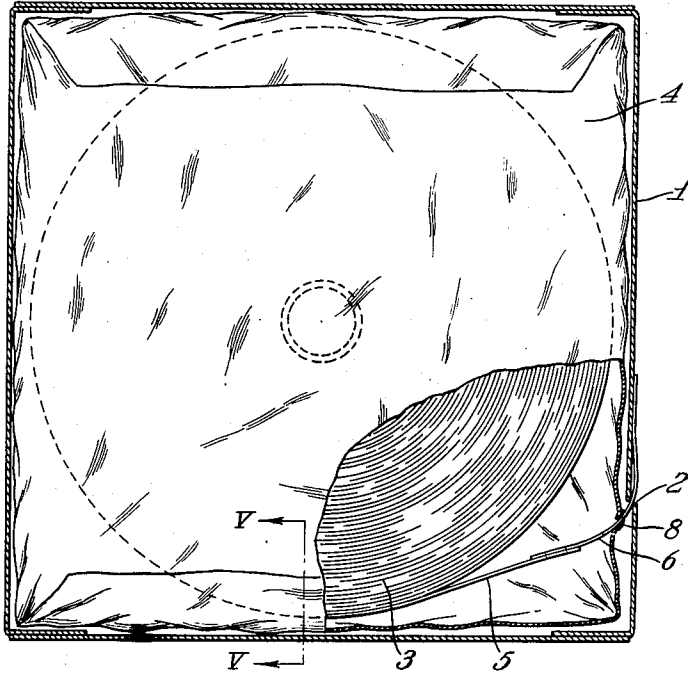


Fig. 3

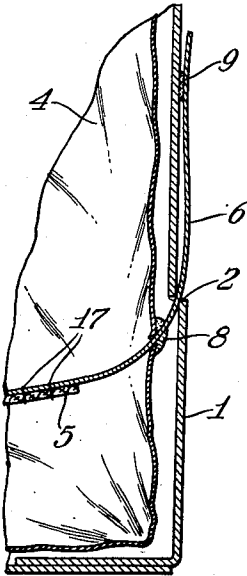


Fig. 4

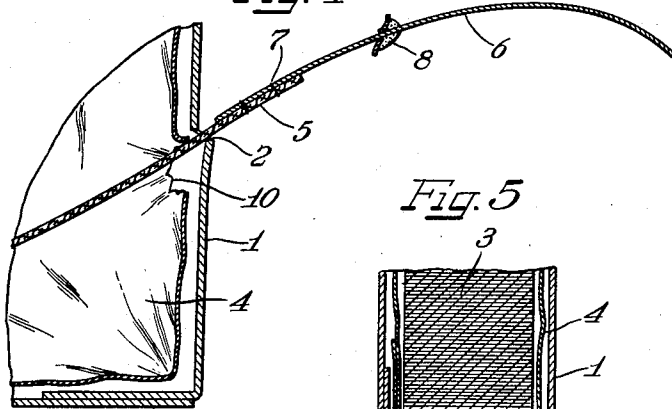


Fig. 5

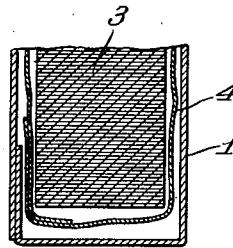
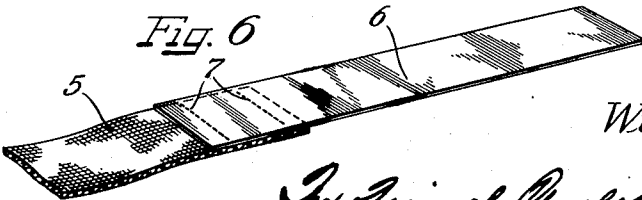


Fig. 6



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PACKAGE FOR TAPELIKE MATERIAL

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3 Claims. (Cl. 206-52)

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This invention relates to improvements in a package for tape-like material and a method of making the same, the invention being highly desirable for use in the commercial packaging of medical or surgical bandages and other tape-like material commonly wound into a roll before being encased in a container, although the invention will have other uses and purposes as will be apparent to one skilled in the art.

The instant invention is highly desirable for use in packaging tubular gauze bandage, hospital folded gauze, adhesive finger bandages, and other bandages of relatively small size separably secured together and wound in rolls, tobacco cloth gauze, and various other types of bandages requiring positive sterilization until the moment of use. At the same time, the invention may be utilized in connection with other tape-like material, and is especially satisfactory therefore where sterilization is desired.

In the past, many and various forms of packages of sterilized bandage material have been developed, but in many cases the degree of sterilization when the bandage reaches the ultimate consumer is highly questionable. Objectionable difficulty has been experienced in providing such bandages in a sterile condition to the ultimate consumer after the usual numerous handlings occasioned by distribution, and this was especially true where the bandage is packed in a box in the form of a roll, with the free end of the bandage projecting through a slit or slot in a wall of the box through which the bandage may be withdrawn as desired. With such an arrangement it was almost impossible to hermetically seal the box itself and still provide a free portion of the bandage readily available for quick removal of the contents of the box, and such bandage would obviously not be considered sterile if any air could enter the box and contact the bandage prior to its initial opening.

With the foregoing in mind, it is an important object of the instant invention to provide a package for bandages and other tape-like material which includes a box or other container having a slot in the wall through which the bandage may be removed as needed, and in which the entire bandage or tape-like material remains completely sealed within an enclosure prior to first usage, with means provided to facilitate the quick withdrawal of the bandage through the slot in the container.

It is also an object of this invention to provide a sterilized package for a roll of tape-like material embodying a leader secured to the free

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end of the material, and a disruptible wrapper enclosing the material and through which wrapper the free end of the leader extends, the wrapper being hermetically sealed around the material and to the leader.

It is also an object of this invention to provide a sterilized package for a roll of tape-like material, including a leader attached to the free end of the roll, and projecting through a bag or wrapper which hermetically encloses the roll of material and is hermetically sealed to the projecting leader, the bag or wrapper being rendered more brittle or fragile by sterilization of the complete assembly.

Also an object of the invention is the provision of a package for a roll of tape-like material including a box having a slot in a wall thereof, a roll of tape-like material with a leader of different material attached to the free end thereof, and a disruptible wrapper hermetically enclosing the tape-like material and hermetically sealed to a part of the leader which projects through the wrapper and also through the slot in the box, a pull upon the exposed end of the leader disrupting the wrapper and withdrawing the roll of material through the slot in the box.

While some of the more salient features, characteristics and advantages of the instant invention have been above pointed out, others will become apparent from the following disclosures, taken in conjunction with the accompanying drawing, in which—

Figure 1 is a pictorial illustration of a completed package embodying principles of the instant invention;

Figure 2 is an enlarged vertical sectional view through the structure of Fig. 1 taken substantially as indicated by the line II—II of Fig. 1, looking in the direction of the arrows;

Figure 3 is a fragmentary enlargement of the lower right hand corner portion of Fig. 2;

Figure 4 is a view similar in character and location to Fig. 3, but illustrating the tape-like material being withdrawn from the package;

Figure 5 is an enlarged fragmentary vertical sectional view taken substantially as indicated by the line V—V of Fig. 2; and

Figure 6 is a fragmentary pictorial illustration of a portion of the tape-like material with the leader attached thereto.

As shown on the drawings:

The illustrated embodiment of the instant invention includes an outer box or container 1 which is provided with a slot 2 in a wall thereof. This container or box may be made of any suit-

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able material, such as paper board or the like, and it may be completely sealed except for the slot 2. Likewise, on its external surface it may bear any indicia or advertising matter that might be found desirable.

The tape-like material to be packaged may be in the form of any of the gauze bandages hereinabove mentioned, or any other material of tape-like character that can be satisfactorily dispensed from a roll. In the illustrated instance, this tape-like material is wound into a roll 3, and the entire roll is encased or enclosed in a bag or wrapper 4 of fragile or disruptible character. This bag 4 may well be made of wax paper, a relatively weak plastic film, or any other suitable material. The bag is not bonded to the roll 3, but is hermetically sealed around the roll so that no air can be admitted to the roll.

The free end 5 of the tape-like material is secured to the end of a leader 6 in any suitable manner such as by stitching 7. The leader 6 is preferably made of different and air impervious material, such as kraft paper or the like. As is seen clearly in Fig. 3, the free portion of the leader extends through the bag or wrapper 4 and the bag or wrapper is hermetically sealed to the leader such as by gluing, or otherwise, as indicated at 8.

When the roll of tape-like material has been enclosed in the bag 4, the leader extended through the bag, the bag hermetically sealed to the leader, the entire assembly is then sterilized, provided the tape-like material is of the character warranting sterilization. The sterilization may be accomplished by placing the entire assembly in an autoclave or the like, or it can be accomplished by means of cathode rays or in any other suitable and economical manner. After sterilization, the bag assembly is then placed in the box 1 and the exposed part of the leader is passed through the slot 2 in the box where it is readily accessible from outside the box. As seen in Fig. 3, the exposed portion of the leader 6 may be tacked by glue or in any other feasible manner to the outside of the box as indicated at 9, so as to prevent the leader being accidentally pulled and to permit better packaging of the product.

When so packaged, the tape-like material is in a thoroughly sterile condition and remains so until the ultimate consumer desires to actually use some of the tape-like material. That feature of the invention is highly important, especially for the packaging of bandages for use in hospitals and the like. It is to be especially noted that even though the tape-like material is withdrawn from a box or contained through a slot in a wall thereof, no portion of that tape-like material is exposed to air prior to the first usage. Its sterility remains positive and complete throughout all handling of distribution, until the package is actually opened by the ultimate consumer of the material.

Where temperature is relied upon, at least in part, to effect the sterilization, as would be the case in an autoclave, the sterilization operation renders the bag 4 more fragile and brittle, especially when that bag is made of a paper-like material. Thus, it is a very simple expedient to release the exposed end of the leader 6 from the tacking 9, and pull the leader together with the free end of the tape-like material through the slot 2 in the box, disrupting the bag as indicated at 10 in Fig. 4. Relatively little exertion

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is required for that effort. When the tape itself comes through the slot 2 in the box, the leader and a short adjacent portion of the tape may be severed and discarded, and thereafter the tape-like material itself drawn from the box and used as desired.

From the foregoing, it is apparent that I have provided a simple and economical package for tape-like material, wherein the tape-like material may be kept in a completely sterile condition until the actual time of first usage. It is believed that my novel method of making such a package is sufficiently apparent from the foregoing as to warrant no further description herein. It should be noted that the entire package and the practice of the method is extremely economical, adding but a negligible amount to the cost of packaging such material in a totally unsterile condition.

It will be understood that modifications and variations may be effected without departing from the scope of the novel concepts of the present invention.

I claim as my invention:

1. A package for a roll of tape-like material including a box having a slot in the wall thereof, a roll of tape-like material, a fragile covering enclosing said roll, a temporary leader secured to the free end of said material and extending through said covering, said covering being sealed around said leader, and said material and covering being enclosed in said box with the free end of said leader projecting through the slot in the box.

2. A package for sterilized bandage material, including a roll of gauze bandage, a paper temporary leader secured to the free end of said bandage, a disruptible bag through which the free end of said leader projects, said bag being hermetically sealed around said bandage roll and to the projecting part of said leader, and a box containing said bag and bandage roll and having a slot in a wall thereof through which the exposed end of said leader projects.

3. A package for sterilized bandage material, including a roll of surgical bandage, a temporary discardable tape-like leader connected to the free end of the rolled bandage, a disruptible hermetically sealed bag enclosing said bandage and a part of said leader, said bag being hermetically sealed around the projecting part of said leader, and said leader being of different material than said bandage and pulled to disrupt said bag and bring forth the free end of the bandage after which the leader must be removed and discarded to permit use of the bandage.

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