June 30, 1970 F. WITTLAND 3,517,806

GLOVE PACKAGE

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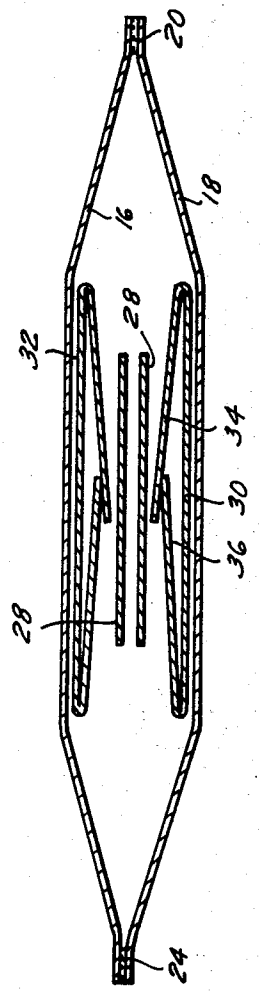


FIG. 3

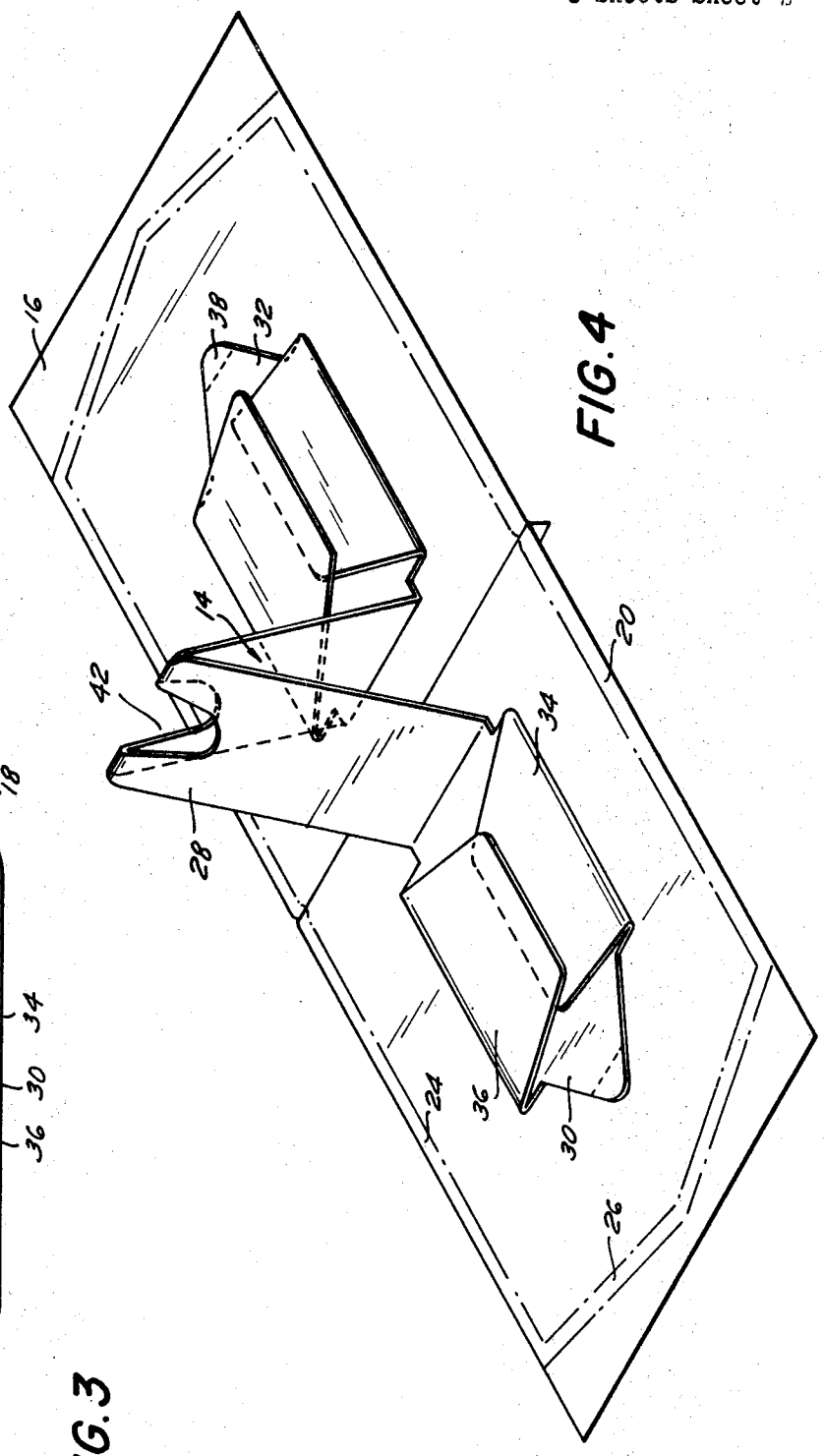


FIG. 4

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June 30, 1970 F. WITTLAND 3,517,806

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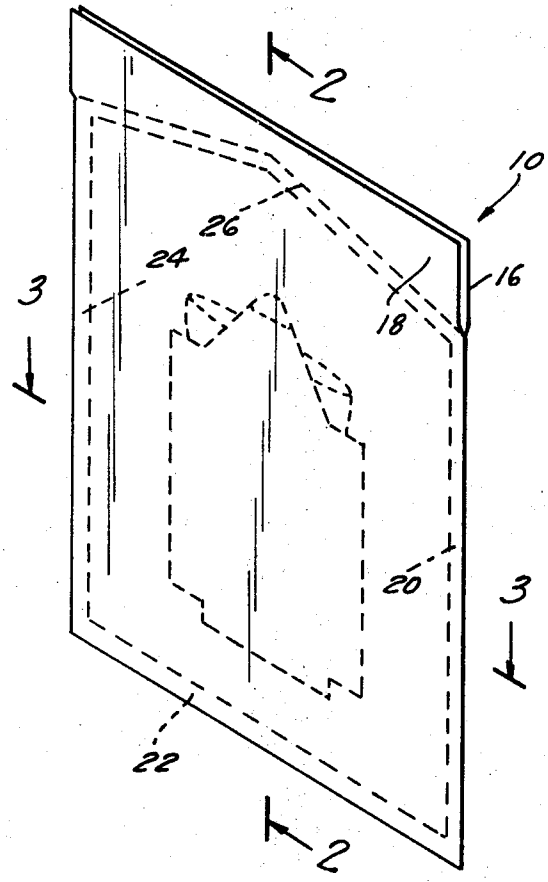


FIG. 1

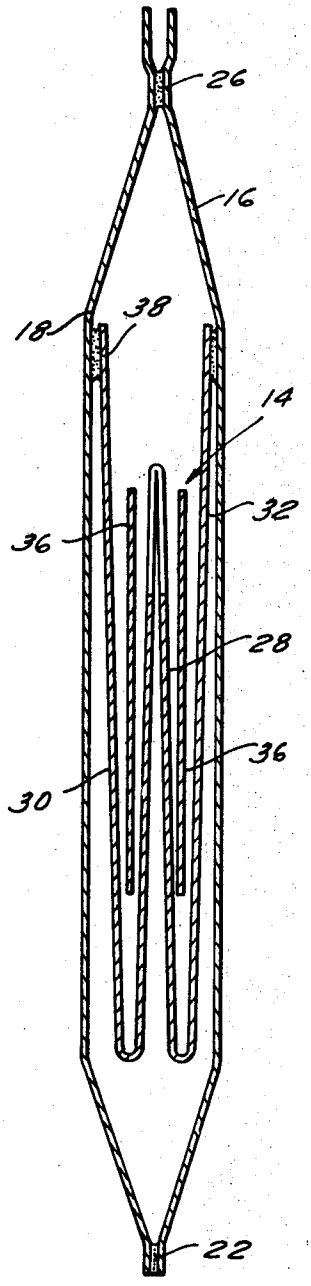


FIG. 2

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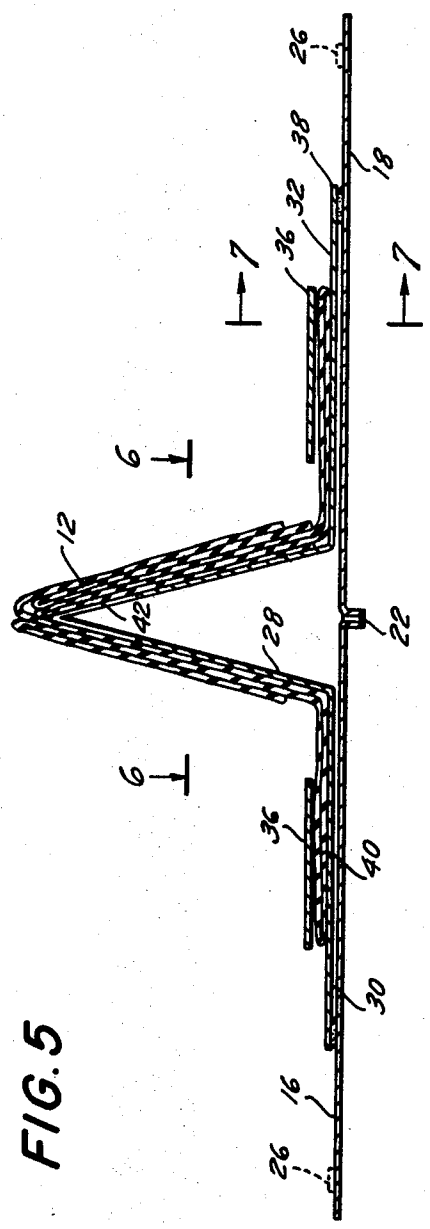


FIG. 5

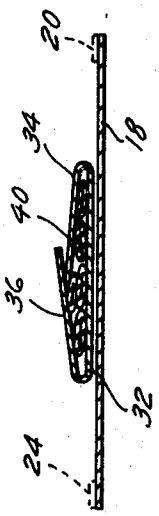


FIG. 7

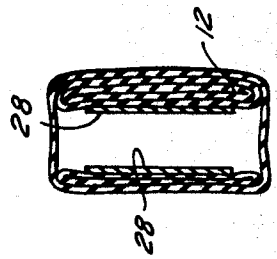


FIG. 6

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FIG. 9

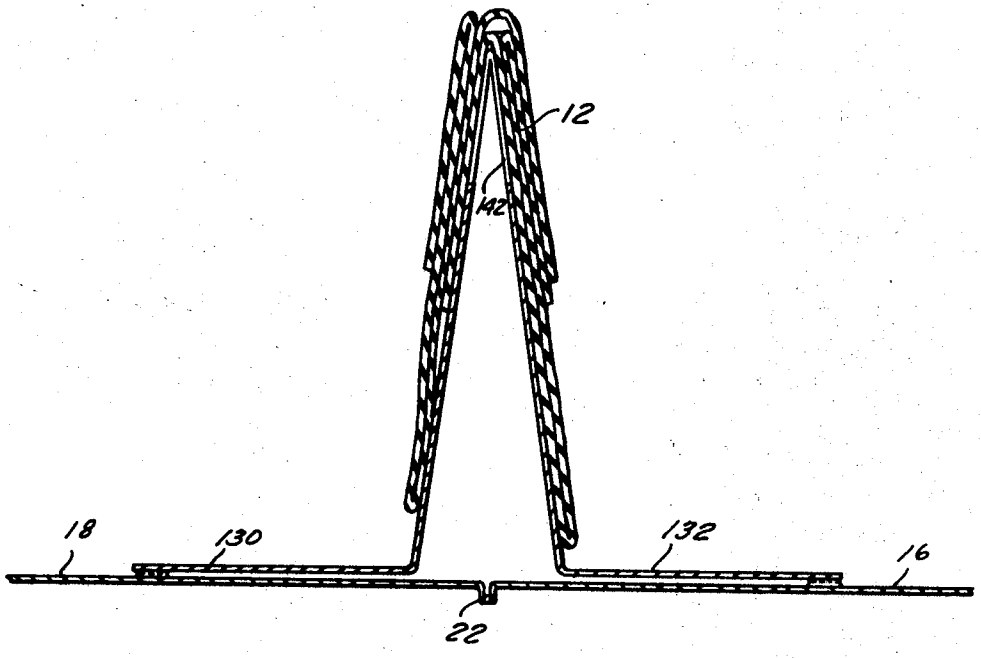
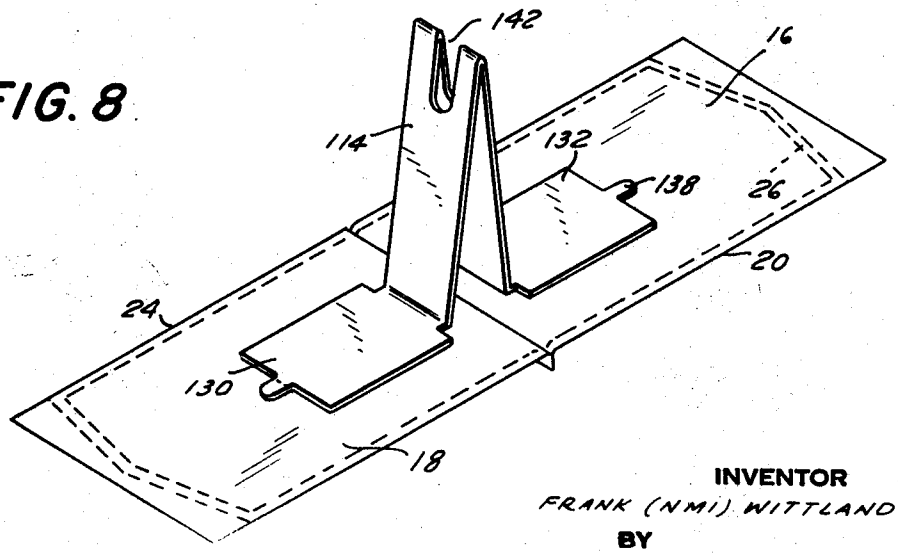


FIG. 8



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FIG. 11

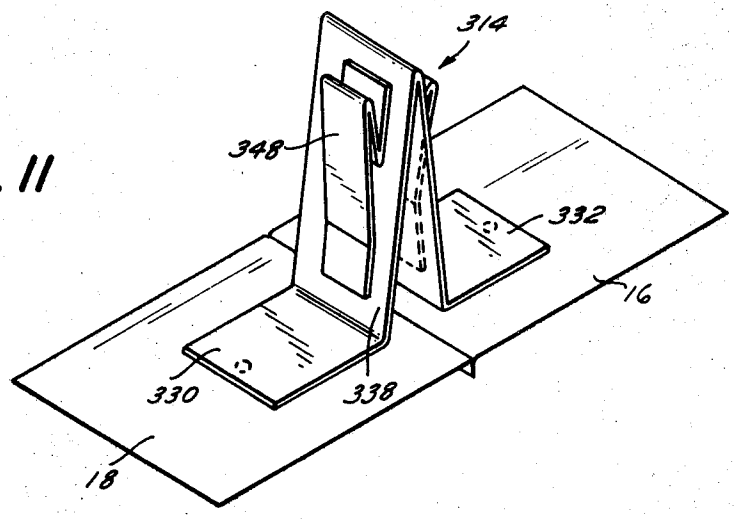


FIG. 10

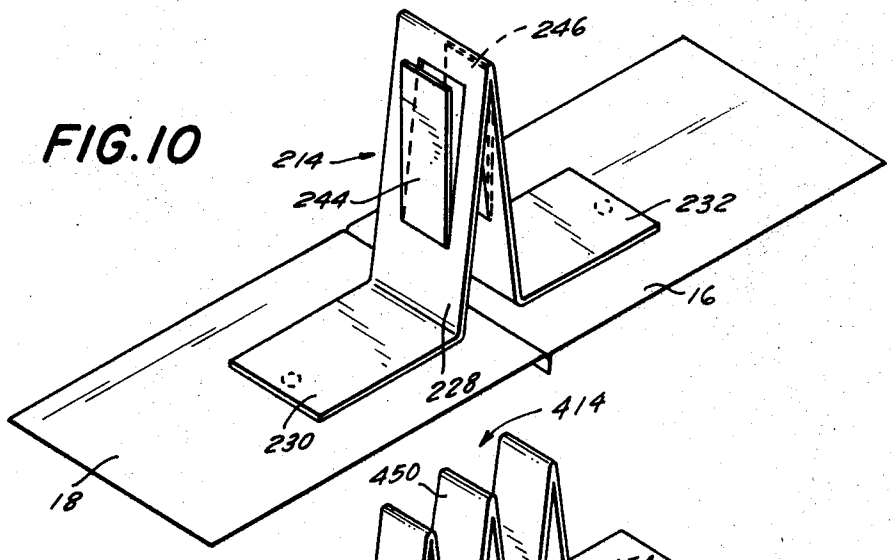
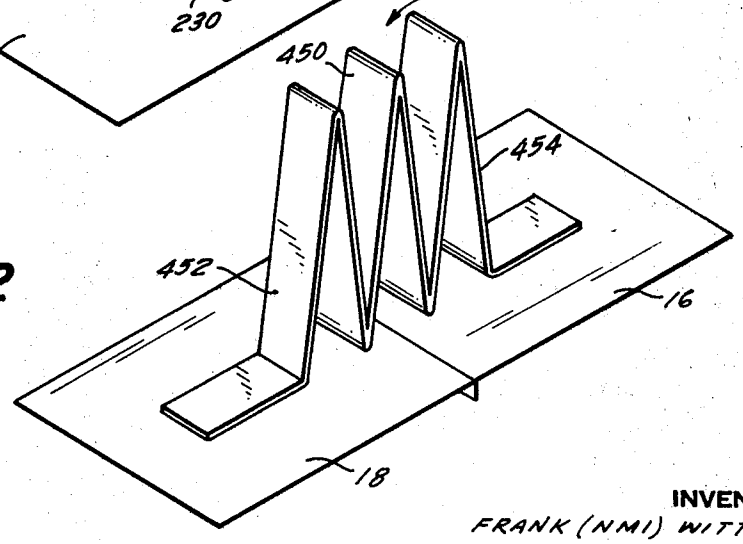


FIG. 12



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United States Patent Office 3,517,806 Patented June 30, 1970

3,517,806

GLOVE PACKAGE

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Int. Cl. B65d *85/18;* A61b *19/02*
U.S. Cl. 206—63.2 12 Claims

ABSTRACT OF THE DISCLOSURE

A glove package of the peel apart variety confining under sterile conditions a pair of gloves. The gloves are supported by a post construction which, upon opening of the package, causes the gloves to be disposed in an upstanding position for ease in donning.

The present invention relates to a glove package and particularly a package for use with sterile disposable surgeon's gloves.

The prior art is replete with packages which are adapted to enclose a pair of gloves under sterile conditions. Generally, these packages define only an outer wrap for an inner sterile package containing the glove pair. The inner package may or may not be sealed, as desired. However, the inner package is usually freely housed by the outer wrap so that upon opening of the latter the gloves may be accidentally displaced from their sterile confines prior to donning, thus becoming contaminated. Further, this type of packaging does not locate the gloves in a position as, for example, in an upright position, whereby the individual gloves may be easily donned.

The present invention, therefore, seeks to provide an improved packaging unit for packaging a pair of surgeon's gloves under sterile conditions. The package is defined by an outer wrap formed by at least a single sheet of wrapping material having a continuous zone coating of an adhesive substantially in the region of the sheet periphery so that the package may be sealed. A post construction is removably mounted by the sheet material so that upon opening of the package the post which is adapted to support a pair of gloves positions the gloves in substantially an upright position within a sterile field bordered by the material periphery.

In accordance with the foregoing discussion, it is a principal object of the invention to provide a peel apart glove package having a single wrap and including internal glove supporting structure whereby, upon opening of the package, the gloves are disposed in an upright position under sterile conditions for ease in donning.

Other objects and advantages of the invention will become apparent to those skilled in the art as the following description, to be read in conjunction with the drawings which form a part of the present disclosure, is developed. By these drawings:

FIG. 1 is a perspective view of a glove package;

FIG. 2 is a vertical sectional view as seen along the line 2—2 in FIG. 1 showing the internal post adapted to support a pair of gloves;

FIG. 3 is a horizontal sectional view of the glove package as seen along the line 3—3 in FIG. 1;

FIG. 4 is a perspective view of the glove package having been opened thereby to illustrate the post construction adapted to support a pair of gloves;

FIG. 5 is an elevational view, partially in section, of the opened glove package and illustrating a pair of gloves supported on the post;

FIG. 6 is a horizontal sectional view of the post and supported glove pair as seen along the line 6—6 in FIG. 5;

FIG. 7 is a vertical sectional view of the base of the post and supported glove as seen along the line 7—7 in FIG. 5;

FIG. 8 is a view similar to FIG. 4 yet illustrating a second embodiment of the invention;

FIG. 9 is an elevational view of the package of FIG. 8 and illustrating a glove pair supported by the internal post; and,

FIGS. 10–12 are views similar to FIG. 8 yet illustrating further embodiments of the invention.

FIGS. 1–7 show a first embodiment of the invention. These figures illustrate a sealed package unit **10** enclosing a pair of gloves **12** which is supported by a post construction **14**.

The illustrated package is formed by individual sheets of packaging material, denoted by the numerals **16** and **18**, cut to predetermined shape. The package material may have applied thereto a zone coating of adhesive along the peripheral edges **20**. **22** and **24** and in the region of the remaining edge as well as with a surface coating of adhesive throughout the total area of the material. The zone coating is applied in a continuous application therearound. Whereas the application along the mentioned sides is within the region of the edge, the zone coating **26** is applied as a double incline toward the top edge. Thus, the individual sheets may be gripped and peeled apart as is conventional in the packaging arts.

Any suitable adhesive may be employed which is adapted to undergo a heat or pressure sealing technique.

The package may also be formed from a single elongated sheet of packaging material which is folded upon itself along the bottom with the remaining edges zone coated for sealing as at **20**, **24** and **26**. Both packages are of the peel apart variety which allows for ease in opening of the same to dispense the confined gloves from a relatively upright position within a sterile field, i.e., within the non-sterile perimeter of the package. The manner by which the adhesive is applied at **26** provides greater ease in opening and the positioning of the gloves when the package is opened permits ease in donning. Further, the glove positioning allows for the implementation of standard donning techniques.

The packaging material may be any one of paper, cardboard, plastic, such as polyvinyl chloride sheet, to name a few. These materials are standard in the packaging arts since they are capable of being zone coated for adhesive sealing, as above and, further, are capable of undergoing a sterilizing procedure, as for example, gas, radiation or autoclaving sterilization.

The post **14**, in the FIGS. 1–7 embodiment, is in the form of an upstanding inverted V-shaped member **28** including integral base portions **30** and **32**. Each base includes a pair of overlapping flaps **34** and **36** which function to confine the individual gloves of the pair (see FIG. 7.).

The post may be secured to the packaging material, as desired. The post may be secured by an adhesive application over its total lower surface so as to be nonremovable of it has been found acceptable to secure the post by an adhesive applied within the region of the tip areas **38** of each base portion. In this manner, both the glove and post will remain stationary within the closed package as well as on the surface of the opened package, thus retaining the glove within its sterile field. However, if desired, the entire post may be easily removed when the package is opened. Therefore, the gloves supported by the post and its base and flaps may be removed from the first sterile field within the confines of the package and positioned in yet another sterile field thereby to be positioned for use.

The gloves are carried on the post and supported by the cuff, one of which is carried over the other. As may

be obvious, the glove may be precuffed or cuffed at packaging and as illustrated in FIG. 5 is carried by the member **28** in a manner such that the individual gloves of the pair are disposed on separate sides of the post with the finger portion **40** extending along the base **30** and **32** and below the flaps **34** and **36**. Any type of glove, for example, of the plastic or latex variety, may be supported in this fashion and packaged, as discussed.

The post **14** may be formed of any relatively sturdy material. However, the material must not only be one that exhibits stability in maintaining the gloves upright upon opening of the peel apart package and within the wrapper confines but also it must be one that is light weight and capable of being adhesively applied to the packaging material. Cardboard has been successfully employed for this purpose. The post includes a U-shaped cut-out area **40** which functions in a manner whereby the gloves, either singly or as a pair, determined by the finger pressure exerted, may be easily removed from the post without upsetting the same.

The embodiment of FIGS. 8–9 is generally similar to the embodiment of FIGS 1–7. In this connection, like structure will be identified by like numeral designation.

The package unit is similarly formed and includes an internal post support **114**. The package is also sealed by pressure or heat sealing of the continuous zone coated adhesive application at **20**, **22**, **24** and **26**. As discussed, the package is subjected to sterilization procedures.

The construction of post **114** is somewhat similar to the construction of post **14**. However, it is of increased height to therefore obviate the need for the flaps of FIG. 1. The height of the post maintains the gloves, supported by their cuffs, above the base **130** and **132** and within the sterile field.

The post **114** is likewise provided with a U-shaped cut-out **142** for the purpose as discussed and, similarly, the post may be adhesively applied to the packaging material within the region of the base tips **138**.

The embodiments of FIGS. 10–12 are, again, similar to the FIG. 1 embodiment. As with the FIG. 8 embodiment, the differene is with regard to the construction of the glove supporting posts **214**, **314**, and **414**.

In FIGS. 10 and 11, the post is in the form of an inverted and upstanding V-shaped member including integral base portions **230–232** and **330–332**, respectively. The upstanding portion of FIG. 10 includes a pair of projections **244** and **246** which are struck from the surfaces **228**. The upstanding portion of FIG. 11 includes, on the surfaces **338**, a supporting projection **348** that is configured, generally, in the manner of the post **314** itself and affixed to the latter. In both the FIGS. 10 and 11 embodiments, the projections function to support the individual gloves disposed thereon by their cuffs, as discussed.

The post **414** of FIG. 12 is generally of a sawtooth construction. The inner portion **450** adapts the post for a folding action when the package is sealed and the end portions **452** and **454** carry the individual gloves disposed thereon by the cuff portion.

Each of the posts **214**, **314**, and **414** are adhesively mounted to the packaging material, as discussed, and each post is of a height whereby the supported gloves will be disposed above the integral base portions so as to reside within the sterile field.

If desired the package described above can be disposed in an additional peel apart package.

From the foregoing, it should be apparent that the objects are carried out and that advantages accrue by use of the improved glove package of the present invention.

Having described the invention, I claim:

1. A package of the peel apart type for sterile disposable gloves comprising two superimposed relatively flat yet yieldable surfaces that are joined to one another substantially within the peripheral region of each surface for peel apart opening and defining a chamber, therewithin, and a supporting means secured to the inner face of the surfaces within the chamber area, said means adapted to support a pair of gloves such that upon opening said peel apart package the glove pair is disposed in substantially an upright orientation whereby the gloves may be easily donned.

2. The package of claim **1** wherein the surfaces are formed of sheet material capable of undergoing sterilization to provide sterile contents.

3. The package of claim **1** wherein the superimposed surfaces are formed by a plurality of sheet material sections and joined to one another by a zone coated adhesive means within substantially said peripheral region of each sheet.

4. The package of claim **1** wherein said supporting means includes at least one inverted V-shaped member and a pair of integral side base members.

5. The package of claim **4** wherein said base members include flap elements to confine within the flaps and base a portion of said glove adapted to be carried by said at least one inverted V-shaped member.

6. The package of claim **4** wherein said at least one inverted V-shaped member includes a cut-out at the apex whereby the gloves adapted to be supported by the member may be gripped and easily removed for donning.

7. The package of claim **4** wherein a tip portion of said base member is adhesively secured to said inner face of the surfaces.

8. The package of claim **4** wherein said at least one inverted V-shaped member includes a pair of projections on the side surfaces for supporting individual gloves.

9. The package of claim **8** wherein the projections are struck from the side surface.

10. A glove package of the peel apart type for sterile disposable gloves comprising two superimposed relatively flat yet yieldable surfaces that are joined to one another substantially within the peripheral region of each surface for peel apart opening and defining a chamber therewithin, at least one sterile disposable glove of a glove pair, and a supporting means secured to the inner face of the surfaces within the chamber area, said supporting means mounting said at least one glove of the glove pair such that upon opening said peel apart package the said glove is disposed in substantially an upright orientation whereby it may be easily donned.

11. The package of claim **1** wherein said supporting means are removably secured to the inner face of the surface within the chamber area.

12. The package of claim **10** wherein said supporting means are removably secured to the inner face of the surface within the chamber area.

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U.S. Cl. X.R.

206—46