

Feb. 21, 1956

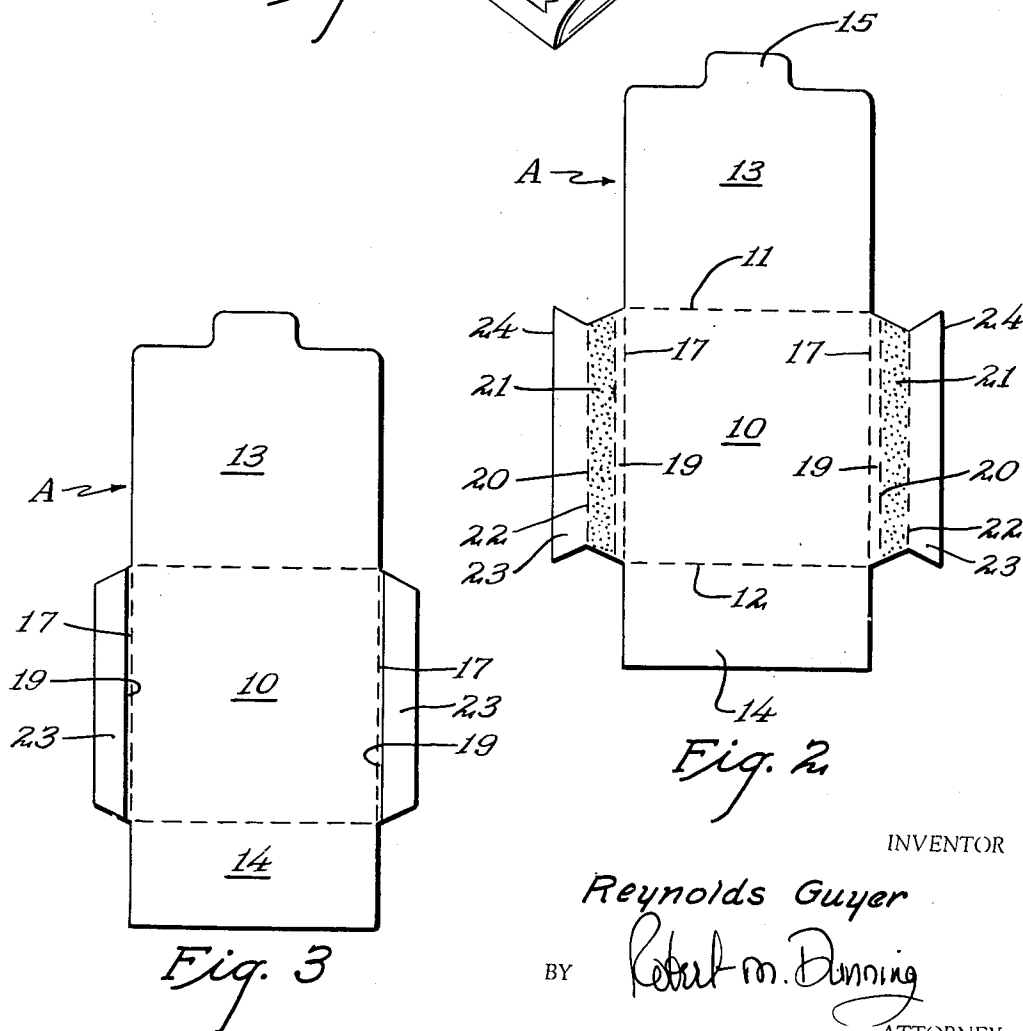
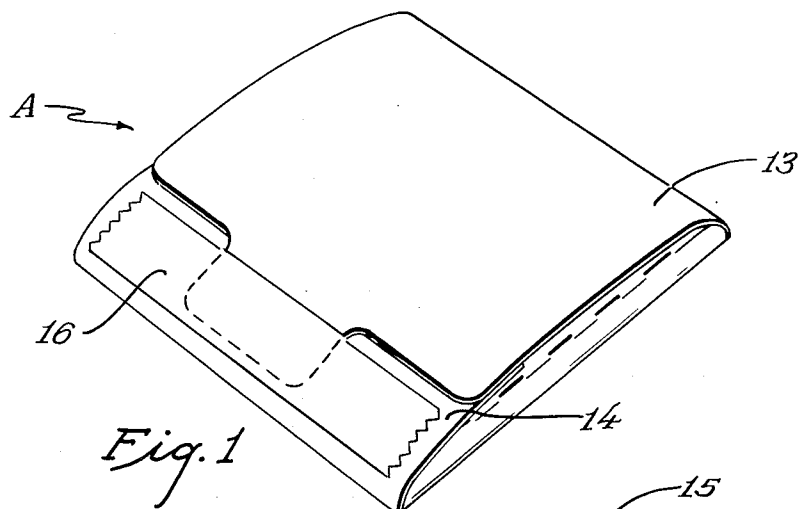
R. GUYER

2,735,544

SURGICAL DRAPE PACKAGE

Filed Oct. 26, 1951

2 Sheets-Sheet 1



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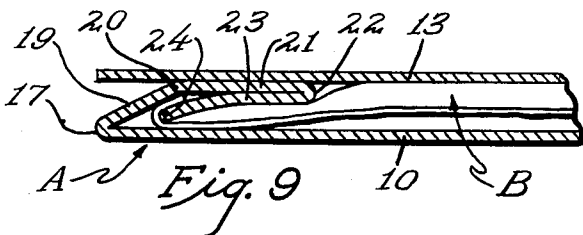
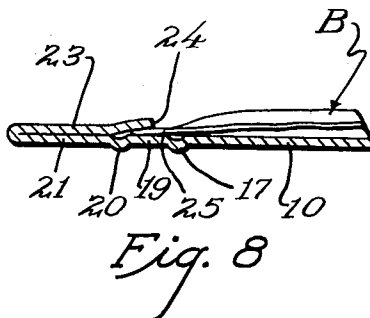
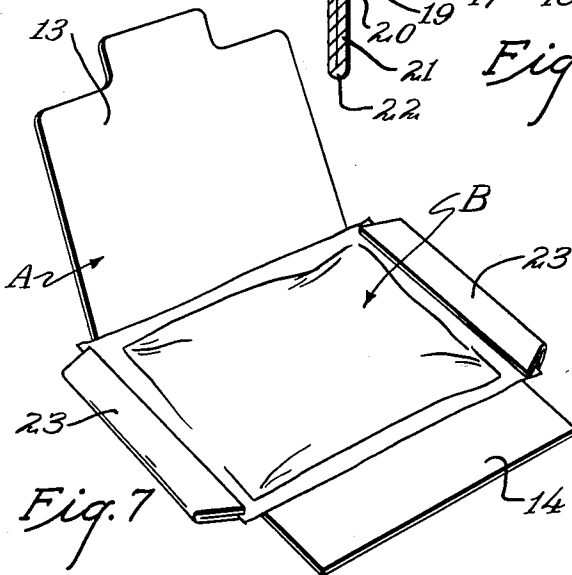
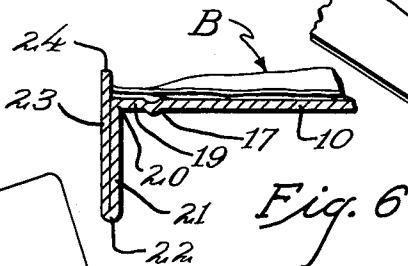
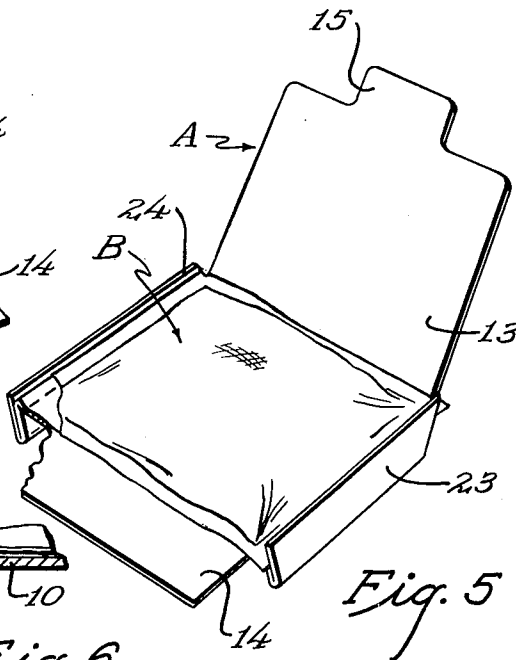
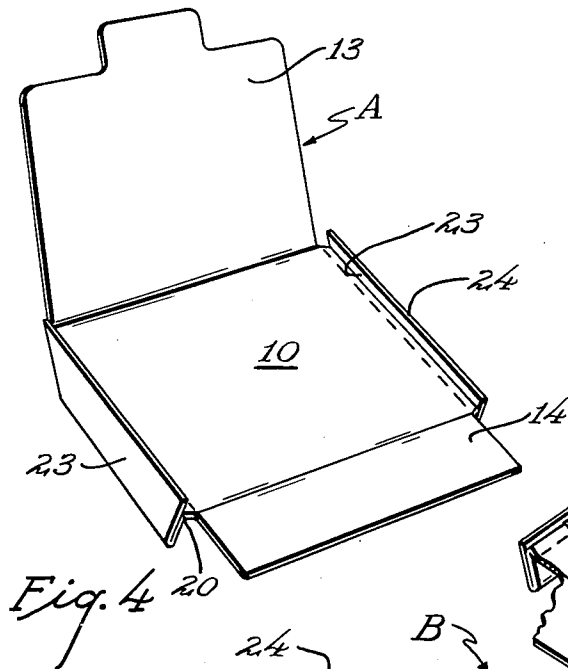
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2 Sheets-Sheet 2



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SURGICAL DRAPE PACKAGE

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Application October 26, 1951, Serial No. 253,359

6 Claims. (Cl. 206—63.2)

This invention relates to an improvement in surgical drape package and deals particularly with a folder of paper board or the like suitable for holding an envelope containing a surgical drape or the like.

Surgical drapes, bandages, and the like, are often packaged in sealed envelopes of foil or other material after sterilization so as to maintain them in a sterile condition. The drape or bandage often possesses considerable weight, particularly when enclosed in the foil envelope. In order to maintain an effective seal it is necessary to prevent the envelope from sliding about in an enclosing package. The thicker portion of the drape is at the center of the envelope and all of the marginal edges of the envelope are relatively thin and comprise merely the envelope material. As a result the edges of the envelope are relatively fragile and if the same were placed within a rectangular carton the weight of the contents would quickly cause the edges to become crimped and broken.

An object of the present invention resides in the provision of a folder capable of clamping two opposite edges of the envelope and holding the same from slidable movement. By firmly gripping two edges of the envelope the same may be held from movement within the folder, thus preventing injury to the seal and maintaining the contents in a sterile condition.

A feature of the present invention lies in the provision of a folder which may be readily filled and yet which will effectively clamp the envelope in place. During the insertion of the drape into the folder the clamping members of the folder are swung open so that the envelope may be put in place without difficulty. By folding the clamping edges of the folder against the edges of the envelope, the two opposed edges of the envelope may be firmly grasped to hold the same from movement.

A feature of the present invention resides in the provision of a folder having a bottom panel, narrow wall panels hingedly connected to opposite edges thereof, and locking flanges hingedly connected to the wall panels. Clamping flanges are hinged to the locking flanges and are adhered thereto. These clamping flanges are wider than the locking flanges so that the free edges thereof overlie the narrow side wall panels. When the flanges are hinged downwardly along the fold line connecting the side wall panels to the locking flanges, the marginal edges of the clamping flanges extend above the level of the bottom panel. However, when the locking flanges are hinged through substantially 270°, the marginal edges of the envelope are crimped about the marginal edges of the locking flanges, thus firmly holding the envelope from movement.

An added feature of the present invention lies in the provision of locking and clamping flanges which are connected to the bottom panel along two spaced parallel fold lines. When the envelope is inserted upon the bottom panel, the locking flanges are folded down along the outermost fold line of each pair. However, when the locking flanges have been swung upwardly into the

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plane of the bottom panel, further pivotal movement causes the marginal edges of the clamping panels to clamp against the marginal edges of the envelope and the carton folds along the inner fold lines of each pair.

As a result the edges of the envelope are folded over the marginal edges of the clamping flanges, thus firmly clamping the envelope in place.

These and other objects and novel features of my invention will be more clearly and fully set forth in the following specification and claims.

In the drawings forming a part of my specification:

Figure 1 is a perspective view of the folder in use.

Figure 2 is a diagrammatic view of the blank of which the folder is formed.

Figure 3 is a diagrammatic view of the blank after the clamping flanges have been folded upon the locking flanges and adhered thereto.

Figure 4 is a perspective view of the folder in open position before the envelope containing the surgical drape or other material is placed thereupon.

Figure 5 is a perspective view showing the envelope in place upon the folder.

Figure 6 is a cross sectional view through a marginal edge of the folder with the envelope resting thereupon.

Figure 7 is a perspective view of the folder after the locking flanges have been hinged into the plane of the bottom panel.

Figure 8 is a sectional view through the marginal edge of the folder showing the manner in which the envelope is clamped in the position shown in Figure 7.

Figure 9 is a sectional view through a marginal edge of the folder after the folding operation is complete.

The folder A is designed to support an envelope such as B containing a surgical wrap or other article. The envelope B is possessed of a relatively thick center portion and flat sealed marginal edges encircling the entire body. The drape contained is sealed in the envelope after the same has been sterilized and the edges of the envelope are sealed to maintain the drape in a sterile condition.

The envelope may be of metal foil or similar material with or without a suitable coating for protective purposes.

The folder A includes a bottom panel 10 connected along parallel fold lines 11 and 12 to a top panel 13 and a second top panel 14. The top panel 14 normally folds over the envelope contained and the panel 13 folds into overlapping relation with the panel 14. A projecting tongue 15 is provided on the free end of the top panel 13. A strip of tape 16 may be applied over the tongue 15 to adhere this tongue to the top panel 14.

The bottom panel 10 is foldably connected along fold lines 17 at opposite sides thereof to similar side panels 19. These side panels 19 are relatively narrow in width. The panels 19 are foldably connected along parallel fold lines 20 to locking flaps 21. The locking flanges 21 are connected along parallel fold lines 22 to clamping flanges 23. The flanges 23 are somewhat wider than the flanges 21 so that when these flanges 23 are folded along their fold lines 22, the marginal edges 24 thereof overlie the side panels 19. The extent to which the panels 23 overlie the panels 19 may be changed but the edges preferably overlap at least one-half of the area of the side wall panels 19 in the proportion of folder illustrated.

In order to produce a neater package and to reduce the thickness of the flanges near the fold lines 11 and 12, the flanges 21 and 23 may be tapered as illustrated. In other words, the fold line 22 is substantially shorter than the marginal edge 24 of the fold line 20. This spaces the folded edges of the connected flanges from the fold lines 11 and 12 when the folder is closed.

The folder is usually folded into the position illustrated

in Figure 3 at the point of manufacture, adhesive being applied to the panels 21 before the flanges 23 are folded thereover in surface contact therewith. Thus after the adhesive has been applied the flanges 21 and 23 are adhered together throughout the major portion of their area, the free edges 24 of the clamping panels 23 overlying the side walls 19 and being free thereof. Figure 3 illustrates the folder as it is normally supplied to the user.

The assembly of the package is indicated by Figures 4 through 9 of the drawings. Before the envelope is placed upon the panel 10, the combined flanges 21, 23 on opposite sides of the bottom panel are folded downwardly along the outer fold lines 20. As the flanges 23 are somewhat wider than the locking flanges 21 to which they are secured, the marginal edges 24 of these flanges 23 will project above the level of the bottom panel 10. When in this condition, the wall panels 19 are in a common plane with the backing panel 10 and the combined flanges 21, 23 are folded downwardly at right angles as indicated in Figures 4 and 6 of the drawings. The upwardly projecting marginal edges of the flanges 23 form sides between which the envelope may be placed, these sides guiding the envelope in its location.

After the envelope B has been put in place as indicated in Figure 5 of the drawings, the flanges 21, 23 are folded upwardly until the flanges 21 are in the same plane as the wall panels 19 and the bottom panel 10. During this hinging action the marginal edges 24 of the flanges 23 overlie the edges 25 of the envelope B as shown in Figure 8. Thus the clamping flanges 23 engage over the marginal edges of the envelope B as shown.

Continued hinging movement of the combined flanges 21 and 23 causes the carton to fold along the inner fold lines 17. Obviously the folder cannot continue to fold along the fold lines 20 as this is prevented by the overlapping of the flanges 23 with the wall panels 19. Therefore as the folder folds along the fold line 17, the marginal edges 25 of the envelope B are folded around the marginal edges 24 of the flanges 23 as indicated in Figure 9 of the drawings. Thus the edges of the envelope are doubled about the edges 24 of the flanges 23, thus holding the envelope from lateral movement. When the locking flanges are in the position shown in Figure 9 the envelope is also held from longitudinal movement by friction and by the clamping action of the flanges.

To complete the sealing operation, the panel 14 is folded over the envelope, the top panel 13 is folded over the envelope to overlap the panel 14 and the taped strip 16 is applied over the tongue 15 to hold the cover panels closed. When in this position the locking flanges are held in the condition illustrated in Figure 9 and the envelope is firmly clamped from movement in any direction.

In accordance with the patent statutes, I have described the principles of construction and operation of my surgical drape package, and while I have endeavored to set forth the best embodiment thereof, I desire to have it understood that obvious changes may be made within the scope of the following claims without departing from the spirit of my invention.

I claim:

1. A folder for containing an envelope or the like having flat opposed edges, the folder including a bottom panel, side panels foldably connected to opposite sides of said bottom panel, locking flanges foldably connected to said side panels and clamping flanges secured to said locking flanges, said clamping flanges being wider than the locking flanges and being folded thereupon in substantially surface contact therewith, with the free edge of the clamping flanges overlying the side panels, said clamping flanges being foldable upon the flat edges of the envelope contained and the locking flanges and side panels being foldable over said bottom panel to fold the marginal edges of the envelope therebetween.

2. The structure described in claim 1 and including a top panel foldable over said flanges.

3. The structure described in claim 1 and including opposed top panels foldable over the envelope and over the flanges when said flanges are folded to overlie said bottom panel.

4. A folder containing an envelope or the like having flat opposed edges, the folder including a bottom panel, a pair of side panels foldably connected to opposite sides of said bottom panel, first flanges foldably connected to said side panels, second panels foldably connected to said first panels, and means securing said first and second panels in surface contact, the second flanges being somewhat wider than the first flanges and including free ends projecting upwardly above said panels when said first flanges are folded downwardly from the edges of the side panels, the flat envelope edges overlying said side panels and terminating closely adjacent to the upwardly projecting free ends of the second flanges when these flanges are folded downwardly.

5. A folder for containing an envelope or the like having flat opposed edges, the folder including a bottom panel, a pair of side panels foldably connected to opposite sides of said bottom panel, first flanges foldably connected to said side panels, second panels foldably connected to said first panels, and means securing said first and second panels in surface contact, the second flanges being somewhat wider than the first flanges, said first and second panels being foldable in unison in one direction relative to said side panels, the marginal edges of said second panels engaging said side panels to prevent said panels from folding substantially relative to said side panels in the opposite direction.

6. The structure described in claim 5 and including means holding said flanges and side panels folded to overlie said bottom panels.

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