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2,257,952

CONTAINER

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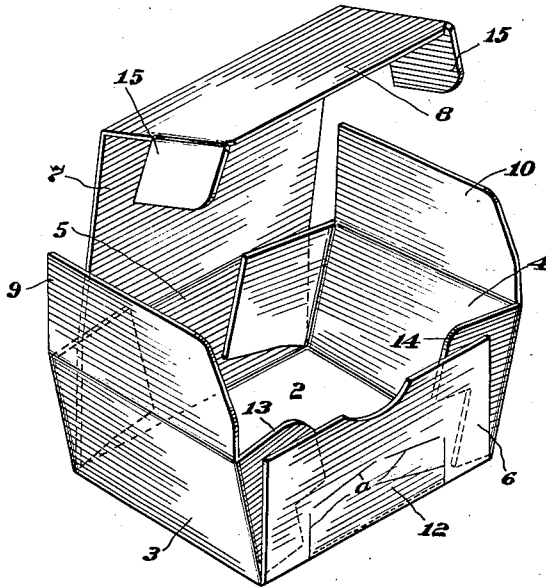


Fig. 1

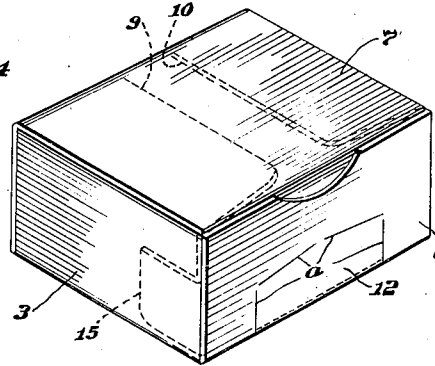


Fig. 2

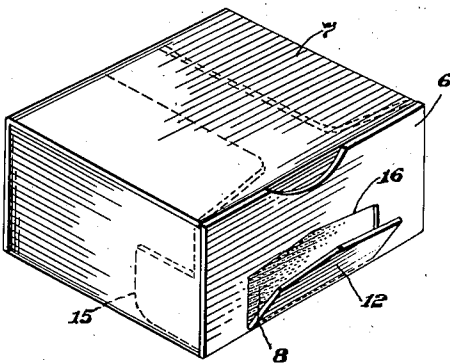


Fig. 3

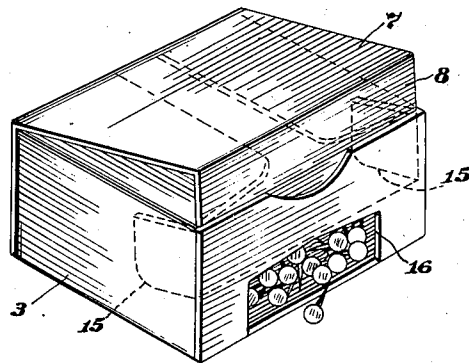


Fig. 4

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CONTAINER

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6 Claims. (Cl. 229-17)

This invention relates to boxes of the general type in which tacks, rivets, small screws, and similar articles are packaged and sold, although the utility of the invention is not limited to the particular articles mentioned.

It is the chief object of the invention to improve boxes of this character with a view to facilitating the removal of the merchandise from them by the user in approximately the exact number or quantity desired by him from time to time. In addition, the invention aims to devise a construction in which the danger of spilling the contents of the box will be minimized, and to accomplish these objects without adding to the expense of manufacture of the box.

The nature of the invention will be readily understood from the following description when read in connection with the accompanying drawing, and the novel features will be particularly pointed out in the appended claims.

In the drawing:

Figure 1 is a perspective view showing a box embodying this invention but in a partly assembled condition;

Fig. 2 shows the box in its completed form; and Figs. 3 and 4 are views similar to Fig. 2 illustrating the manner in which features of this invention may be utilized.

Referring first to Figs. 1 and 2, it will be seen that the box there shown is, except for features hereinafter described more particularly, of a common form. It is made from a single blank of cardboard, or any equivalent sheet material, and comprises a bottom panel 2, side panels 3 and 4, and end panels 5 and 6. Extending inwardly from the two side panels are wings which are cemented to the inner surfaces of the end panels 5 and 6 and serve to secure these parts permanently together. It may here be noted, however, that it is immaterial which panels are regarded as the sides and ends, these terms being here used simply for convenience in explanation. Extending from the upper edge of the end panel 5 is a cover 7 provided with a front flap 8, this cover being designed to be folded down into the position shown in Fig. 2 for the purpose of closing the box. The side panels also have top flaps 9 and 10 which cooperate with the cover in confining the contents of the box, these two flaps being folded inwardly toward each other and underlying the cover. So far as the construction above described is concerned, the box is of an old form.

According to the present invention, the front panel 6 is scored or cut, as indicated by the lines

a in Fig. 2, to provide a section 12 which may readily be broken out to form an opening or aperture through which the contents of the box may be discharged. The lower corners of the wings 13 and 14 which are cemented to the front panel 6 of the box also are notched sufficiently to prevent them from overlapping the section 12, as best shown in Fig. 1. Normally this weakened front wall is protected by the flap 8 which lies immediately behind the front wall of the box and is substantially coextensive with it.

The box is filled with the cover open and the flaps 9 and 10 turned up. Thereafter these flaps are folded down and the cover 7 is closed, as shown in Fig. 2. During this operation the flap 8 slides in behind the front wall 6. It will be observed that this flap has two wings 15-15 extending from opposite edges thereof, and these wings are folded snugly against the inner surface of the flap 8 and held in this position while the flap is tucked down into the box. When they are released, however, they tend to spring outwardly against the side panels 3 and 4, and care is taken not to fill the box completely so that when it is set up on the panel 5 or tipped up on one back corner or the other, the contents will move out of contact with the wings and thus allow them to move into contact with the side panels. One of the wings is so shown in Fig. 2. Usually this action will occur in the normal handling of the merchandise without any special care on the part of the packer.

The packages go into the normal channels of commerce and reach the ultimate consumer in this condition. When he wishes to use the tacks, fasteners, or other merchandise contained in the package, he breaks out the panel 12, as shown in Fig. 3, tears it off, thus producing the discharge aperture 16. The contents of the box are still held against escape, however, by the flap 8. Upon lifting the cover 7 slightly, as shown in Fig. 4, this aperture may be opened, and the tacks or other contents of the package may be shaken out in substantially the number or volume desired. Before putting the package away again, the user depresses the flap 8, thus closing the aperture 16.

It is desirable to limit the opening movement of the flap 8 to substantially that required to open the aperture 16, both for the purpose of maintaining the flap 8 always in its operative position and also to limit the range of movement of the cover 7, the latter being desired in order to afford better control of the contents of the box. It is for this purpose that the wings 15-15

are formed on the ends of the flap 8. They are made of such vertical dimensions that when the cover 7 is raised, the upper ends of these wings engage the parts 9 and 10, respectively, of the box and prevent further opening movement of the cover or the flap.

It should be observed that the box provided by this invention is exceptionally convenient for the ultimate consumer to use. Also, that when the box is closed after the section 12 has been removed, the pressure of the contents of the box against the inner surface of the flap 8 tends to hold the flap in its closed position and thus to prevent the accidental spilling of the contents. A surprising fact concerning this box is that when it falls with the flap 8 open, as shown in Fig. 4, the result in most cases is to close this flap.

These advantages also are obtained without any material increase in the expense of manufacture of this box as compared to a box of the common constructions but made of the same dimensions and materials. This is largely due to the fact that the only changes made in these regular constructions are the addition of the wings 15 and the provision made for the easy breaking out of the section 12. The wings 15 come out of stock which otherwise would be discarded as scrap. Consequently, these changes in construction do not increase either the material or labor cost.

The drawing shows the invention applied to a common type of cardboard box known as the Inman box. It will be evident, however, that it is immaterial from the standpoint of this invention just how the body of the box is made. Any other suitable construction, such as the Brightwood box, the tuck end box, the seal end bottom type, and others, can be used so long as provision is made for producing the discharge aperture 16 and closing that aperture by a flap which preferably is locked by one or more locking tabs equivalent to those shown at 15.

Having thus described my invention, what I desire to claim as new is:

1. A cardboard box provided with front, rear and side walls, an aperture in the front wall thereof through which articles contained in the box may be shaken out, said aperture occupying only a relatively small portion of both the length and width of said wall, a closure panel forming the top of the box and hinged to the rear thereof, said closure panel also including a flap on the front edge thereof extending downwardly along the front wall, when in closed position, and of sufficient width to close said aperture, said flap being movable to open said aperture and being provided adjacent its free end with one or more inwardly extending wings, means on the side wall positioned to contact said wings to limit the outward movement of the flap in exposing the aperture, said flap when closed overlapping portions of said box at the edges of said aperture whereby the pressure of the contents of said box against the inner surfaces of the flap tend to hold it in closed position.

2. A cardboard box provided with front, rear and side walls, a portion of said front wall being removable to form an aperture therein through which articles contained in the box may be shaken out, said aperture occupying only a relatively small portion of both the length and width of said wall, a closure panel forming the top of the box and hinged to the rear thereof, said

closure panel also including a flap on the front edge thereof extending downwardly along the front wall, when in closed position, and of sufficient width to close said aperture, said flap being movable to open said aperture and being provided adjacent its free end with one or more inwardly extending wings, means on the side wall positioned to contact said wings to limit the outward movement of the flap in exposing the aperture, said flap when closed overlapping portions of said box at the edges of said aperture whereby the pressure of the contents of said box against the inner surfaces of the flap tend to hold it in closed position.

3. A cardboard box provided with front, rear and side walls, an aperture in the front wall thereof through which articles contained in the box may be shaken out, said aperture occupying only a relatively small portion of both the length and width of said wall, a closure panel forming the top of the box and hinged to the rear thereof, said closure panel also including a flap on the front edge thereof extending downwardly along the front wall, said flap being movable to open said aperture and being provided adjacent its free end with one or more inwardly extending wings, said box having side walls provided with extensions folded toward each other and adapted to overlie the contents of the box where they cooperate with said cover in closing the top of the box, said extensions being so positioned as to contact said wings to limit the outward movement of the flap in exposing the aperture, said flap when closed overlapping portions of said box at the edges of said aperture whereby the pressure of the contents of said box against the inner surfaces of the flap tend to hold it in closed position.

4. A cardboard box provided with front, rear and side walls, a portion of said front wall being removable to form an aperture therein through which articles contained in the box may be shaken out, said aperture occupying only a relatively small portion of both the length and width of said wall, a closure panel forming the top of the box and hinged to the rear thereof, said closure panel also including a flap on the front edge thereof extending downwardly along the front wall, said flap being movable to open said aperture and being provided adjacent its free end with one or more inwardly extending wings, said box having side walls provided with extensions folded toward each other and adapted to overlie the contents of the box where they cooperate with said cover in closing the top of the box, said extensions being so positioned as to contact said wings to limit the outward movement of the flap in exposing the aperture, said flap when closed overlapping portions of said box at the edges of said aperture whereby the pressure of the contents of said box against the inner surfaces of the flap tend to hold it in closed position.

5. A cardboard box provided with front, rear and side walls, an aperture in the front wall thereof through which articles contained in the box may be shaken out, said aperture occupying only a relatively small portion of both the length and width of said wall, a closure panel forming the top of the box and hinged to the rear thereof, said closure panel also including a flap on the front edge thereof extending downwardly along the front wall, when in closed position, and of sufficient width to close said aperture, said flap being movable to open said aperture, means on

at least one side wall projecting inwardly therefrom, and means on said flap positioned to contact the means on the side wall to limit the outward movement of the flap in exposing the aperture, said flap when closed overlapping portions of said box at the edges of said aperture whereby the pressure of the contents of said box against the inner surfaces of the flap tend to hold it in closed position.

6. A cardboard box provided with front, rear and side walls, a portion of said front wall being removable to form an aperture therein through which articles contained in the box may be shaken out, said aperture occupying only a relatively small portion of both the length and width of said wall, a closure panel forming the

top of the box and hinged to the rear thereof, said closure panel also including a flap on the front edge thereof extending downwardly along the front wall, when in closed position, and of sufficient width to close said aperture, said flap being movable to open said aperture, means on at least one side wall projecting inwardly therefrom, and means on said flap positioned to contact the means on the side wall to limit the outward movement of the flap in exposing the aperture, said flap when closed overlapping portions of said box at the edges of said aperture whereby the pressure of the contents of said box against the inner surfaces of the flap tend to hold it in closed position.

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