

[54] **ELONGATED ARTICLE CONTAINER**

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[51] Int. Cl. **B65d 5/50**, B65d 5/58
[58] Field of Search 229/39 B, 14 C; 206/16 R, 45.14, 206/45.19, 46 F

[56] **References Cited**

UNITED STATES PATENTS

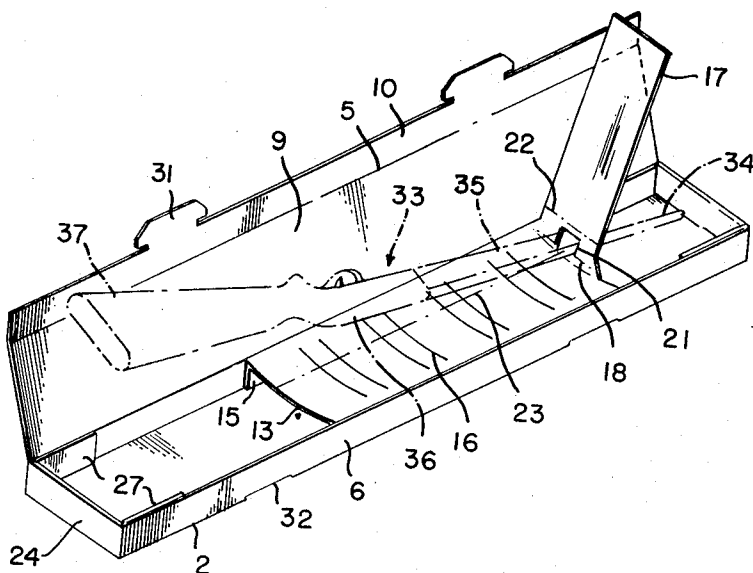
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|-----------|---------|---------|-------|----------|
| 3,156,351 | 11/1964 | Small | | 206/16 R |
| 3,400,879 | 9/1968 | O'Brien | | 229/39 B |

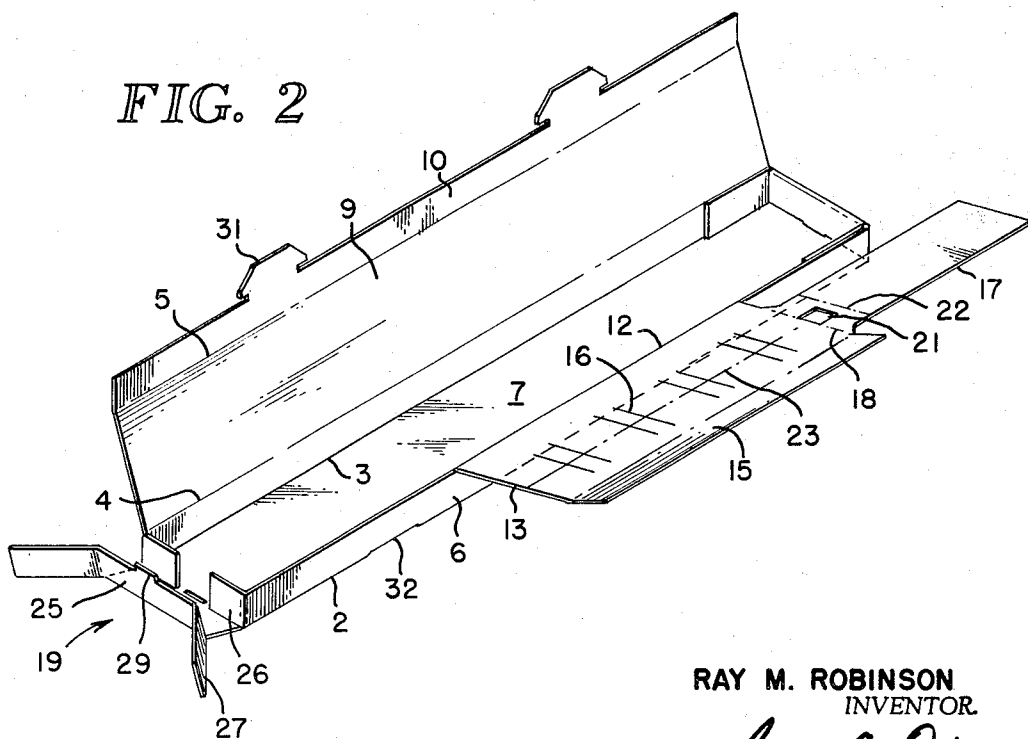
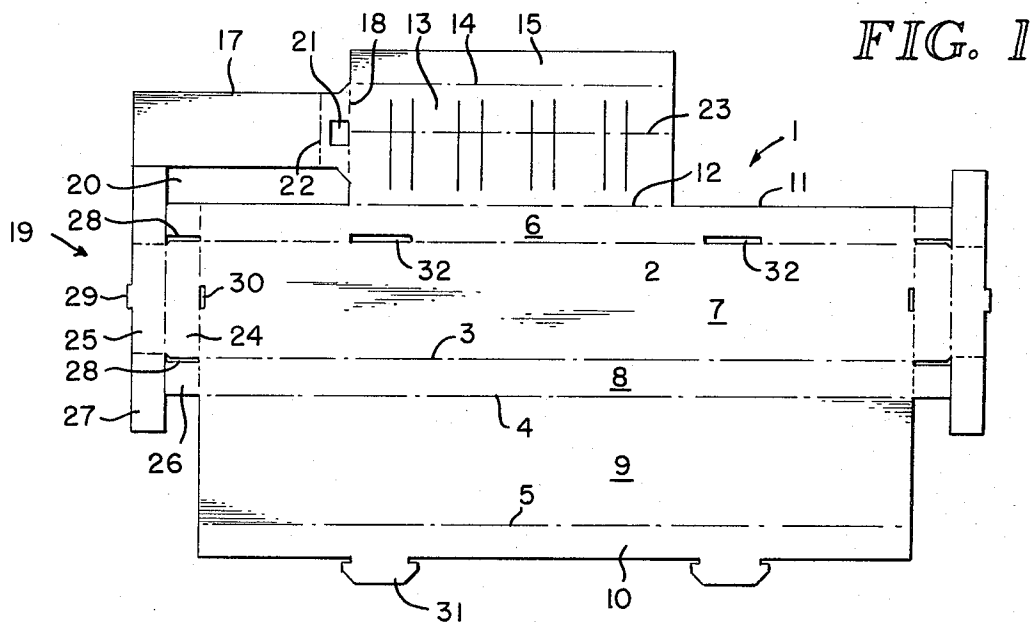
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[57] **ABSTRACT**

An elongated container for a rifle or the like is of basically standard design but has an improved pressure plate and locking flap assembly. A pressure plate and supporting panel are hingedly connected to a side panel and the pressure plate is provided with an outwardly extending locking flap which has a longitudinal dimension approximately equal to that of the pressure plate. An aperture is provided in the locking plate in order to accommodate the article to be packed. The locking flap is folded back over the rifle and is locked in place after which the external front closure panel and top panel are locked in the closed position.

8 Claims, 5 Drawing Figures





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FIG. 3

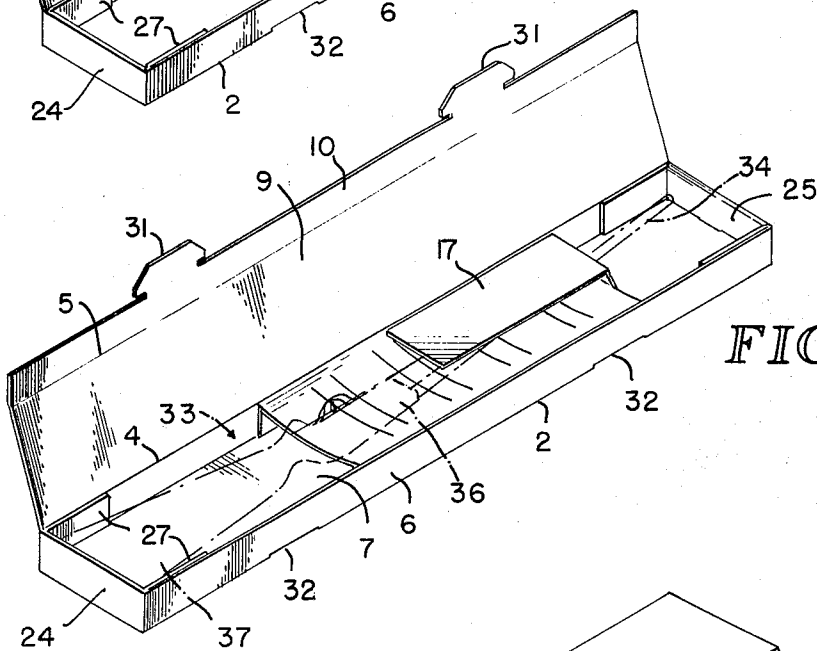
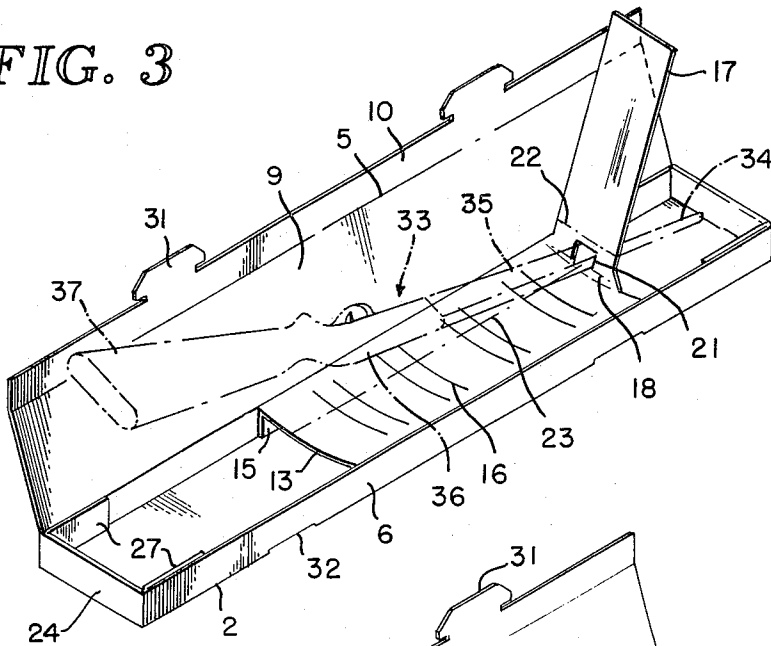
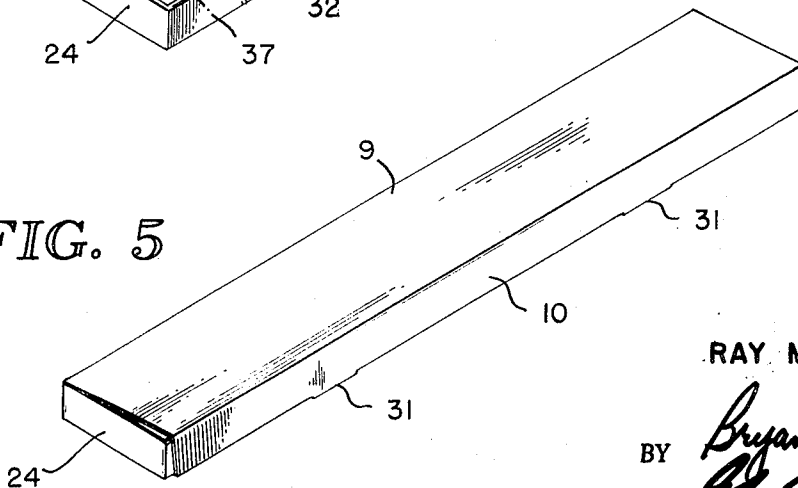


FIG. 4

FIG. 5



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ELONGATED ARTICLE CONTAINER

BACKGROUND OF THE INVENTION

This invention relates generally to containers which are formed from a single blank. More particularly it relates to a container which is specifically adapted to accept and properly carry elongated articles such as rifles or the like.

In the manufacture of container blanks, it is the primary purpose to provide the required characteristics while utilizing the least amount of container material to provide the blank. Another goal in container blank construction is to provide simplicity together with function.

The prior art contains an issued U.S. Pat. No., 3,156,351, to D. I. Small granted Nov. 10, 1964 which pertains specifically to a carton construction for rifles. The carton construction depicted in Small is relatively complicated with many interlocking flaps and would tend to increase the packing time required when packaging the article. It likewise offers no provision for supporting the article by means of a pressure plate.

The U.S. Pat. issued to A. G. O'Brien et al. U.S. Pat. No. 3,400,879 on Sept. 10, 1968 relates specifically to a carton having an internal cushioning platform. The cushioning platform as depicted in O'Brien's FIGS. 1 and 2 is similar to the one described in the present invention, however, no locking flap is provided nor is one necessary. The carton for O'Brien is specifically adapted for packaging radio tubes and other similar electronic components.

One object of the present invention is to provide a simple yet functional container blank for elongated articles.

Another object is to provide an improved pressure plate arrangement and suitable locking flap for such elongated articles.

These and other objects of the invention will become apparent upon reading the following specification in conjunction with the attached drawings.

SUMMARY OF THE INVENTION

Briefly, this invention is practiced in one form by including a pressure plate with a suitable supporting panel along one side of a standard elongated container blank. Extending from one end of the pressure plate is an elongated locking flap which has an aperture therein and is adapted to be folded back over the top of the contained article after the article has been positioned through the aperture.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a top plan view of the container blank.

FIG. 2 is an isometric view of the container in its partially constructed configuration.

FIG. 3 is an isometric view showing the position of a rifle as it is inserted through the locking flap aperture with the locking flap still in an unfolded configuration.

FIG. 4 is a similar isometric showing the rifle in its final position with the locking flap folded over the trigger housing area.

FIG. 5 is another isometric showing the main closing flaps and tabs about to be finally locked.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring first to FIG. 1 where an individual container blank is indicated as 1 it will be noted that a standard elongated container blank is divided by score lines 2, 3, 4, and 5 into a front side panel 6, a bottom panel 7, a back side panel 8, a top panel 9, and a front closure panel 10.

Hingedly connected to the long side 11 of the front side panel 6 through longitudinally extending score line 12 is the pressure plate 13. Hingedly connected to the opposite longitudinal side of the pressure plate 13 through score line 14 is the pressure plate supporting panel 15. The pressure plate 13 and its attendant supporting panel 15 extend longitudinally along side 11 equalling a dimension of approximately one-half the total longitudinal length of the front side panel 6. It is further

positioned in the approximate center of the side 11. A plurality of longitudinally spaced laterally extending slits 16 are positioned along the length of pressure plate 13. The lateral dimension of pressure plate 13 from score line 12 to score line 14 is slightly greater than the lateral dimension of the bottom panel 7 and this provision will be fully understood after referring to a description of the method of packing the elongated article.

Extending outwardly from one end of the pressure plate 13 is an elongated locking flap 17. Locking flap 17 is hingedly connected to the pressure plate 13 by a laterally extending score line 18. The locking flap 17 extends outwardly a distance which is approximately equal to two-thirds of the longitudinal dimension of the pressure plate 13. It should be appreciated that from the embodiment depicted in FIG. 1 the dimension for locking flap 17 is limited by the total longitudinal dimension of the bottom panel 7 and the end locking flap elements generally indicated as 19. By so constructing the locking flap 17 in relation to the overall container blank 1 a longitudinally extending aperture 20 is removed between the side of locking flap 17 and side 11 of the front side panel 6. Positioned along score line 18 is an aperture 21 through which the article to be packed will be inserted. The proper dimensions of aperture 21 will depend upon the dimensions of the article to be packed. It is apparent that the locking flap 17 will bend about the score line 18 and the plane of the aperture 21 will likewise bend about score line 18. An additional score line 22 extends laterally across the face of internal locking flap 17 so that after the article is inserted through aperture 21 the locking flap 17 can be folded back about score line 22 and over the article. An additional longitudinally extending score line 23 is positioned along the length of the internal pressure plate 13 in order to allow a slight bowing configuration for the pressure plate 13 when the article is allowed to exert its full weight on the pressure plate.

The locking flap elements 19 are of standard design and include an end side panel 24, a reversible internal end panel 25, a pair of end dust flaps 26, and a pair of laterally extending internal strengthening flaps 27. A pair of slots 28 are provided at the locking flap elements 19 in order to accommodate the normal folds in the erected configuration of container blank 1. A cooperating tab 29 and laterally extending slot 30 are provided in order to secure the locking flap elements 19 in their finally constructed position. In a similar fashion a standard locking tab 31 and cooperating slot 32 are provided on the front closure panel 10 and in the front side panel 6 respectively in order to allow closure and locking of the finally constructed and packed container.

Referring now to FIGS. 2 through 5 the procedure for folding the container blank and placing the elongated article therein will be described. In the embodiment indicated a standard rifle indicated generally at 33 is to be packed into the container. Rifle 33 has the usual barrel area 34, stock area 35, trigger housing area 36 and stock area 37. The overall length of the rifle will of course be roughly equal to the longitudinal length of the bottom panel 7.

The first step in forming the container is to establish the normal container volume as indicated by FIG. 2. The locking flap elements 19 are positioned in the normal fashion and locked. The internal pressure plate supporting panel 15 is then folded about score line 14 to form a right angle with the internal pressure plate 13. Internal pressure plate 13 is then folded over score line 12 and allowed to form a horizontal flat plane area across the top of the container volume. The rifle barrel area 34 is then inserted through the aperture 21 with the trigger housing area 36 pointing toward the top panel 9. The packer will then exert a sufficient pressure on the rifle 33 and internal pressure plate 13 so that the proper bow for pressure plate 13 will be formed about score line 23. The internal locking flap 17 is then ready to be folded about score line 22 such that it will be resting generally in a horizontal plane similar to that of the pressure plate 13. This procedure may be seen by referring to FIG. 4. The stock area 37 of rifle 33 is

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then positioned so that it abuts the reversible internal end panel 25. The internal locking flap 17 is then pressed against the trigger housing area 36 such that it is in a horizontal plane flush with the horizontal plane extending over score lines 4 and 12.

If desired, the locking flap 17 can be secured to the pressure plate 13 by any suitable means such as taping. The top panel 9 and front closure panel 10 are then folded about their respective score lines 4 and 5. After accomplishing this procedure the container is then ready to be finally closed by inserting the locking tabs 31 into the slots 32. After this final closure step, it should be appreciated that the rifle will be snugly and securely contained within the elongated container.

While a detailed example of the principal embodiment has been described, it is understood that changes and modifications may be made in the above-described container blank without departing from the spirit of the invention. All such modifications are intended to be included within the scope of the appended claims.

What is claimed is:

1. In a container having a body with front and back wall panels and closure means, the improvement comprising:
 - a pressure plate extending between said front and back wall panels, and
 - a locking flap extending outwardly from said pressure plate

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and adapted to be positioned back over said pressure plate.

2. The container of claim 1 in which said locking plate is hinged to said pressure plate.

3. The container of claim 2 in which said pressure plate is hinged to said front wall panel.

4. The container of claim 3 further comprising a pressure plate support panel hinged to said pressure plate.

5. The container of claim 2 in which said locking plate defines an aperture for the accommodation of an elongated article.

6. The container of claim 2 further comprising locking means to fix said locking flap in a position over the contained article which extends through said aperture.

7. The container of claim 2 further comprising a score line extending the length of said pressure plate.

8. In a container blank having front and back wall panels and closure means, the improvement comprising:

- 20 a pressure plate extending outwardly from said front wall panel, and

- a locking flap extending outwardly from one end of said pressure plate and adapted to be positioned back over said pressure plate.

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