April 26, 1938. D. H. SHAPIRO 2,115,181

EGG CARTON

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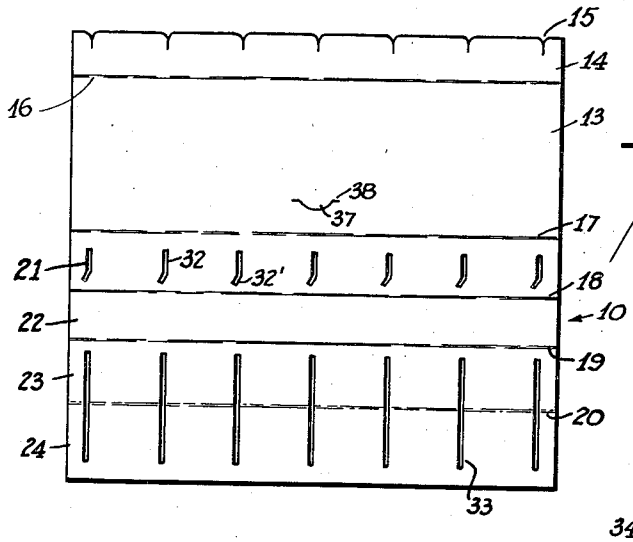


FIG. 1.

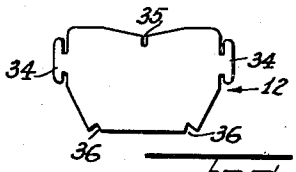


FIG. 3.

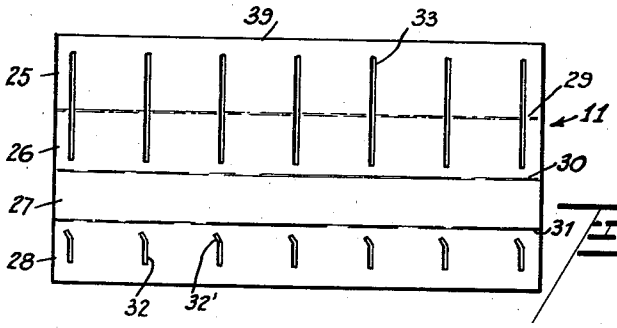


FIG. 2.

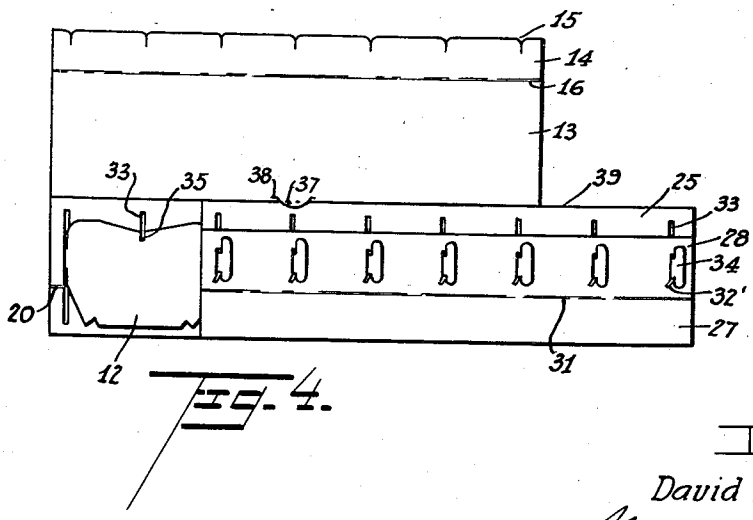


FIG. 4.

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Fig. 5.

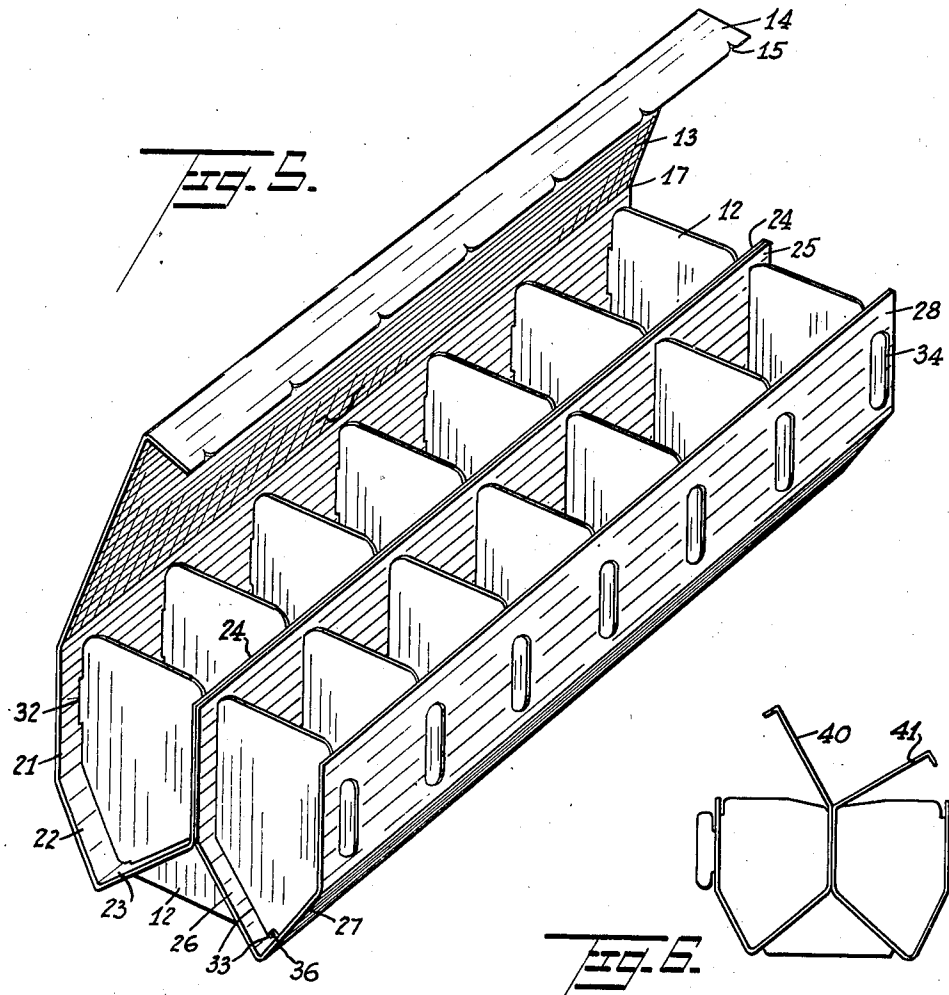


Fig. 6.

Fig. 8.

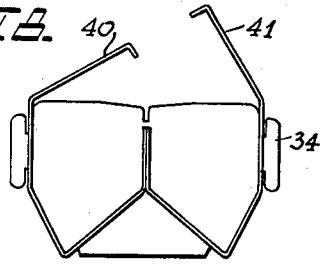
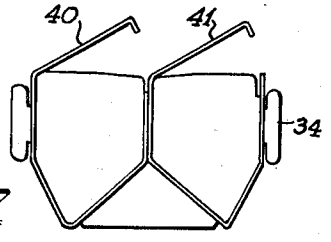


Fig. 7.



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2,115,181

EGG CARTON

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Application May 17, 1934, Serial No. 726,016

4 Claims. (Cl. 229—29)

This invention relates to collapsible cardboard boxes or containers and more particularly to the type, in which eggs are shipped, stored and sold to the retail trade.

It is an object of this invention to provide an egg box having a pair of collapsible blanks forming the body of the box, and partitions swingably connected with the blanks, the blanks being movable relatively longitudinally when in collapsed position, at least one of the blanks serving as a cover for the box.

It is another object of this invention to provide a container having a collapsible body and interior cells constructed of individual fillers.

It is another object of this invention to provide a container having the collapsible body in two pieces, so as to permit the center portions of each to be moved toward the outer portion when collapsing of the box is desired, the one complete portion in this case swinging toward the one side.

It is a further object of this invention to provide a collapsible egg box comprising two blanks, each blank being foldable to provide an outer and an inner wall superimposable thereupon, and partitions swingably connected to the outer walls and projecting through the inner walls, the inner walls adapted to be swung together to provide spaces between a respective inner and outer wall for the reception of eggs, the partitions having slots for locking engagement of the inner walls therewith when the box is in operable position.

It is another object of this invention to make a collapsible container of such construction, that it can be assembled in the very shortest possible time.

It is a further object of this invention to provide a collapsible container with outside lips along the walls, which will act as cushions or spacers when the containers are packed and shipped alongside of each other, thereby preventing the crushing of the eggs within.

This invention accordingly consists in the features of construction, combination of parts and in the unique relations of the members and in the relative proportioning and disposition thereof; all as more completely outlined herein.

To enable others skilled in the art so fully to comprehend the underlying features thereof that they may embody the same by the numerous modifications in structure and relation contemplated by this invention, drawings depicting preferred and modified forms have been annexed as a part of this disclosure, and in such drawings, like characters of reference denote corresponding parts through all the views, of which:

Fig. 1 is a plan view of the blank forming the rear portion of the container.

Fig. 2 is a plan view of the blank forming the front of the container.

Fig. 3 is a plan view of one of the spacers.

Fig. 4 is a plan view of the container in collapsed form.

Fig. 5 is a perspective view of one embodiment of the invention with one large cover.

Figs. 6–8, inclusive, are end views of embodiments of the invention showing variations in the cover construction.

The rear portion of the outer casing or body is formed from one blank 10, the front portion of the outer casing is formed from one blank 11 and the spacers formed from a blank 12. The cover portion 13 has a front flap 14. This flap 14 is provided with notches 15 which engage with the partitions or spacers 13 in the closed position.

Flap 14 folds downward along score line 16. Score lines 17, 18, 19 and 20 divide the rest of the rear portion into parts 21, 22, 23 and 24. Part 21 is the straight rear wall, 22 and 23 are the inclined portions against which the egg rests, while portion 24 is the upright center wall. Fig. 5 illustrates this very plainly. The front portion 11 is divided into four parts, 25, 26, 27 and 28 by score lines 29, 30 and 31. Parts 21 and 28 are provided with short straight slots 32, having an inclined portion 32'. Slots 33 are longer and extend over two parts in both front and rear portions, namely, 25 and 26 as well as 23 and 24. Slots 32 receive the ear projection 34 of spacer 12 while slot 33 permits the center portion 35 of the spacer 12 to pass through. Notches 36 in the spacer 12 receive and hold the score lines 19 and 30, respectively. In the collapsed position, as shown in Fig. 4, the lip 37 of notch 38 grips edge 39 of the part 25, avoiding the opening of the box unexpectedly.

In the modifications shown in Figs. 6, 7 and 8, the cover is made in two parts 40 and 41, hinged either both in the center, one on side and one on center or both on the outside of the container.

When assembling the device into its knock-down form the partitions may be held spaced apart in a fixture and the front and rear blanks or portions 11, 10 assembled thereon, but in their collapsed or folded condition as indicated in Fig. 4. Then the said portions or blanks 11, 10 are moved relatively longitudinally while still in their folded condition, at the same time the partitions

12 being swingably carried longitudinally therewith, and the lip 37 is made to grip edge 39, thus keeping the box in its knock-down form.

To collapse the box from its operable position shown in Figure 5, center wall 24 is moved towards rear wall 21 and center wall 25 is moved forward towards front wall 28, until the center walls respectively touch the outside walls, after which it is very easy to swing the rear and front portions 21 and 28 longitudinally into position as shown in Figure 4, using the tabs 34 of partitions or spacers 13 as pivots. Tabs 34 also act as spacers between adjacent boxes when packed for shipment.

To assemble the device as an egg box, or other merchandise carrier, the part 25 is released from lip 37 and the blanks 10, 11 moved relatively longitudinally until the partitions are at right angles thereto. The inner walls 24, 25 are then moved towards each other and made to lockingly engage with the partitions, the walls, at their slotted ends seating within the notches or slots for that purpose.

It is believed from the above description that those skilled in the art will have no difficulty in understanding the construction, the method of use and operation of the device herein disclosed and a detailed discussion thereof is unnecessary. The invention is of simple and practical construction and is adapted to accomplish among others all of the objects and advantages herein set forth.

Without further analysis, the foregoing will so fully reveal the gist of this invention that others can by applying current knowledge readily adapt it for various applications without omitting certain features, that, from the standpoint of the prior art, fairly constitute essential characteristics of the generic or specific aspects of this invention, and therefore, such adaptations should and are intended to be comprehended within the meaning and range of equivalency of the following claims.

What is claimed is:

1. A collapsible box comprising two blanks, each blank foldable to provide an inner wall constituting a central longitudinal partition and an outer wall, and spaced transverse partitions swingably connected to the outer walls, the inner walls having slots therein through which the transverse partitions extend, said slots being of sufficient length to permit abutment of said inner walls against the inner surfaces of said outer walls, respectively, and to permit swinging of said inner walls toward each other to provide spaces between a respective inner and outer wall for the reception of articles between the said transverse partitions.

2. A collapsible box comprising two blanks, each blank foldable to provide an inner wall constituting a central longitudinal partition and an outer wall, and spaced transverse partitions swingably connected to the outer walls, the inner walls having slots therein through which the transverse partitions extend, said slots being of sufficient length to permit abutment of said inner walls against the inner surfaces of said outer walls respectively, and to permit swinging of said inner walls towards each other to provide spaces between a respective inner and outer wall for the reception of articles between said transverse partitions, said transverse partitions having slots for locking engagement of said inner walls therewith when the box is in operable position.

3. A collapsible box comprising two blanks, each blank foldable to provide an inner wall constituting a central longitudinal partition and an outer wall, and spaced transverse partitions swingably connected to the outer walls, the inner walls having slots therein through which the transverse partitions extend, said slots being of sufficient length to permit abutment of said inner walls against the inner surfaces of said outer walls respectively, and to permit swinging of said inner walls towards each other to provide spaces between a respective inner and outer wall for the reception of articles between said transverse partitions, at least one of the blanks having an extension to provide a cover for the box.

4. A collapsible box comprising two blanks, each blank foldable to provide an inner wall constituting a central longitudinal partition and an outer wall, and spaced transverse partitions swingably connected to the outer walls, the inner walls having slots therein through which the transverse partitions extend, said slots being of sufficient length to permit abutment of said inner walls against the inner surfaces of said outer walls respectively, and to permit swinging of said inner walls towards each other to provide spaces between a respective inner and outer wall for the reception of articles between said transverse partitions, at least one of the blanks having an extension to provide a cover for the box, said partitions having slots for locking engagement of said inner walls therewith and said cover having slots for locking engagement thereof with said partitions.

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