March 30, 1937. M. BURGER 2,075,425

CARTON

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Fig. 1

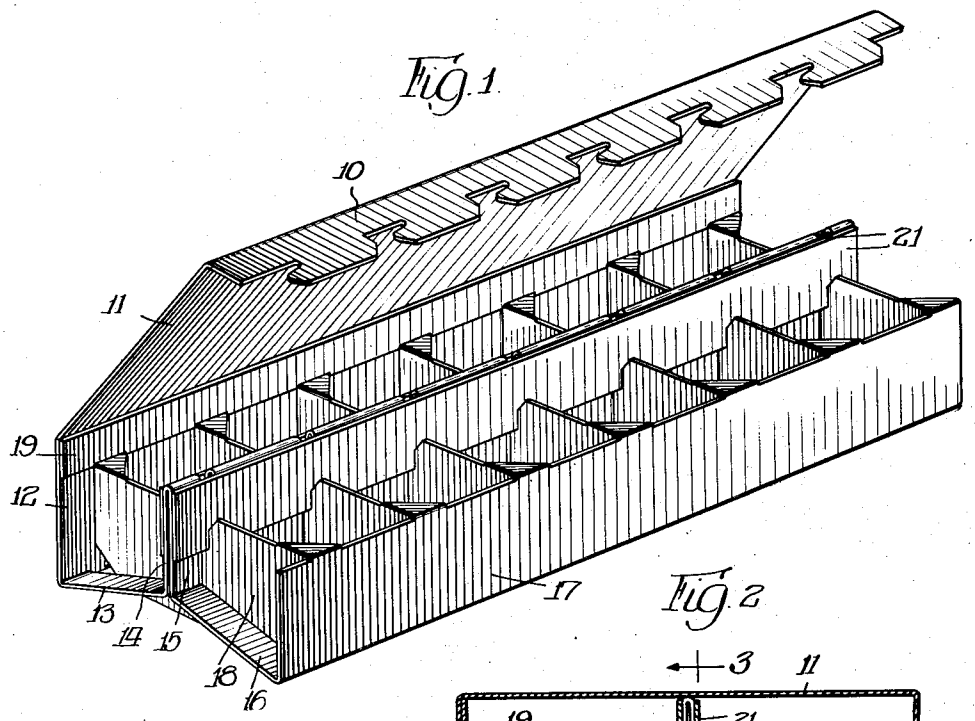


Fig. 2

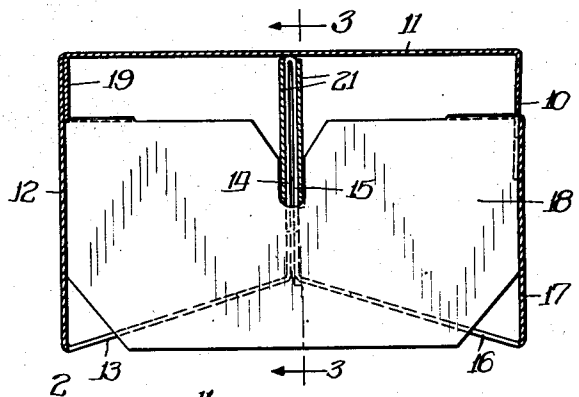
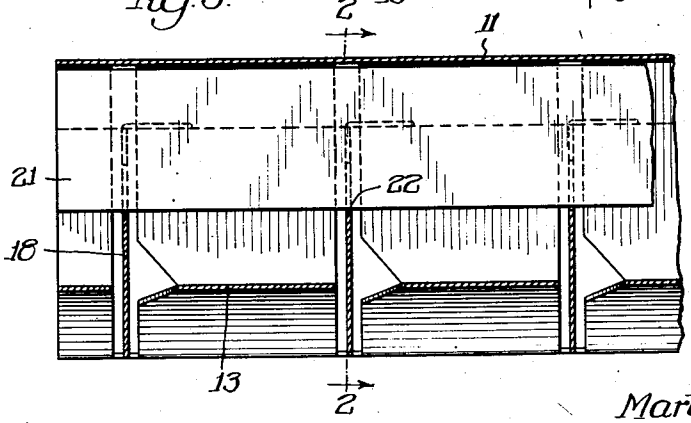


Fig. 3.



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Fig. 4.

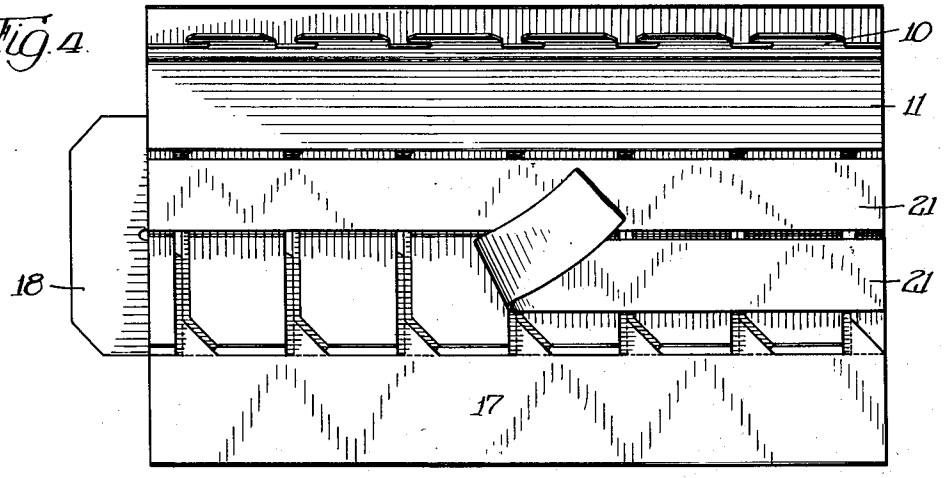


Fig. 5.

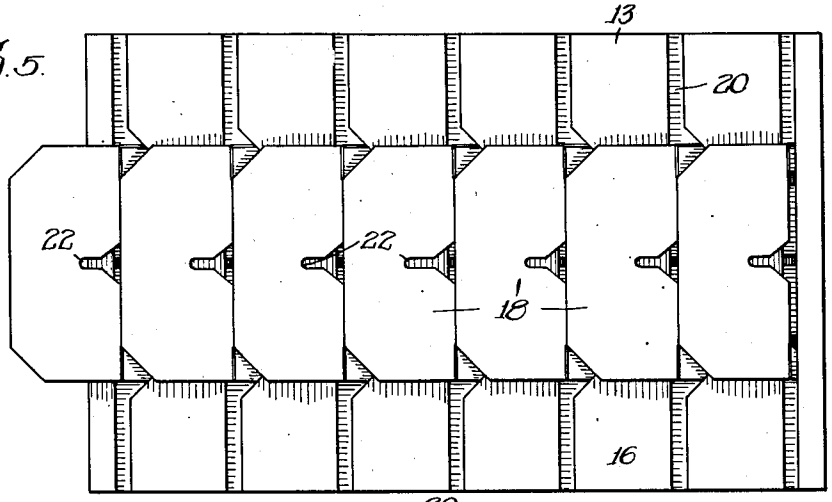
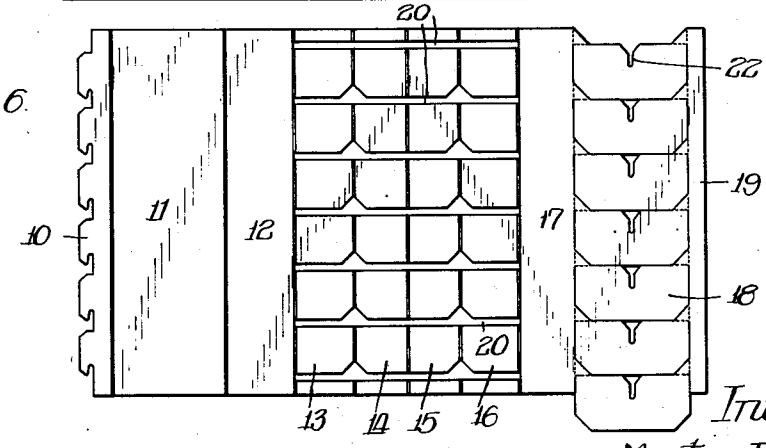


Fig. 6.



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UNITED STATES PATENT OFFICE

2,075,425

CARTON

Martin Burger, Morris, Ill., assignor to Self-Locking Carton Co., Chicago, Ill., a corporation of Illinois

Application November 29, 1935, Serial No. 52,175

4 Claims. (Cl. 229—29)

The present invention relates to cellular cartons of the type customarily employed for packaging fragile articles such as eggs, and has particular reference to an improved type of egg carton which may be set up or erected from collapsed condition by hand.

A principal object of the invention therefore may be said to reside in the provision of an easily erectable cellular carton.

An additional object is to provide a particularly strong cushion carton which does not depend upon the use of disengageable hooks and slots for its erection.

A still further object of the invention is to provide a carton having a sturdy support for the top and a cushion for the bottom.

These and other objects will be evident upon a consideration of the following specification and with reference to the accompanying drawings, in which

Fig. 1 is a perspective view of a carton constructed in accordance with my invention;

Fig. 2 is a sectional view of the carton shown in Fig. 1 in closed position and taken along line 2—2 of Fig. 3;

Fig. 3 is a longitudinal section taken along line 3—3 of Fig. 2;

Fig. 4 is a top view of the carton in collapsed condition and showing a portion of the longitudinal partition drawn away;

Fig. 5 is a view of the bottom of the carton in collapsed condition; and

Fig. 6 shows the blank from which the carton is constructed.

As shown in the drawings, the main portion of the carton is constructed from a single blank which is cut, scored and folded to form a cover-locking strip 10, a cover 11, a rear wall 12, a rear bottom section 13, a rear longitudinal partition section 14, a front longitudinal partition section 15, a front bottom section 16, a front wall 17, cross partitions 18, and an attaching strip 19. Each element of the carton is separated from the adjacent elements by suitable score lines.

A carton which has met with considerable favor in the industry consists of front and rear walls joined at their lower portions by a bottom member which is pressed upwardly along its central portion into cushion-forming position, the bottom member being engaged to cross partitions by hooks on the cross partitions extending through slots in the bottom member. While this carton is highly effective from the standpoint of the user, it requires the use of a machine or block for setting up the carton from the collapsed condition in which it is received by the user.

In accordance with the present invention, the bottom and longitudinal partition-forming sections are provided with slots 20 positioned to receive each of the cross partitions. The carton is folded along the score line between the bottom sections and the lower portions of the front and rear walls, and the attaching strip 19 is glued to the rear wall. The cross partitions 18 are inserted through the slots 20 and, in the collapsed condition shown in Figs. 4 and 5, these cross partitions overlie the longitudinal partition-forming sections. That is, the longitudinal partition-forming sections lie between the top of the carton and the cross partitions.

After insertion of the cross partitions through the slots 20, one or more glue strips 21 are attached to the longitudinal partition-forming section as shown in Fig. 4. In this manner the longitudinal partition-forming sections are entrapped on the upper side of the cross partitions.

The cross partitions are provided with downwardly extending slots 22 which preferably are of a depth substantially equal to the width of the strips 21. To erect the carton from the collapsed condition shown in Figs. 4 and 5, it merely is necessary to press the longitudinal partition-forming sections together, as by means of the strips 21. That is, the longitudinal partition sections are brought together and simultaneously raised so that the edges of the strips 21 pass over the tops of the cross partitions. This motion causes the walls of the cartons to be positioned in an erect manner and also causes the cross partitions to rotate into vertical position. When the attaching strips 21 and the longitudinal partition sections are brought completely together the same may be pressed downwardly into the slots 22 on the cross partitions, thereby forming the carton into the shape shown in Figs. 1, 2, and 3. In this position the glue strips 21 may rest on the bottom of slots 22 and the tops of the strips may be adjacent the top of the container. The resulting structure will form a rigid support for the top of the carton and eggs contained within the carton will be satisfactorily supported. Also, it will be noted that the bottom of the carton is divided up into independent units which offer a greater degree of spring or cushion effect and at the same time jars received by one of the sections will be less readily transmitted to the adjacent sections than in the case of a solid bottom container. The cross partitions may extend downwardly to substantially

the same level as the lower portion of the carton, as shown in Fig. 2, thereby supporting additional support for the bottom.

It will be seen from the drawings that the dimensions of the carton are such that the front and rear bottom sections plus the front and rear longitudinal partition sections equal the width of the cross partitions plus the height of the front and rear walls below the points to which the longitudinal partitions are attached thereto. This construction permits the carton to be collapsed along the score lines which separate the front and rear walls from the bottom sections.

A principal advantage of the container is that there are no separate pieces such as customarily are employed as the longitudinal partition in many hand set-up cartons, and the carton may be erected rapidly by hand without the use of machines or blocks of any character. Such devices may be employed if desired, and the ease of erecting the carton may be used to advantage in the machine set up. It will be understood that to close the carton the cover-locking strip 18 is depressed into engagement with the triangular hinge portions along the front wall by which the cross partitions are secured. It will be noted that the cross partitions are cut away adjacent the upper ends of slots 22. This facilitates the erection of the container, since it is necessary to raise the longitudinal partition section as the sides thereof are brought together. The erection of the carton may be facilitated still further by a more severe cutting away of the cross partitions. The glue strips 21 securely bind the carton in the proper assembled condition and it is not necessary to depend upon individual attachable and detachable hooks and slots.

The carton obviously may be changed in detail over the structure shown and described herein for purposes of explanation, and all such changes and modifications are intended to be included in the appended claims.

I claim:

1. A cellular carton for packaging fragile articles such as eggs, comprising front and rear walls, cross partitions extending between said walls, front and rear bottom sections, a longitudinal partition section, said longitudinal partition section being slotted from its upper edge adjacent said cross partitions and said cross partitions extending through said slots, and an assembly strip attached to said longitudinal partition section above said cross partitions and extending across the slots in said longitudinal partition section.

2. A cellular carton for packaging fragile articles such as eggs, comprising front and rear walls, cross partitions attached to said walls, front and rear longitudinal partition sections, the dimensions of said bottom sections and said longitudinal partition sections being equal to the width of said cross partitions plus the height of said front and rear walls below the point of attachment of said cross partitions thereto, said bottom sections and longitudinal partition sections having slots extending downwardly from the upper edges thereof and receiving said cross partitions, and at least one assembly strip attached to said longitudinal partition sections above said cross partitions and extending across the slots in said longitudinal partition section.

3. A cellular carton for packaging fragile articles such as eggs, comprising front and rear walls, cross partitions extending between said walls, a bottom and longitudinal partition-forming section having slots extending downwardly from the upper edge thereof and receiving said cross partitions, said carton being collapsed along the lower portion of said front and rear walls and said cross partitions extending through said slots, and at least one assembly strip attached to said longitudinal partition sections above said cross partitions and extending across said slots.

4. A carton of the type described, comprising front and rear walls, cross partitions, a bottom longitudinal partition-forming section having slots extending downwardly from its upper edge and receiving said cross partitions, and an attaching strip attached to said section above said cross partitions and having elements engaging at least certain of said cross partitions to maintain the carton in erect condition.

MARTIN BURGER.