Sept. 15, 1942. H. K. POWELL 2,296,229

HANDLE FITTED CARTON

Filed March 11, 1940 2 Sheets-Sheet 1

Fig. 1.

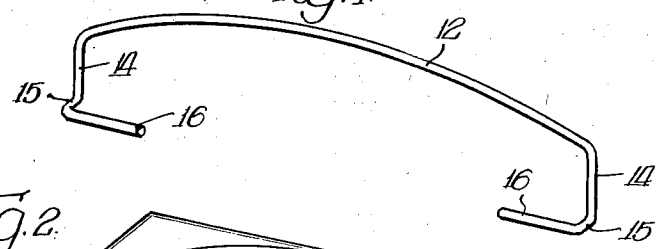


Fig. 2.

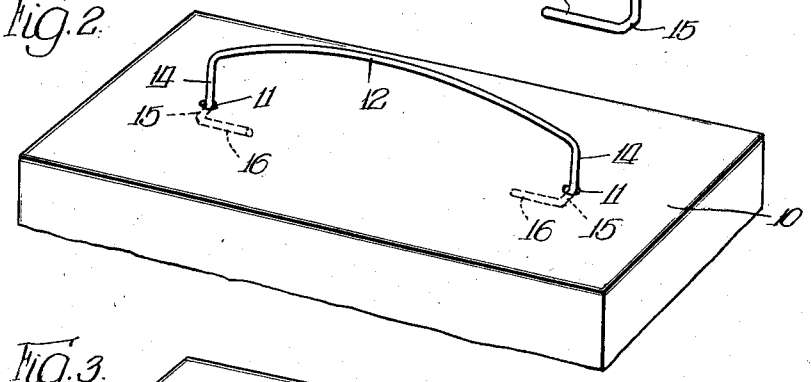


Fig. 3.

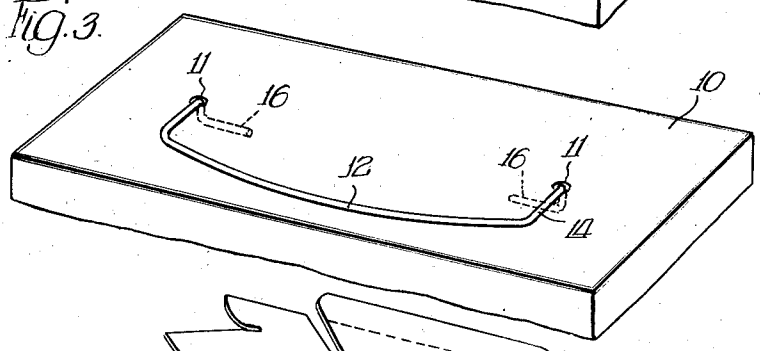
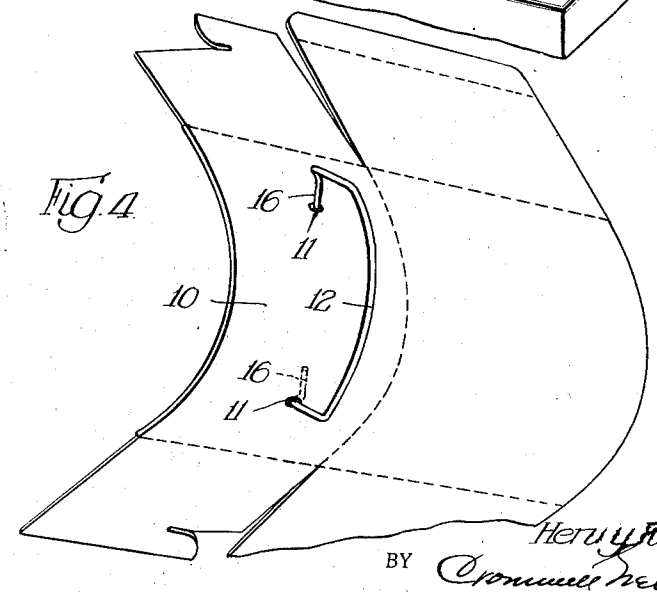


Fig. 4.



INVENTOR.
Henry K. Powell,
BY
Cromwell Greenbaum
Attys.

Sept. 15, 1942. H. K. POWELL 2,296,229

HANDLE FITTED CARTON

Filed March 11, 1940 2 Sheets-Sheet 2

Fig. 5.

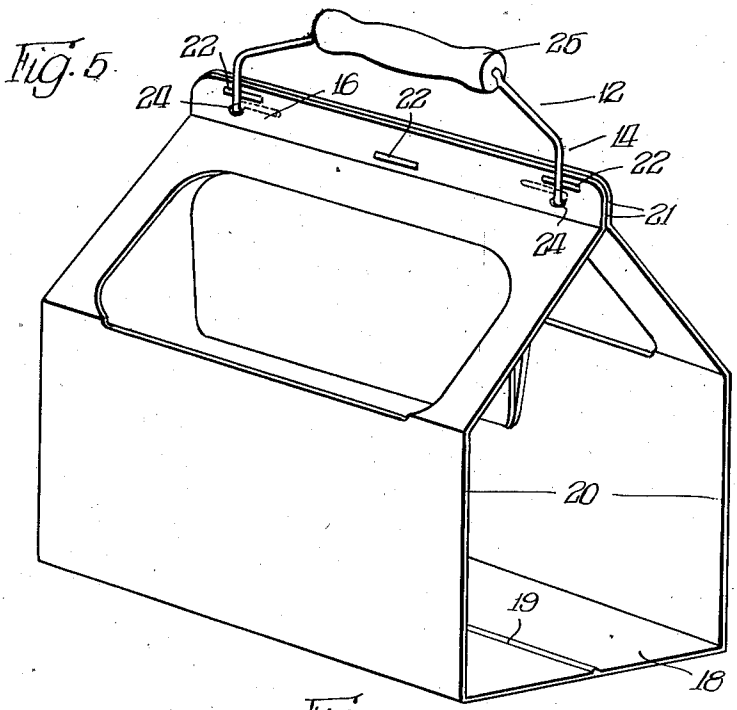
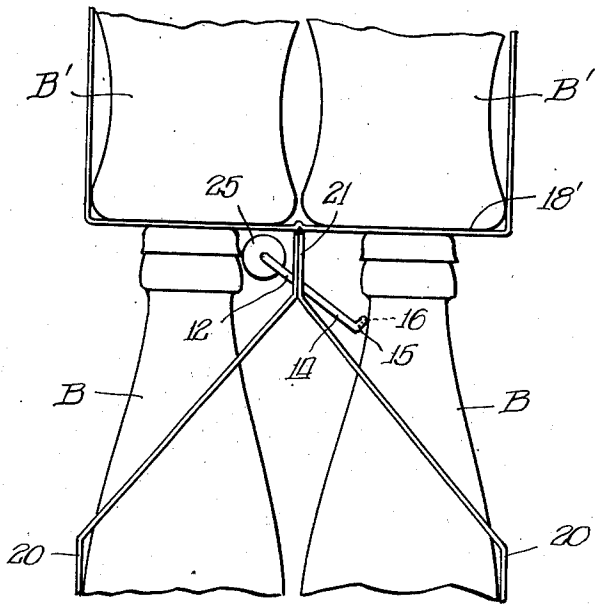


Fig. 6.



INVENTOR.
Henry K. Powell,
BY Cromwell Mattleson
Attys.

Patented Sept. 15, 1942 2,296,229

UNITED STATES PATENT OFFICE

2,296,229

HANDLE FITTED CARTON

Henry K. Powell, Chicago, Ill., assignor to Morris Paper Mills, Chicago, Ill., a corporation of Illinois

Application March 11, 1940, Serial No. 323,269

2 Claims. (Cl. 229—52)

This invention relates to a carton or the like which is formed of flexible material, such as paper board, and fitted with a separately preformed handle whereby the carton may be carried conveniently.

A general object of the invention is the provision of such a handle-fitted carton construction which may be manufactured very economically and which is of such nature that the carton itself is collapsible to a flat form and may be set up and a separate handle attached to it by the user without requiring any special apparatus or additional fastenings for the handle, and wherein the handle, after it is attached to the carton, may be swung either to an upstanding position where it may be grasped for carrying the carton or may be swung down flat against the surface of the carton for the purpose of disposing the handle in a position where it will not interfere with the stacking of cartons one upon another.

Another object of the invention is the provision of such a construction in which the preformed handle is connected directly with a wall portion of the carton, without requiring any intermediate journals, hinges or the like, and wherein the handle may be used repeatedly, with a number of different carton bodies.

Other and further objects of the invention will be pointed out or indicated hereinafter or will become apparent upon an understanding of the present disclosure or actual use of the devices.

For the purpose of aiding in an explanation of the invention, I show in the accompanying drawings, forming a part of this specification, and hereinafter describe, certain forms in which it may be employed. It is to be understood, however, that these are presented merely for purpose of illustration and that the invention may be embodied in various other forms and arrangements, and in practically any type of collapsible carton, without departing from the scope of the appended claims.

In said drawings:

Fig. 1 is a perspective view of one form of handle adapted for embodiment of the invention;

Fig. 2 is a perspective view of the upper portion of a set-up carton showing such a handle attached to it and in the "carrying" position;

Fig. 3 is a similar view of the carton but showing the handle in the "stacking" position;

Fig. 4 is a perspective view of the same carton in collapsed condition and showing it arched or bowed to permit attachment of the handle to it;

Fig. 5 is a perspective view of another form of carton, designed particularly for the packaging and carrying of a plurality of bottles of beverage or the like, and showing a handle of a slightly different form connected thereto and in the "carrying" position; and

Fig. 6 is an end view illustrating the relationship of the upper portion of such a carton with bottles therein, to a superimposed similar carton, and showing the handle in the "stacking" position.

The nature of the invention will be ascertained most quickly from a description of the particular examples here illustrated.

The invention is adapted for embodiment in almost any type of collapsible paper board carton, and in Figs. 2, 3 and 4 I show a conventional form of paper board carton which may be set up in rectangular form or collapsed to a flat folded form. This carton has a wall portion 10 which is provided with a pair of spaced handle receiving apertures 11, and for connection to said carton I provide a handle which may be of the form shown in Fig. 1. This handle is pre-formed, and is of rigid character, being made of any suitable stiff material such as heavy metal wire. It has a bail with an upper portion 12 and depending parallel leg portions 14, which at their lower ends have short laterally extending offset portions 15 and retainer portions 16 extending toward and approximately in alignment with each other from the outer ends of said offset portions 15. The retainer portions 16 and offset portions 15 are of suitable size to thread into the apertures 11 of the carton wall, and the leg portions 14, at their lower ends at least, are spaced apart the same distance as the said apertures 11.

Such a handle may be attached to the carton when the latter is in its knocked-down or flat collapsed condition in which it is customarily supplied to the user. To effect this attachment of the handle to the carton, one of the retainer members 16 is inserted through one of the apertures 11, and then the collapsed carton is arched or bowed, approximately as illustrated in Fig. 4, sufficiently to permit insertion of the other retainer member 16 through the other aperture 11. When the arched container is then released, it will spring back to approximately its normal flat condition, thus moving the apertures outwardly to the leg portions 14 of the handle. In such relationship, the retaining members 16 underlie the wall 10 and prevent withdrawal of the handle, thereby effecting a secure connection of the handle to the carton.

When so attached, the handle may be swung to a carrying position, such as illustrated in Fig. 2,

where its bail portion 12 may be grasped by the hand and the carton carried conveniently in a pendulous position. In such relationship the wall 10 of the carrier rests and is supported upon the offset portions 15 and the retainer portions 16, thus providing a substantial support for the carton and its contents.

Inasmuch as the user, such as a retail merchant, may desire to keep a number of the cartons filled and ready for sale, it is desirable that the handle be movable to a position where it will not interfere with the stacking of such packages one upon another. The construction above described permits this being done, as the handle may be folded down flat against the wall 10, as illustrated in Fig. 3. In this relationship of the parts, the offset portions 15 extend through the apertures 11 and the retaining portions 16 underlie the wall 10 and continue to retain the handle against detachment.

In the constructions shown in Figs. 5 and 6, the carton is of a sort designed for the packaging and carrying of six bottles of beverage. This carton is also collapsible to a flat form, as by folding its bottom panel 18 on the medial crease line 19 so as to bring its side panels 20 in contact with each other. At their upper ends the side panels are connected in any suitable manner, as by means of top flaps 21 fastened together by staples 22, this forming a double upstanding wall portion of the carton. This wall portion is provided with apertures 24 extending through it and spaced to receive a handle of the form and in the manner above described. Here I show the bail portion of the handle equipped with a grip element 25 for grasping in the hand.

The handle is connected to this type of carton when the latter is in its flat collapsed condition, in the manner above described, and in the carrying position the offset members 15 pass through the apertures 24, the leg portions 14 extending upwardly along one side of the wall portion 21 and the retaining members 16 extending alongside the opposite side of the wall portion 21 and serving to retain the handle against detachment.

In Fig. 6 the handle is shown in the stacking position, which permits a similar carton, filled with bottles, to be stacked on top of the bottles in a lower carton. Here the bottom portion of the upper carton is indicated at 18', and the lower portions of the bottles which it contains are indicated at B'. Such superimposed carton rests on top of the bottles B of the subjacent carton, the handle having been moved to a position wherein its bail 12 is below the tops of the bottles and its leg portions 14 disposed angularly to the side surfaces of the wall portion 21.

I claim:

1. A carton comprising a collapsible body member having a wall portion formed with handle receiving apertures therethrough and in spaced relationship, which wall portion is flexible to an arched form in the collapsed condition of the body member so as to bring said apertures closer to each other, and a pre-formed rigid handle comprising a bail portion having at its ends laterally offset portions spaced from each other a distance corresponding to the spacing of the handle receiving apertures and retainer portions extending toward each other from the outer extremities of the laterally offset portions, said retainer portions and laterally offset portions each being of a length exceeding the maximum dimension of respective handle receiving apertures and of cross-sectional size such as to permit their being threaded longitudinally through the handle receiving apertures when said wall portion is in arched form to positions where they overlap surfaces of the wall portion and afford retaining supports for the body member, said handle while attached to the body member being movable to a position wherein the bail is alongside the wall portion and to another position where the bail is at right angles thereto.

2. A carton comprising a collapsible body member having a wall portion formed with handle receiving apertures therethrough and in spaced relationship, which wall portion is flexible to arched form in the collapsed condition of the body member so as to move the apertures toward each other, and a pre-formed rigid handle comprising a bail portion having at its ends legs with laterally offset portions which are spaced apart approximately the same distance as the handle apertures and retainer portions extending toward each other from the outer extremities of the laterally offset portions, said retainer portions and laterally offset portions each being longer than the maximum dimension of respective apertures and being of cross-sectional size such as to permit their being threaded longitudinally through the handle receiving apertures of the arched wall portion to positions where they overlap the wall portion and afford retaining supports for the body member, said handle while attached to the body member being movable to a position wherein the legs are alongside the wall portion and to other positions where the legs extend angularly therefrom, said body member having other wall portions connected to and extending angularly from said first mentioned wall portion when the body member is in set-up condition.

HENRY K. POWELL.