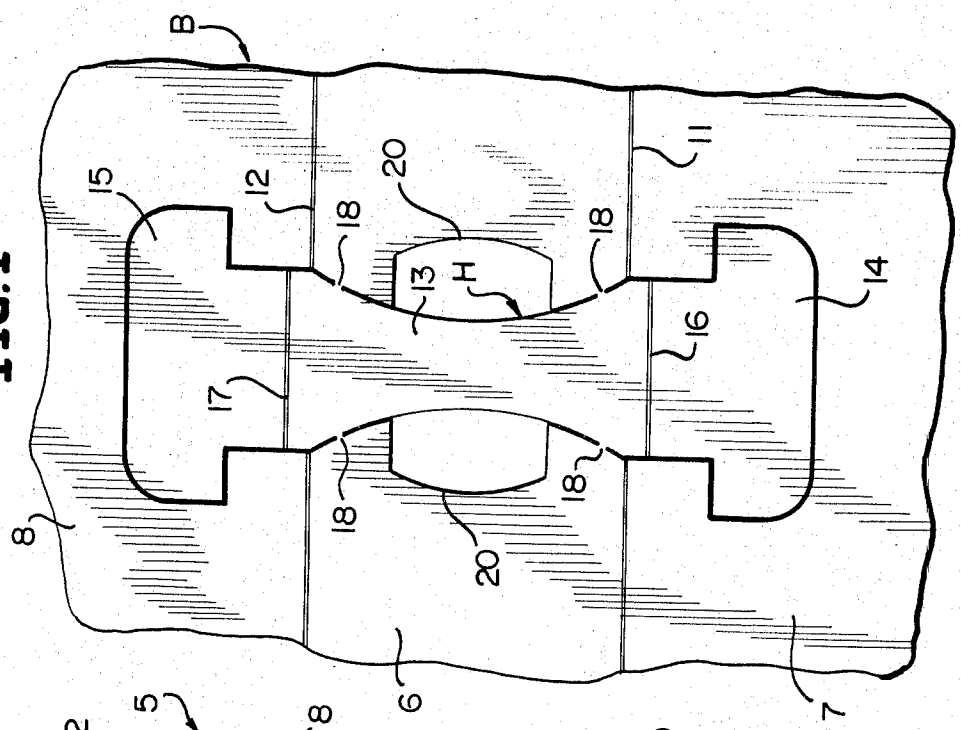
March 5, 1968 J. DETZEL 3,371,846

CARRYING HANDLE FOR PACKAGES

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FIG. 1



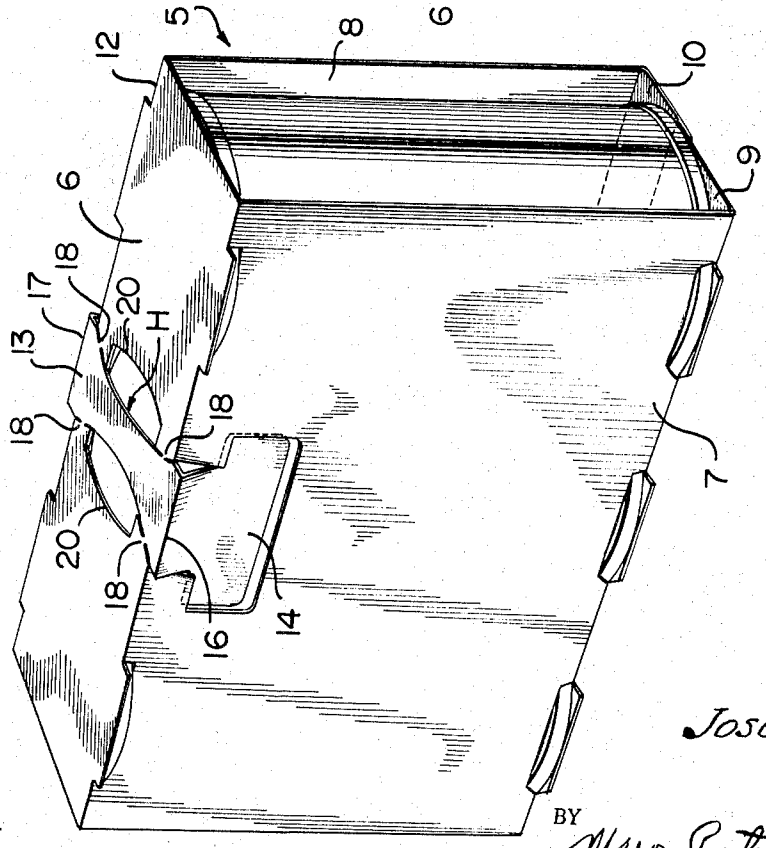


FIG. 2

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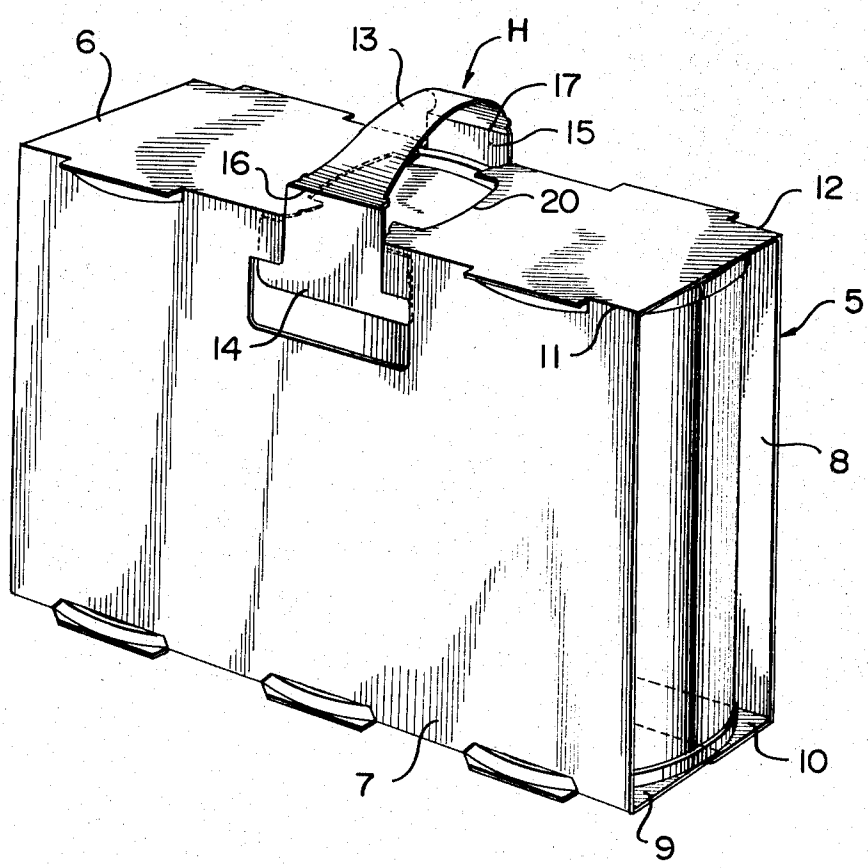
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FIG. 3



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CARRYING HANDLE FOR PACKAGES

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ABSTRACT OF THE DISCLOSURE

This disclosure has to do with providing a package with a handle wherein the handle is formed from the material of a carton of the package and is initially integrally connected thereto but is separated therefrom when a lifting force is applied thereto. The handle remains interlocked with the carton at all times.

This invention has to do with new and useful improvement in cartons and packages formed therefrom, and more particularly to a novel carton structure which has an integrally formed carrying handle.

At the present time, in order to facilitate the carrying of packages which include a carton, the carton either has a separate handle incorporated therein, or the top panel of the carton is provided with a pair of finger receiving openings. The provision of a separate handle is expensive and the finger openings have not proven to be satisfactory.

It is the object of this invention to provide a carrying handle for packages which is integrally formed with the carton of the package and which is separable from the carton while remaining interlocked therewith so as to project above the top wall of the carton to facilitate the gripping thereof.

Another object of this invention is to provide a carton having a carrying handle which is formed from the material of the carton and which remains integrally connected to the carton until it is utilized, at which time it is readily separated from the carton and is movable to an operable position while remaining interlocked with the carton.

A further object of this invention is to provide a novel carton blank which has a central portion thereof cut to define a handle, which handle remains integrally connected with the carton blank and is readily handleable therewith and does not become disconnected from the carton blank as it is applied to articles in the formation of a package.

With the above and other objects in view that will hereinafter appear, the nature of the invention will be more clearly understood by reference to the following detailed description, the appended claims and the several views illustrated in the accompanying drawings:.

In the drawings:

FIGURE 1 is a fragmentary plan view of a carton blank having integrally formed therewith a handle in accordance with this invention.

FIGURE 2 is a top perspective view of a package utilizing the carton blank of FIGURE 1 and shows the position of the handle prior to the utilization thereof.

FIGURE 3 is a top perspective view of the package of FIGURE 2 and shows the handle separated from the carton while remaining interlocked therewith and ready for use in carrying the package.

The principles of this invention may be utilized in cartons of different types. In FIGURE 2 the invention has been illustrated in conjunction with a carton of the wrap-around type which is identified by the numeral **5**. The carton **5** includes a top panel **6**, a pair of side panels **7** and **8**, and a pair of secured together bottom forming panels **9** and **10**. The illustrated carton is of the wrap-around type in which containers are interlocked and accordingly has open ends. However, it is to be understood that the

carton **5**, as far as this invention is concerned, may either be open ended or have closed ends (not shown). Also, it is to be noted that while the illustrated carton **5** is of a dimension for receiving a single row of containers, it may be dimensioned for receiving a plurality of rows of containers.

It is to be understood that this invention will function with any carton having a top panel and a pair of depending side panels. Referring now to FIGURE 1, it will be seen that there is illustrated a carton blank B from which the carton **5** is formed. It is to be noted that the top panel **6** is connected to the side panel **7** along a fold line **11** and to the side panel **8** along a fold line **12**. The central portion of the blank B is formed with a handle H which extends entirely across the top panel **6** and into the side panels **7** and **8**.

The handle H includes a carrying strap **13** which is preferably of a configuration to facilitate the gripping thereof. The carrying strap **13** is of a length to extend entirely across the top panel **6** and into the side panels **7** and **8**. At the opposite ends of the carrying strap **13** there are disposed anchoring members **14** and **15** which are formed from the material of the side panels **7** and **8**, respectively, and which are connected to the opposite ends of the carrying strap **13** along fold lines **16** and **17**, respectively. It is to be noted that the anchoring flaps **14** and **15** are of a generally T-shaped configuration and are of a greater width remote from the carrying strap **13** than they are at their connections with the carrying strap **13**. The purpose of this configuration of the anchoring flaps **14** and **15** will become obvious hereinafter.

It is to be noted that the handle H, which is formed of the carrying strap **13** and the anchoring flaps **14** and **15**, is entirely separated from the remainder of the blank B except along four short bridges **18** which are positioned adjacent the edges of the top panel **6**. These bridges **18** serve to retain the handle H as an integral part of the blank B whereby the handle H will remain in an inoperative position when the carton blank B is shaped into the carton **5** as it is wrapped around containers.

At this time it is pointed out that the top panel **6** is provided with a pair of cut outs **20** on opposite sides of the central portion of the carrying strap **13** to facilitate the lifting thereof and the rupturing of the bridges **18**.

Referring once again to FIGURE 2, it will be seen that inasmuch as the fold lines **16** and **17** are spaced apart a greater distance than the fold lines **11** and **12**, when the side panels **7** and **8** are folded along the fold lines **11** and **12** relative to the top panel **6**, there will be a relative movement between the adjacent portions of the side panels **7** and **8** and the respective ones of the anchoring flaps **14** and **15**, with the result that anchoring flaps **14** and **15** will move into the interior of the carton **5** being formed and the enlarged portions of the anchoring flaps **14** and **15** will become blocked behind the side panels **7** and **8**. At this time the carrying strap **13** will project transversely outwardly of the side panels **7** and **8**.

It is to be noted that after a package has been formed and the carton blank B has been folded to form the carton **5**, the handle H still remains connected to the top panel **6** of the carton by means of the bridges **18**. Thus, except for the slight amount which the carry strap **13** projects beyond the opposite sides of the carton, the handle **8** does not project from the carton and in no way interferes with the stacking of one carton on the other.

When it is desired to utilize the handle H, the central portion of the carrying strap **13** is gripped through the openings **20** in the top panel **6**. When a lifting force is applied to the carrying strap **13**, the bridges **18** will rupture and the anchoring flaps will slide upwardly inside of the carton **5** until the enlarged portions thereof engage the underside of the top panel **6** along the fold line **11**

and 12. The handle H is now securely interlocked with the carton 5, although it is no longer integrally connected thereto, and the carrying strap 13 is elevated sufficiently above the top panel 6 to facilitate the ready handling of the package of which the carton 5 is a part.

It is to be noted that the latching flaps 14 and 15 will be positioned between the article or articles disposed within the carton 5 and the side panels 7 and 8 so that the movement of the latching flaps 14 and 15 towards one another when the carrying strap 13 is elevated, will not occur, and the engagement of the enlarged portions of the latching flaps 14 and 15 with the carton 5 will occur along the fold lines 11 and 12. When the package is lifted by means of the carrying strap 13, the carrying strap 13 will bow slightly and the latching flaps will be disposed in generally upstanding positions, as is shown in FIGURE 3.

Although only a preferred embodiment of the invention has been specifically illustrated and described herein, it is to be understood that minor variations may be made in the disclosed handle structure without departing from the spirit and scope of the invention, as defined in the appended claims.

What is claimed as new:

1. A blank for a carton having an integrally formed handle, said blank defining carton panels including a top panel and a pair of outer panels connected to said top panel along carton fold lines; and said handle comprising a carrying strap formed from the material of said top panel and extending across said top panel, and latching means at the opposite ends of said carrying strap releasably formed from the material of said outer panels for movement toward said top panel thereby permitting movement of said carrying strap out of said top panel.

2. The blank of claim 1 wherein said latching means are connected to said carrying strap along fold lines disposed generally parallel to and spaced from said carton fold lines whereby relative movement of said latching means and said outer panels will automatically occur and said latching means will be positioned behind said outer panels in interlocked relation thereto when said outer panels are folded relative to said top panel along said carton fold lines.

3. The blank of claim 1 wherein said latching means are in the form of generally T-shaped latching flaps having small stem portions thereof connected to said carrying strap.

4. The blank of claim 1 wherein said carrying strap has a readily rupturable connection with said top panel facilitating the removal of said carrying strap therefrom.

5. A carton comprising a plurality of panels defining an enclosure and including a top panel and adjacent panels connected to said top panel on opposite edges thereof along carton fold lines, and a handle formed from material of said top panel and said adjacent panel, said handle including a carrying strap extending across said top panel and a pair of latching flaps hingedly connected to opposite ends of said carrying strap and locked behind said adjacent panels.

6. The carton of claim 5 wherein said carrying strap extends beyond said top panel and said latching flaps are formed of the material of said adjacent panels.

7. The carton of claim 6 wherein said latching flaps are generally T-shaped in outline and said adjacent panels have similarly shaped openings therein, and said latching flaps have small stem portions extending through narrow portions of said adjacent panel openings and connected to the ends of said carrying strap along fold lines disposed outwardly of and generally parallel to said carton fold lines.

8. The carton of claim 5 wherein said top panel has openings therein on opposite sides of said carrying strap to facilitate the gripping thereof.

9. The carton of claim 5 wherein said carrying strap is integrally connected to said top panel by readily rupturable connections.

10. A package comprising a carton having panels including a top panel and side panels, a product in said carton closely adjacent said side panels, said carton having an integrally formed handle including a carrying strap extending across said top panel and projecting outwardly of said side panels, and inverted T-shaped latching flaps connected to the ends of said carrying straps, said latching flaps being formed from said side panels with said side panels having similarly shaped openings therein, and said latching flaps extending into the interior of said carton through said side panel openings and having large end portions thereof locked behind said side panels between said side panels and said product.

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