May 11, 1943. J. C. MORRIS ET AL 2,318,957

CONTAINER CLOSURE AND CARRIER

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Fig. 1.

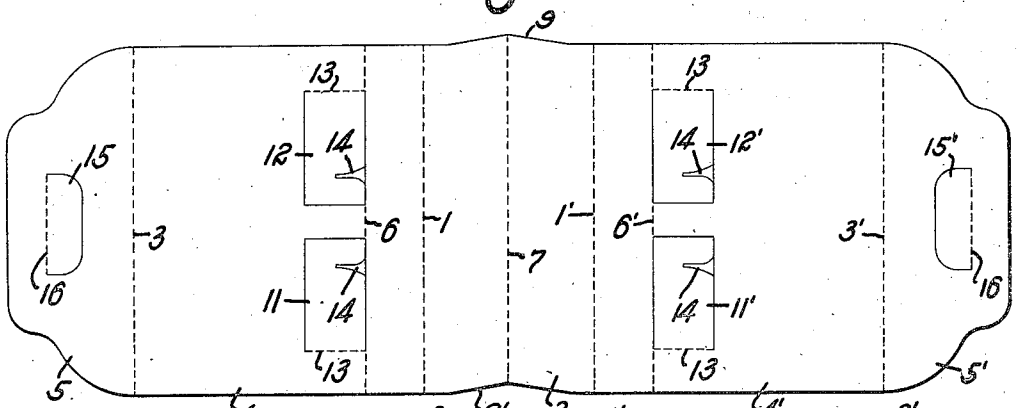


Fig. 2.

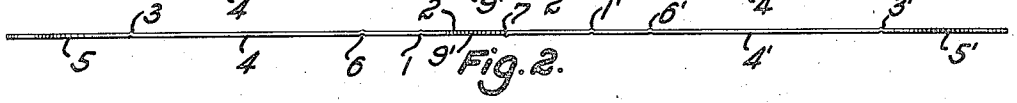
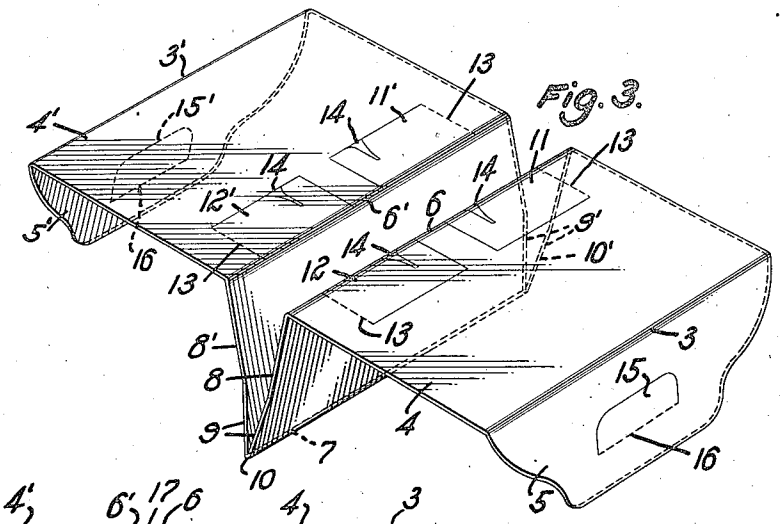


Fig. 3.



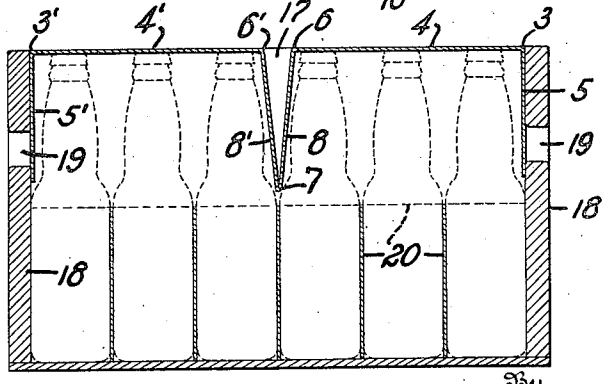


Fig. 4.

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Fig. 5.

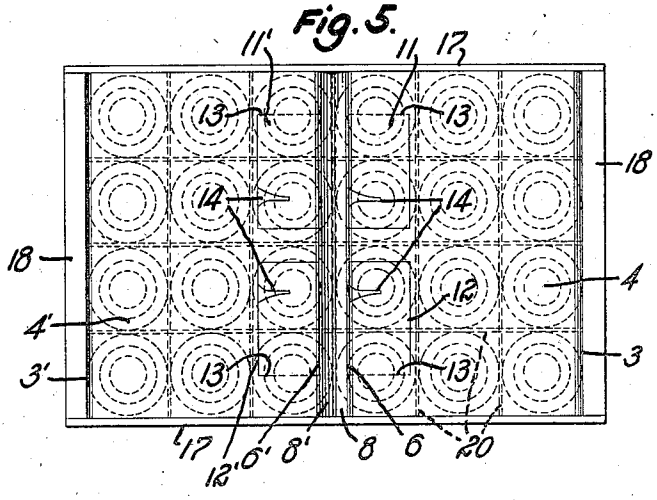
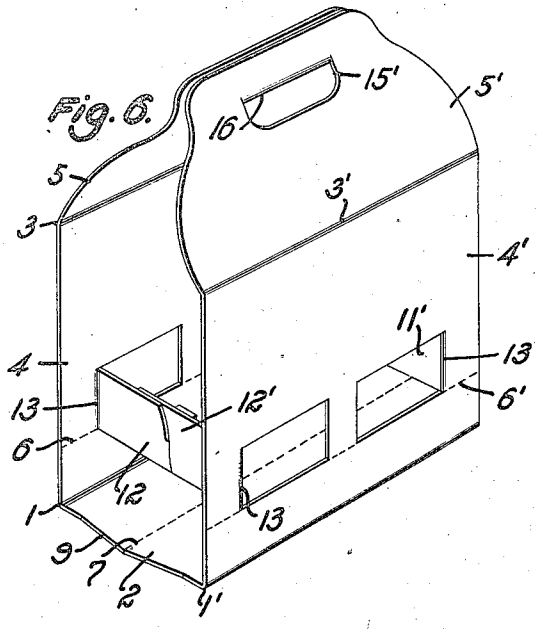


Fig. 6.



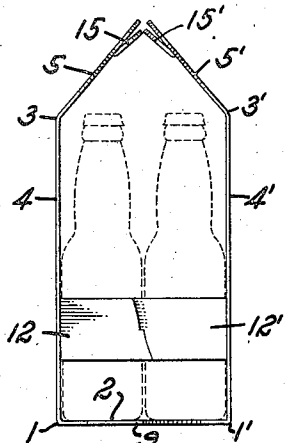


Fig. 7.

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2,318,957

CONTAINER CLOSURE AND CARRIER

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Application January 22, 1941, Serial No. 375,522

2 Claims. (Cl. 217—56)

This invention relates to container closures and carriers, and has particular reference to a device, preferably made of paperboard, for example corrugated board, boxboard, or other suitable bendable material, which may constitute a cover for a container, such as a case containing bottled goods, and which is convertible into a carrier for a plurality of the bottles.

It has become a more or less prevalent practice to cover cases of bottled goods, and particularly cases of beer, the tops of which have heretofore been left open, with covers which completely fill the top openings of the cases and which are provided with means for effectively closing the handholds in the ends of the cases, such covers usually lying within the confines of the top openings of the cases as determined by the side and end walls thereof and finding their major support upon the caps of the contained bottles.

The object of the present invention is to provide an improved cover of the general type just described which is so designed that it may, upon removal from the container, be set up to furnish a carrier for a plurality of the bottles.

Another object of the invention is to provide a cover having structural characteristics which enable it to be frictionally retained within the container when serving as a cover therefor, so that it will not be accidentally displaced or dislodged. And a further object is to provide a cover having a depressed, relatively centrally located, folded portion the edges of which will, upon application of the cover to a container, engage the side walls of the container, and also having end flaps for engagement with the end walls of the container, the springy characteristics of the material of which the device is made imparting a spreading tendency to the depressed folded portion which will serve to force the end flaps into intimate engagement with the end walls of the container.

A still further object of the invention is to furnish the device, when it is set up as a bottle carrier having a bottom and side walls, with integral means, formed as knock-out portions of the side walls, engageable in pairs transversely of the carrier to secure the side walls and provide end abutment means for the bottles contained in the carrier. And it will be understood that, when the device is used as a cover, these knock-out means remain integral with and in the plane of the blank and present no openings through which dust or other foreign material, and light, may enter the container. Also, as will be apparent from the following description, the knock-out means are so formed, and so function, that no applied attaching means, such as glue, or staples or other fasteners, are needed to set the blank up as a bottle carrier. Therefore the device may be considered as self-contained when used either as a container cover or as a bottle carrier.

In the accompanying drawings illustrating the invention, in the several figures of which like parts are similarly designated,

Figure 1 is a plan view of the blank forming the device of the invention.

Fig. 2 is an edge view thereof.

Fig. 3 is a perspective view illustrating the device in folded or bent condition ready for insertion in a container as a cover therefor.

Fig. 4 is a substantially central longitudinal section through a filled beer case with the device of the invention applied thereto as a cover.

Fig. 5 is a top plan view of the beer case as illustrated in Fig. 4.

Fig. 6 is a perspective view illustrating the device of the invention set up as a bottle carrier, and

Fig. 7 is an end view of the carrier with the arrangement therein of beer bottles conventionally indicated.

The blank forming the device of the invention, having reference particularly to Figs. 1 and 2, comprises a piece of bendable material, preferably of paperboard, such as corrugated board, boxboard or fiber board, of appropriate shape and dimensions, provided with transverse spaced score or fold lines 1 and 1' located adjacent to its mid-portion and defining between them the ultimate bottom 2 of the bottle carrier, and other score or fold lines 3 and 3' adjacent to the ends of the blank and defining, between them and the score lines 1, 1', the ultimate side walls 4 and 4' of the bottle carrier, and between them and the ends, end flaps 5 and 5' which constitute the ultimate handle means for the bottle carrier.

Spaced from the score or fold lines 1, 1', and lying within the ultimate side walls 4 and 4' are score or fold lines 6 and 6' which, in combination with a centrally arranged score or fold line 7 provide means upon which the blank may be bent to form a substantially centrally arranged depressed portion (Fig. 3) having walls 8 and 8' which include parts of the ultimate bottom 2. It will be noted that the depressed portion constituted by the walls 8, 8' has one edge provided with an extension 9 which, when in folded condition, produces a somewhat pointed outwardly offset edge part 10, and its other edge is corre-

spondingly recessed at 9' to produce an inwardly sloped edge part 10' for engagement with the side walls of the container, as will be hereinafter pointed out.

The side walls 4 and 4' are provided with partially severed knock-out members 11, 11', and 12, 12' each of which has a hinge connection 13 with the blank. These members are furnished with knock-out notch-forming parts 14 whereby they may be engaged in pairs, respectively 11, 11' and 12, 12' when the device is ultimately set up as a bottle carrier to hold the side walls in proper relation and to furnish end abutment means for the carrier.

Also the end flaps 5, 5' are provided with partially severed knock-out members 15 and 15', respectively, hinged at 16 and adapted to furnish handhold openings when the device is set up as a bottle carrier.

As hereinbefore indicated, when the device is functioning as a container cover, the members 11, 11', 12, 12', 14 and 15, 15' are all intact with and lie in the plane of the blank and therefore no openings are present through which dust and other extraneous material, and light, may penetrate, and the whole surface thus presented may be printed upon or otherwise ornamented, as may be desired.

Although not essential to the construction of the device, it will be noted that the score or fold lines 6, 6' fall substantially in line with incisions of the knock-out members 11, 11' and 12, 12'. This makes bending of the blank upon these score or fold lines relatively easy and, in addition, relieves the tendency of the parts 4 and 4' to spring upwardly when the device is so bent as to adapt it for use as a container cover, as will now be described.

When the device is to be used as a container cover, see particularly Figs. 3, 4 and 5, it is bent upon the score or fold lines 6, 6' and 7 to form the V-shaped depressed portion including the walls 8, 8'; and the end flaps 5 and 5' may also be preliminarily folded as indicated in Fig. 3. The V-shaped depressed portion may then be entered in the container or case with its outwardly offset and inwardly slanted edge parts 10 and 10' respectively engaging the side walls, and its leading edge, constituted at the score or fold line 7, passing between the neck portions of adjacent rows of bottles. Due to the corresponding slope of the parts 10 and 10' the device will readily slide downwardly between the side walls 17 of the container, though offset somewhat from the longitudinal axis thereof, until the straight edge portions of its side edges adjoining the sloped portions 9' thereof contact with the adjacent container side wall. Thereafter, forcing of the device downwardly into the container will cause frictional contact of the offset part 10 and of the side edges adjoining the portions 9' with the adjacent side walls 17 of the container, and continued downward movement of the cover relatively to the container will enhance this frictional engagement, so that when the parts 4 and 4' finally come to rest upon the caps of the bottles, the cover will be firmly frictionally located in place in the container. It will be understood, of course, that prior to flattening down of the parts 4 and 4' upon the bottle caps, the end flaps 5 and 5' will have been inserted between the end walls 18 of the container and the necks of adjacent rows of bottles. Moreover, where the container is a bottle case, as illustrated, these end flaps will cover the hand-holds 19 therein.

As hereinbefore pointed out, the inherent springiness of the material of which the device is formed will serve, particularly at the bend along the score or fold line 7, to spread the walls 8, 8' of the V-shaped depressed portion apart, thereby tending to force the end flaps 5, 5' into intimate surface contact with the end walls 18 of the container. Thus, inasmuch as the cover fully fills the top opening of the container, as will be apparent from Fig. 5, and preferably closely contacts the inner surfaces of the end walls 18 thereof, dust and other foreign material, and light, will be effectively excluded from the container.

It will be noted that, when the device is assembled upon a container as a cover therefor (see particularly Fig. 4), the V-shaped depressed portion, and the end flaps, do not extend down into the container to a greater extent than is necessary to accomplish their desired functions. And this is particularly advantageous where the cover is used on a bottle case having the usual separator strips 20, or where the rows of bottles are close together, as these parts do not then interfere either with the separator strips or with the bottles, and the cover may thereby be appropriately positioned without regard for interference with such strips or with the bottles.

As has been pointed out, the relative lack of springiness at the bends upon the score or fold line 6 and 6' precludes any marked tendency of the parts 4, 4' to spring upwardly away from the caps of the bottles even if the surface contact of the end flaps 5 and 5' with the ends 18 of the container does not provide such engagement as will serve to prevent such displacement. Thus, no fastening means are required to hold the cover against accidental displacement or dislodgment with respect to the container, the frictional engagement of the V-shaped depressed portion, and the contact of the end flaps normally being sufficient for the purpose.

For use as a bottle carrier, the device need merely be removed from the container, by reversing the steps of its insertion, and then, by completely knocking out the parts 14 and knocking out and rotating their carrying members 11, 11' and 12, 12' upon their hinges 13, and then bending the side wall members 4 and 4' upwardly upon the score lines 1 and 1', and engaging the notches, provided by removal of parts 14, of the respective pairs of members 11, 11' and 12, 12', the carrier will be set up in the form illustrated in Figs. 6 and 7. Thereafter, by knocking out the handhold forming parts 15, 15' of the flaps 5 and 5' and rotating them upon their hinges 16, carrying handles will be provided.

It is preferable, as illustrated in Fig. 2, to form the score or fold lines 7 by impression in opposite sense from the score or fold lines 1 and 1', 6 and 6', and 3 and 3'. Thus, when the device is adjusted to cover form, the score or fold line 7 will be bent downwardly, as viewed in Fig. 2, and as the outside of the cover is also the outside of the carrier, this bend at the score or fold line 7 will be straightened out when the portion 2 forms the bottom of the carrier, and hence the mode of formation of the score or fold line 7 will tend to have a stiffening effect upon the bottom of the carrier to maintain it in relatively flat condition. Obviously, when the carrier is loaded with bottles and is lifted by the handle means, it has a tendency more or less to collapse upon or hug the bottles insofar as is possible within the limits determined by

the end abutment means formed by the members 11, 11' and 12, 12', and hence this feature of the fold or score line 7 is not of marked importance. However, it does aid in setting up the device to carrier form and tends to increase the attractive appearance of the carrier when thus set up.

Various changes and modifications are considered to be within the spirit of the invention and the scope of the following claims.

What we claim is:

1. A closure device for containers, particularly adapted as a cover for a case of bottled goods and convertible into a carrier for a plurality of the bottles, comprising a blank of bendable material of appropriate shape and dimensions to close the container when folded as a cover and applied thereto, said blank being provided intermediate its ends with score or fold lines defining the ultimate bottom of the carrier, other score or fold lines adjacent to said first-named score or fold lines and defining a portion of the blank depressible to V-shape to frictionally engage the adjacent side walls of the container, score or fold lines adjacent to the ends of the blank and defining between them and the first-named score or fold lines the side walls of the carrier, the end portions of the blank beyond the end adjacent score or fold lines being bent upon said lines to extend downwardly within the container in contact with the adjacent end walls thereof and ultimately providing handle means for the carrier, and complemental means carried by the side wall portions and interengageable to maintain the blank in set up condition as a carrier when the blank is appropriately bent upon said first-named score or fold lines.

2. A container closure, particularly adapted as a cover for a case of bottled goods, comprising a blank of bendable material of appropriate shape and dimensions to close the container when folded and applied thereto, said blank being provided with spaced score or fold lines intermediate its ends and upon which it may be bent to form a substantially V-shaped depressed portion having its apex forming a leading edge and capable of insertion between and with its opposite edges in contact with opposed walls of the container, one lateral edge of said depressed portion being provided with an angularly offset portion adjacent to said leading edge and its opposite lateral edge being provided with a complementary angularly inset portion adjacent to said leading edge, the depressed portion being of a uniform width throughout its extent equal to the corresponding width of the blank, whereby when the closure is inserted in the container said depressed portion may have its leading edge readily entered between the container walls adjacent to its opposite edges, and when in fully inserted position the offset portion adjacent to its leading edge will frictionally engage the adjacent container wall.

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