

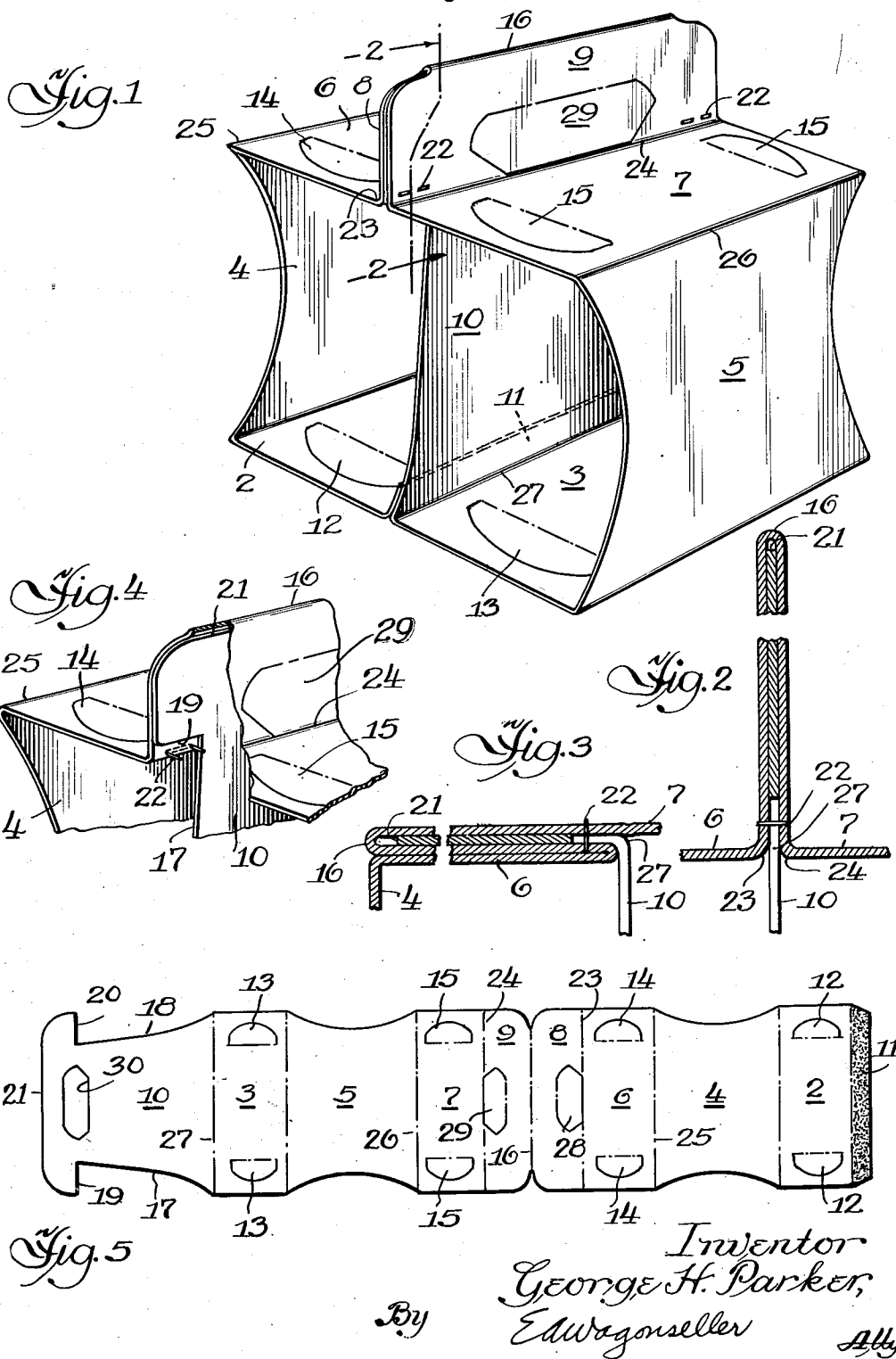
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CAN CARRIER WITH FOLDABLE HANDLE

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CAN CARRIER WITH FOLDABLE HANDLE

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The present invention relates to a can carrier having an integral, centrally disposed partition provided with an upwardly extending handle portion, and is concerned particularly with the construction of the partition which permits the handle portion to be folded over against the top of the carrier without impairing the subsequent efficiency of the carrier.

One of the objects of this invention is the provision of a can carrier of the type referred to which can be formed from a single blank of paperboard suitably creased and cut so that the parts may be secured by adhesive and staples, or other securing means, to produce the finished carriers in flat, collapsed form ready for delivery to a user. Another object of the invention is to secure the handle of the carrier in such a manner that after the carriers are filled with cans or similar articles they may be packed into larger containers, or stacked in any desired manner, with the handles folded substantially flat against the top of the carriers, and the handle having sufficient freedom of movement to prevent tearing of the carrier at the stapled portion of the handle.

Other and further objects and advantages of the invention will become apparent upon reading the following description, taken in conjunction with the accompanying drawings, showing a preferred illustrative embodiment of the invention, in which:

Fig. 1 is a perspective view of a can carrier embodying the present invention illustrating the carrier in assembled position ready to receive the cans for which it is designed;

Fig. 2 is an enlarged cross sectional view, taken along the line 2-2 of Fig. 1, showing the position of the upper portion of the partition relative to the handle forming flanges when the handle is in vertical position;

Fig. 3 is an enlarged fragmentary cross sectional view, similar to Fig. 2, showing the handle folded flat against the top of the can carrier;

Fig. 4 is a fragmentary perspective detail view of the can carrier showing the position of the partition relative to the staple; and

Fig. 5 is a top elevational view of the blank from which the can carrier embodying the present invention is made.

The can carrier of the present invention is preferably formed to provide a convenient carry-out for a retail store customer to take home six cans of beverage or food, and is particularly designed so that the filled-carriers may be packed in large containers for transportation from the

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packer to the wholesaler, jobber or retailer. The carrier is made with a carrying handle that may be folded flat against the filled carrier, and a centrally disposed reinforcing partition extending between the flanges forming the handle is particularly designed to permit the partition to slip relative to the flanges when the handle is folded. This relative slippage between the partition and the flanges protects the partition against being torn by the staples or other fastening elements securing the flanges together to form the handle when the handle is folded.

Referring more particularly to the drawing, the carrier as herein disclosed comprises a pair of horizontal bottom wall panels 2 and 3, vertical side wall panels 4 and 5, horizontal top wall panels 6 and 7, vertically extending handle forming flanges 8 and 9, a centrally disposed, vertically extending partition 10, and a glue flap 11.

The horizontal bottom wall panels are each formed with a pair of arcuate cut-out tabs 12 and 13 which are folded upwardly out of the panels through an angle of approximately 180° so as to underlie cans inserted into the carrier and engage the inner radius of the flanges of the outer cans to prevent accidental longitudinal displacement of the cans after they have been positioned in the carrier. The edges of the top flanges of the outer cans are similarly engaged by tabs 14 and 15 folded inwardly and downwardly from the top wall panels 6 and 7.

The carrying handle is formed by the flanges 8 and 9 which are folded downwardly along the fold line 16. The sides of the centrally disposed vertical partition 10 are recessed or flared inwardly along lines 17 and 18 to form shoulders 19 and 20 adjacent the top edge 21 of the partition. A plurality of staples 22, or similar fastening elements, is driven through the flanges 8 and 9 to secure them together tightly so that when the handle is folded downwardly against the top of the carrier the flanges move as a single unit. The staples may be positioned anywhere above the fold lines 23 and 24 which connect the flange 8 to the horizontal top wall panel 6 and the flange 9 to the panel 7, respectively, but are preferably positioned immediately adjacent the fold lines 23 and 24.

When a plurality of filled carriers is transported from the packer or wholesaler to the retailer it is desirable to pack them into large containers, and the handles of the individual carriers are preferably folded over against the top of the carriers to save packing space. The carriers if desired may be shipped to the retailer in col-

lapsed condition and filled by the retailer so that packing of the filled carriers in large containers is unnecessary. However, even under these conditions some retailers will fill a quantity of carriers and stack them so that the handles are folded against the top of the carriers. When the handle is folded downwardly against the top of the carrier the fold lines 23 and 24, and the fold lines 25 and 26, which connect top panel 6 to side panel 4 and top panel 7 to side panel 5, respectively, permit the flanges 8 and 9 to move in either direction without binding. The partition 10, however, is relatively fixed at its bottom edge because the cans hold the bottom wall panels 2 and 3 rigidly. The lower edge of partition 10 is connected to bottom panel 3 by a fold line 27 and to panel 2 by the glue flap 11 to which it is adhered. Consequently, the partition 10 cannot move with the same freedom as flanges 8 and 9.

In order to permit the partition to be folded with the flanges 8 and 9 without causing the partition to be torn by the staples 18 or similar fastening elements, the cut away areas of the partition adjacent the shoulders 19 and 20 are large enough to permit the staples to secure the flanges 8 and 9 together without penetration and preferably without contacting any part of the partition. When the handle is folded out of its vertical plane, the partition 10 is folded around a pivot formed by the lower edge of either flange 8 or 9 and the inner edge of the adjacent top wall panel 6 or 7. As the handle is folded along fold lines 23 or 24, respectively, the upper portion of partition 10 must move a greater distance than the flanges 8 and 9 because the lower portion of partition 10 is relatively fixed, and, consequently, as shown in Figs. 2 and 3, the upper portion of the partition slips relatively to the flanges 8 and 9. Such movement would cause the staples 22 to tear the partition 10 if the partition was secured to the flanges 8 and 9 by the staples. The upper portion of the partition 10 is positioned loosely between the flanges 8 and 9, and the shoulders 19 and 20 are preferably positioned far enough above the staples 22 so that when the handle is folded over against the top of the carrier the partition slips relative to the flanges 8 and 9 without causing the shoulders to come into contact with the staples. The shoulders 19 and 20 prevent the partition from becoming accidentally displaced from its position between the flanges.

To facilitate carrying the filled carrier the flanges 8 and 9 are preferably provided with partially cut out tabs 28 and 29 which may be folded to form a hand hold. The partition 10 is preferably provided with an opening 30 to register with the opening formed by folding the tabs 24 and 25.

While the present description sets forth a preferred embodiment of the invention, certain changes may be made in the construction without departing from the spirit of the invention, and it is therefore desired that the present embodiment be considered in all respects as illustrative and not restrictive, reference being had to the appended claims rather than to the foregoing description to indicate the scope of the invention.

I claim:

1. A can carrier formed of paperboard or the like, comprising a pair of parallel compartments separated by a centrally disposed partition, each of said compartments having a top wall, the

inner edges of the top walls terminating adjacent opposite faces of the partition, a flange extending upwardly from the inner edge of each of the top walls, a plurality of staples joining the flanges together to form a carrying handle, the partition extending between said flanges to reinforce the handle, the side edges of said partition being recessed to provide clearance for the staples, whereby the staples may secure the handle forming flanges together without penetrating the partition to permit folding of the carrying handle substantially flat against either top wall without tearing the partition.

2. A can carrier comprising a partition and a pair of flanges positioned adjacent opposite faces of the partition to form a carrying handle, a plurality of staples securing the flanges together, a portion of each of the side edges of the partition being formed to extend inwardly to the staples adjacent thereto to permit said partition slidably to fit between the flanges without being penetrated by the staples, and a pair of shoulders formed on said partition to prevent accidental displacement of the partition.

3. A can carrier of the character described comprising, a single integral length of material such as paperboard, cut, scored and folded to provide a bottom wall, a top wall, opposite side walls connecting the bottom and top walls in spaced relation to one another, a partition member extending upwardly medially of said bottom wall to a place medially of said top wall and in a plane generally parallel to the planes of said side walls, a pair of parallel handle-forming flanges disposed medially of said top wall and having their planes substantially parallel to the plane of said partition, the said flanges having hinged connection with said top wall along parallel score lines for movements together from said position parallel to said partition to a position substantially parallel to said top wall, said partition having a handle-reinforcing portion hinged thereto along its upper end on a line adjacent and parallel to said flange score lines and projecting upwardly between said flanges, said handle-reinforcing portion having notched side edges providing a pair of downwardly facing edges disposed in spaced relation to one another and lying within the areas of the adjacent faces of said flanges, and securing means such as staples passing through said flanges out of contact with said reinforcing portion of said partition and adjacent to and spaced from said downwardly facing edges and in the path of movement of said edges on movement of said reinforcing portion downward in a vertical direction relatively to said flanges when said flanges and reinforcing portion are swung together about said score lines to said position paralleling said top wall.

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