Aug. 30, 1960 L. J. SMALL 2,950,514

CARTON LID HOLDER

Filed March 12, 1958

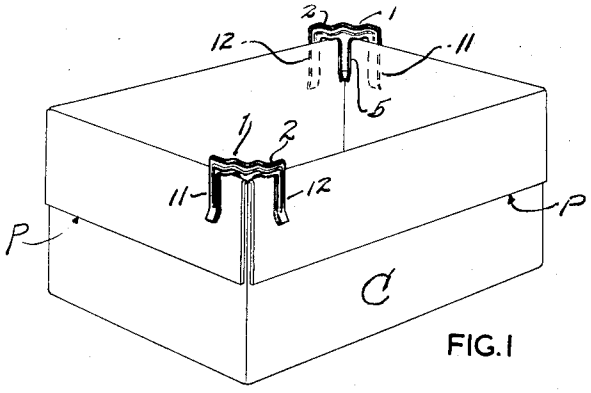


FIG. 1

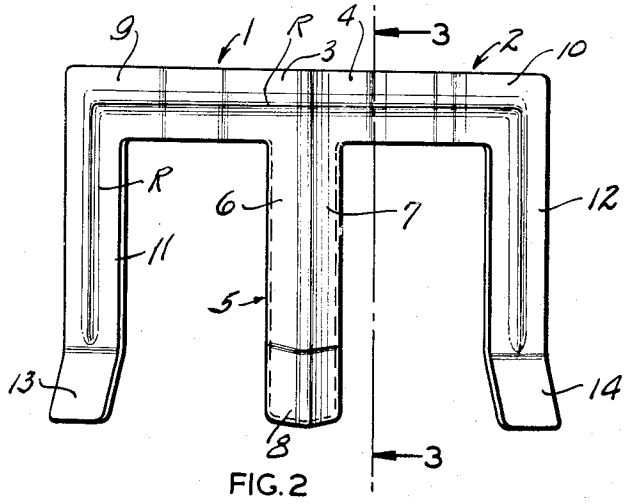


FIG. 2

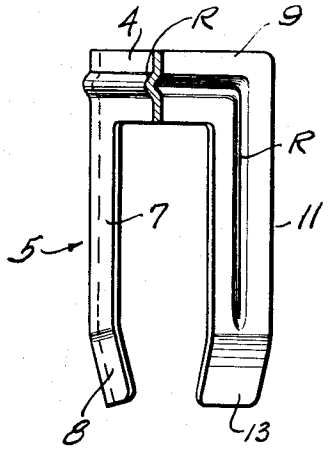


FIG. 3

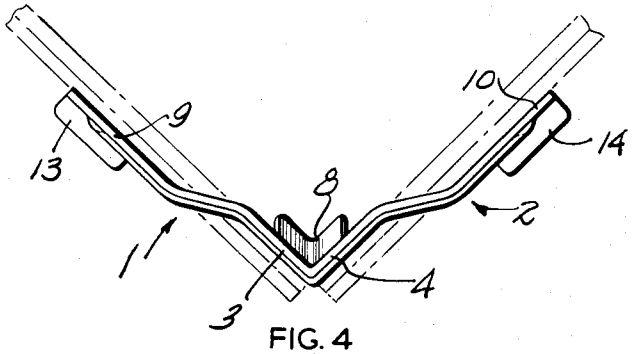


FIG. 4

INVENTOR.
Leroy J. Small
BY Rodney Bedell
atty.

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CARTON LID HOLDER

Leroy J. Small, Memphis, Tenn., assignor to Memphis Metal Manufacturing Co., Inc., Memphis, Tenn., a corporation of Tennessee

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5 Claims. (Cl. 24—81)

The invention relates to a device arranged to be readily applied to the corners of a carton to secure the outwardly and downwardly turned top panels of the carton to hold them out of the way as the carton is being filled or emptied. The device forms no part of the carton, and is readily applied and removed without interfering with the filling of the carton with any kind of packages or loose merchandise.

The main object of the invention is indicated in the above statement. More detailed objects are to facilitate application of the holder to the carton, irrespective of whether the carton lid involves one, two, three or four flaps; to facilitate the stacking and shipping of the holders so that they may nest together smoothly and do not become entangled so as to inconvenience the user, or to make a quantity of the holders unnecessarily bulky. Another object is to secure the carton flaps in a desired position without marring or distorting their surfaces.

In the accompanying drawings illustrating a selected embodiment of the invention:

Figure 1 is a perspective showing the holders applied to diagonally opposite corners of a carton with the four flaps forming the carton lid turned downwardly over the sides of the carton and retained in place by the holders.

Figure 2 is a front elevation of one of the holders.

Figure 3 is a vertical section on line 3—3 of Figure 2.

Figure 4 is a top view of one of the holders with adjacent portions of a carton indicated in broken lines.

The holder comprises a pair of horizontal arms 1 and 2 disposed generally at right angles to each other with adjacent end portions 3 and 4 merging and forming a right angle. A central leg 5 depends from arm portions 3 and 4 and preferably is of angular cross section having flanges 6 and 7 lying in the same vertical planes as arm portions 3 and 4 respectively. The lower end portion 8 of leg 5 is inclined downwardly and inwardly, as best shown in Figure 3.

The outer end portions 9 and 10 of arms 1 and 2 are offset from the inner end portions 3 and 4 outwardly of the angle between the latter, to position the inner and outer portions of each arm in substantially parallel planes extending in the same general direction as the central leg flange which depends from the inner portion of the arm. The intermediate portion of each arm 1 and 2 extends diagonally of its relatively offset inner and outer end portions.

End legs 11 and 12 depend from the outer ends of the arms and preferably are of substantially flat cross section, but their lower ends 13 and 14 are inclined downwardly and outwardly of the plane of the major portion of the leg.

The holder is readily applied to the corner of a carton C as shown in Figure 1 to hold the carton lid panels P down against the outer face of the side walls of the carton.

The intermediate diagonal portions of arms 1 and 2 overlie the top edges of the carton, and the tendency of carton panels to spread from the sides, frictionally retains the holder in place.

The holder does not have any edges extending horizontally to be slid over the carton, nor are there any other elements which will cut into or mar the carton surface as the holder is applied and removed. The device is readily stamped from sheet metal. Preferably it is stamped with reinforcing ribs R to stiffen the arms and legs against bending during the application and removal to and from the carton, or if carelessly thrown into a storage bin. The device is well adapted for its intended purpose and attains the objectives set forth in the introductory portion of the specification.

Details of construction may be varied without departing from the spirit of the invention and the exclusive use of those modifications coming within the scope of the claims is contemplated.

I claim:

1. A carton lid holder comprising a horizontally disposed top member consisting of two arms extending horizontally and disposed generally at a right angle to each other with the outer end portion of each arm offset outwardly of the angle from the inner portion of the arm adjacent the angle between the arms, a depending end leg at the outer end of each arm in the general vertical plane of the outer end of the arm, and a depending central leg at the middle of the member where the arms meet, the end leg depending from the end of each arm being offset outwardly of the angle between the arms and from the central leg.

2. A carton lid holder according to claim 1 in which the lowermost portion of each end leg is inclined downwardly and outwardly of the general vertical plane of the arm portion from which the leg depends and the lowermost portion of the middle leg is inclined downwardly and inwardly of the planes of the angle between the arms, whereby insertion of carton sides and lid panels behind said end legs and in front of said middle leg is facilitated.

3. A carton lid holder according to claim 1 in which said middle leg has an angular cross section and in which each of the depending end legs is substantially flat in cross section and is offset transversely from the plane of the adjacent portion of the angular-cross-section middle leg.

4. A holder for retaining folded over top wall sections of a carton against adjacent side walls of the carton disposed at an angle to each other, comprising a central vertical leg to fit within the angle between the carton walls, top arms extending horizontally from the upper portion of said central leg and generally at right angles to each other, each horizontal arm being offset intermediate the ends of the arm, outwardly of the angle between the arms, and a vertical end leg depending from the outer end of each arm, each of said latter mentioned legs being substantially parallel with the central leg and disposed to accommodate the positioning of a carton side wall, with a top wall folded against the same, at oppositely facing sides of said end legs.

5. A holder for retaining folded over top wall sections of a carton against adjacent side walls of the carton disposed at an angle to each other, comprising a central vertical leg of angular cross section with diverging flanges to fit within the angle between the carton walls, top arms extending horizontally from each side of the upper portion of said central leg and generally at right angles to each other, each horizontal arm being offset intermediate

the ends of the arm, outwardly of the central leg, and a vertical end leg depending from the outer end of each arm, each of said latter mentioned legs being substantially parallel with the central leg but displaced therefrom transversely of the plane of the nearer flange of the central leg to accommodate the positioning of a carton side wall, with a top wall folded against the same, at oppositely facing sides of the middle leg and each end leg.

References Cited in the file of this patent

UNITED STATES PATENTS

967,605	Brooks	Aug. 16, 1910
2,582,502	Nagler	Jan. 15, 1952
2,763,423	Bloomer	Sept. 18, 1956
2,801,453	Melvin	Aug. 6, 1957
2,867,019	Streeter et al.	Jan. 6, 1959