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C. F. GIBBONS

2,646,202

FLAP LOCKING DEVICE FOR CONTAINER INSERTS

Filed Oct. 8, 1949

FIG. 1.

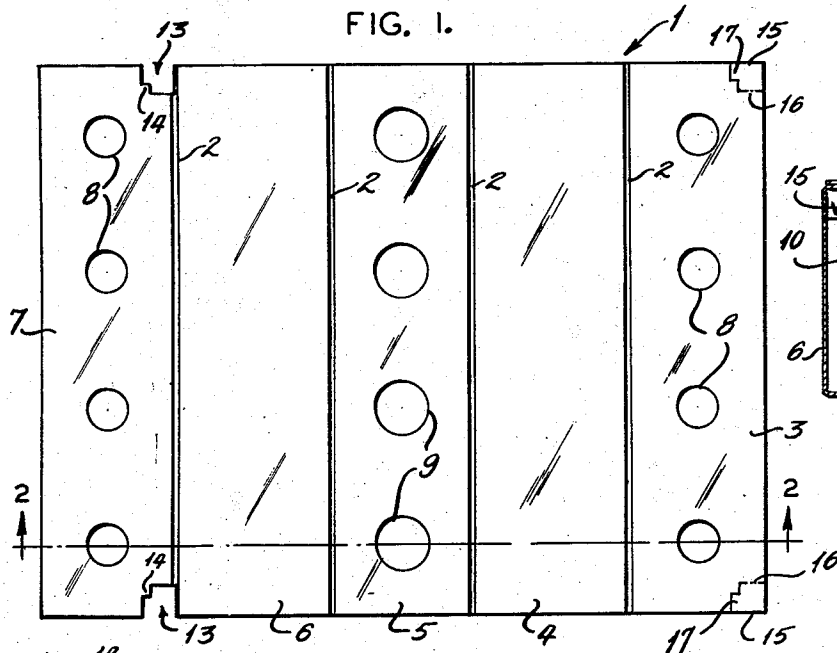


FIG. 2.

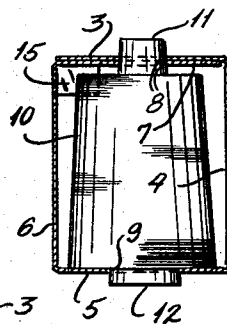


FIG. 3.

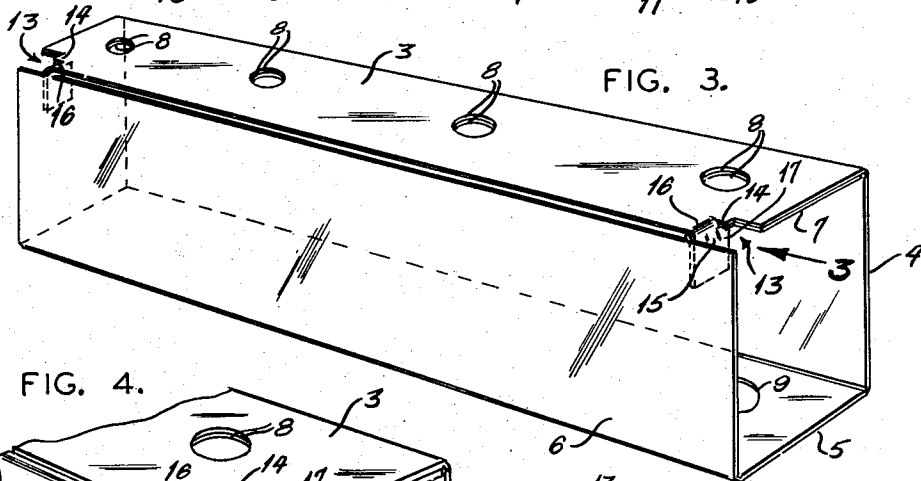


FIG. 4.

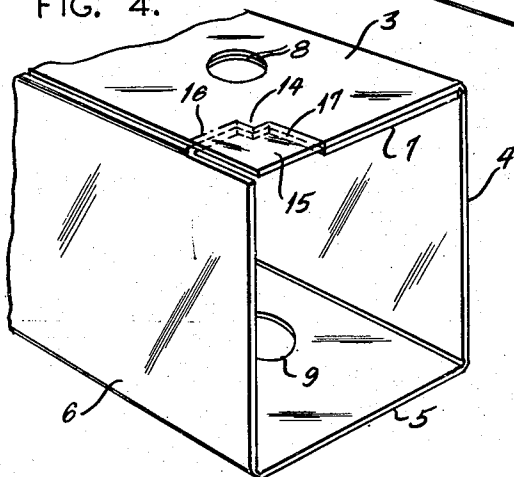
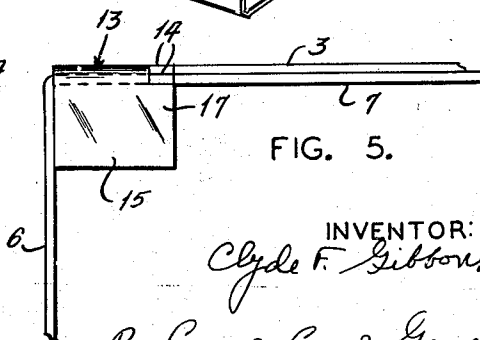


FIG. 5.



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UNITED STATES PATENT OFFICE

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FLAP LOCKING DEVICE FOR CONTAINER
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2 Claims. (Cl. 229-40)

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This invention relates to folded-blank paper-board containers or packages of the type used for shipping a plurality of small articles, such as rayon cones, and are provided with means for maintaining such articles in spaced relation to prevent damage thereto by contact with one another or with the container walls.

The object of the invention is to provide a simple and efficient arrangement for quickly and easily releasably locking together the overlapping cover flaps of containers of the above type.

The invention consists in the provision of a scored folded-blank type tubular open-ended container, there being suitable provision in the container for holding a series of rayon cones therein out of contact with each other and the container walls, and in which one of the cover flaps has openings cut therein provided with projections, the other cover flap having tabs of the same outline as the openings, the tabs being foldable under the first mentioned flap and interlocking with the projections in the openings for holding and locking the container in its tubular shape.

In the drawings:

Fig. 1 is a plan view of a container,

Fig. 2 is a view taken substantially along the line 2-2 of Fig. 1, showing the blank folded into a tubular shape with an article loaded therein,

Fig. 3 is a perspective view of the container,

Fig. 4 is an enlarged view of a part of the container showing the locking tab; and

Fig. 5 is a view of the tab folded to locking position and looking in the direction of the arrow in Fig. 3.

The invention is embodied in a device illustrated in the drawings in which the numeral 1 indicates a foldable blank for a tubular open-ended container, the container being of the folded-blank paperboard type. The blank has a plurality of suitable scorings 2 forming a series of panels 3 through 7, panel 5 forming the bottom wall; panels 4 and 6 forming the opposite side walls; and panels 3 and 7 forming the upper marginal flaps for the two-ply cover panel disposed opposite the bottom wall. When each of the flaps 4 and 6 is folded toward each other about the scores between panels 4, 5 and 6, and the flaps 3 and 7 disposed one above the other, a tubular-shaped container is formed.

The panel 5 has a plurality of apertures 9 cut therein and panels 3 and 7 have a plurality of apertures 8 cut therein, all apertures disposed in the same lateral plane and being aligned with each other when the blank has been folded into

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tubular shape. In the particular illustration shown in Fig. 2, the container is used to hold a series of spools 10 of rayon yarn, the spools having different size spindles 11 and 12 therein, the spools being conical in shape and the spindle 12 being the larger of the two. Therefore, apertures 8 and 9 have different size diameters. The spools are thus prevented from contacting each other and the walls of the container.

The marginal cover flap 7 has openings 13 cut therein, preferably at the ends thereof but may be cut in other parts if so desired. A projection 14, constituting a shoulder preferably rectangular in shape, is formed in each of the openings. The marginal flap 3 has a tab 15 cut therein and having the same outline as opening 13, the connection between tab 15 and panel 3 being scored as at 16. When the blank has been folded into tubular shape with the flap 3 disposed above flap 7 thereby forming the two-ply cover, tabs 15 are folded along score line 16 so that the shoulder 17 on tab 15 is folded under projection 14 in each of the openings, thereby firmly locking the marginal flaps together and causing the container to hold its tubular shape. The container, with the articles contained therein, is then packed in a larger container which is suitably bound for shipment.

While the container has been illustrated with rayon yarn spools installed therein, various other articles may be installed. The blank could also be folded into hexagonal, octagonal, or any other polysided container.

What I claim is:

1. A folded blank container comprising a bottom panel and opposed side wall panels having marginal cover flaps that are overlapped for forming a two-ply top wall panel, one of said cover flaps having a tab foldably connected thereto substantially at a corner thereof, the length of the tab being such that its free end edge will extend substantially to the edge of the flap, said tab having a right angularly cut-out corner notch adjacent one end of the foldable connection, the other of said cover flaps having an opening substantially similar in shape to said tab and a right angularly shaped projection in a corner thereof, the projection being of substantially the dimensions of the notch in the said one cover flap and normally in registry therewith, so that when said tab is folded through said opening into substantially right angular relation with said other cover flap the edges defining the notch will frictionally engage the edges of the projection during the folding movement and the hori-

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zontal edge of the notch will be disposed and frictionally held under the projection and thus hold the said panels together.

2. A folded blank container comprising a bottom panel and opposed side wall panels having marginal cover flaps that are overlapped for forming a two-ply top wall panel, the outermost cover flap having a tab foldably connected thereto at opposite end corners thereof the length of each tab being such that its free end edge will extend to the respective opposite end edge of the flap, each tab having a right angularly cut-out corner notch adjacent one end of the foldable connection, the innermost of the said cover flaps having an opening substantially similar in shape to its respective superposed tab and a right angularly shaped projection in a corner thereof, each projection being of substantially the dimensions of the notch in the said innermost cover flap and normally in registry therewith, so that when said tabs are folded through

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the respective openings in the corners of the innermost flap and into substantially right angular relation with said cover flaps the edges defining the notches will frictionally engage the edges of the projections during the folding movement and the horizontal edges of each of the notches will be disposed and frictionally held under each projection and thus the said flaps are held together and relative movement therebetween is prevented.

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References Cited in the file of this patent
UNITED STATES PATENTS

Number	Name	Date
1,910,168	Jacobs -----	May 23, 1933
2,040,516	Graham -----	May 12, 1936
2,226,603	Gagen -----	Dec. 31, 1940
2,288,739	Peters -----	July 7, 1942
2,408,159	Boh -----	Sept. 24, 1946