July 15, 1952 W. C. GEORGE 2,603,406

CORNER CONSTRUCTION FOR MARGINALLY FLANGED PAPERBOARD CONTAINER COVERS

Filed Oct. 14, 1949

FIG. 1.

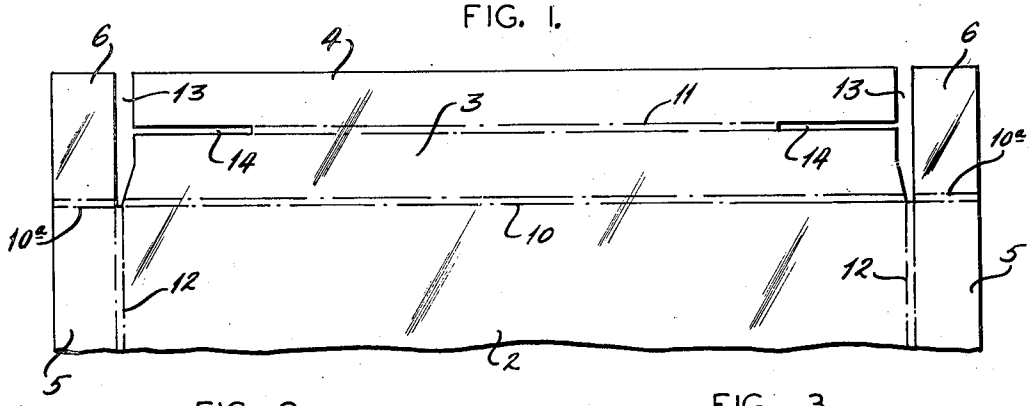


FIG. 2.

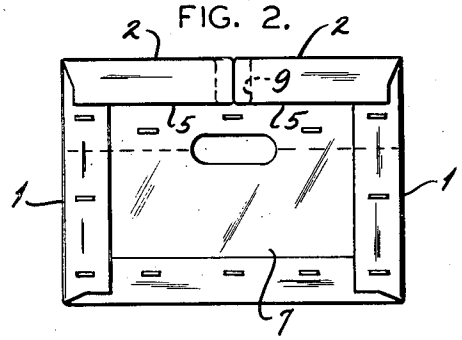


FIG. 3.

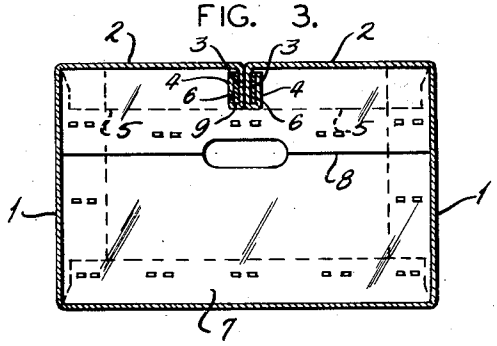


FIG. 4.

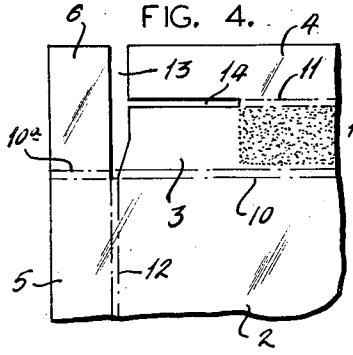


FIG. 5.

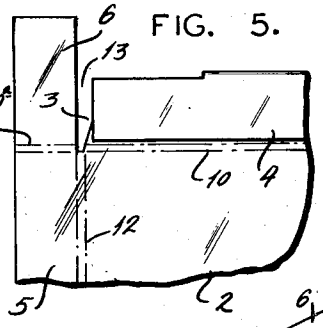


FIG. 7.

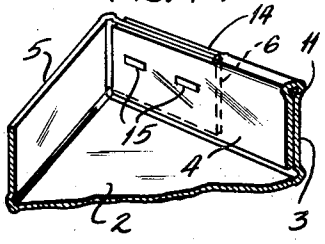


FIG. 8.

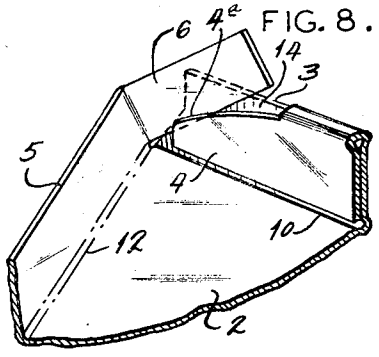
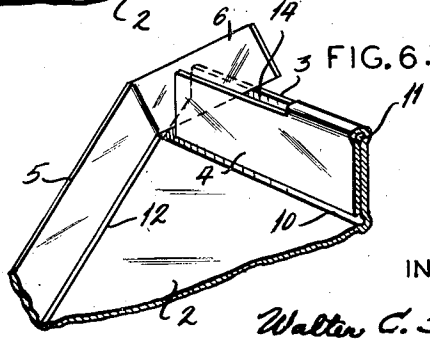


FIG. 6.



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CORNER CONSTRUCTION FOR MARGINALLY FLANGED PAPERBOARD CONTAINER COVERS

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7 Claims. (Cl. 229—44)

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This invention relates to corner constructions for containers, particularly corner constructions for hinged, marginally flanged, paperboard container covers of the kind shown in Fallert Patents Nos. 2,022,191 and 2,089,694 and Williams Patent No. 2,124,326, wherein the cover panel has a depending free side marginal flange with a lower marginal flap, which is folded upwardly along the inner side face of said flange, and a depending end flange that terminates at its outer end in a right-angularly bent tongue that extends and is secured between the depending side flange and the upturned lower marginal flap thereof.

The object of the present invention is to provide a strong and rigid, simple and economical, flanged cover corner construction of the above type which will permit the end tab of the depending end flange of the cover to be quickly and easily inserted between the adjacent end portions of the depending side marginal cover flange and the upwardly folded lower marginal flap thereof.

The invention consists in the flanged paperboard cover corner construction and in the parts and combinations and arrangements of parts hereinafter described and claimed.

In the accompanying drawings, which form part of the specification and wherein like symbols refer to like parts wherever they occur:

Fig. 1 is a fragmentary plan view of a blank from which a flanged cover corner construction embodying my invention is made,

Fig. 2 is an end elevational view of a container provided with hinged cover construction embodying my invention,

Fig. 3 is an end vertical cross-sectional view through the container,

Fig. 4 is a plan view of one of the corner portions of the cover blank,

Fig. 5 is a view similar to Fig. 4, showing the free marginal flap of the side marginal flange of the cover panel blank folded upon and adhesively secured to said flange,

Figs. 6 and 7 are fragmentary perspective views of the corner portion of the cover panel, showing the manner of inserting the locking tongue between the adjacent separated end portions of the side flange and its folded over free marginal flap; and

Fig. 8 is a view similar to Fig. 6, showing a modified corner construction.

In the accompanying drawings, my invention is shown embodied in a folded-blank paperboard container comprising side walls 1 with hinged half-cover panels 2 along the upper margins

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thereof that are each provided with a depending free side marginal flange 3 having a lower marginal flap 4 which is folded upwardly along the inner side face thereof and with depending end flanges 5, each terminating at its outer end in a tongue 6 which is bent at right angles and extends between said free side marginal flange and the upturned marginal flap thereof. The container is also provided with end wall panels 7 having flaps 8 that are bent inwardly and downwardly from the upper edge thereof, said folded upper edges being notched, as at 9, to accommodate the adjacent end portions of the folded depending side flanges 3 of the half-cover panels 2.

As shown in Fig. 1, each half-cover panel 2 is preferably made from a blank of relatively thick, stiff fiberboard provided with a wide longitudinal score 10 along which the side flange is bent, a wide longitudinal reverse score 11 along which the marginal flap 4 of said side flange is bent, and a wide transverse score 12 located adjacent to each end of said blank and along which the end flange 5 at said end is bent. The side flange forming margin of the blank is provided adjacent to each end with a notch 13 that extends inwardly along the transverse score 12 to the longitudinal score 10 and separates the end tongue 6 of the end flange 5 from the side flange 3, the longitudinal score 10 extending across said tongue, as at 10a, and marking off the line on which said tongue is bent.

The folded-blank container thus far described is shown in the above prior patents wherein the forming of the flanged cover corner construction requires the slow and difficult finger tiring operations of first bending the end flanges 5 and the end tongues 6 thereof into position and then holding said tongues in such position by folding the side flange 3 against one side of said tongue and the marginal flap 4 of said side flange over said tongue and against the other side thereof and then holding the stiff folded parts in folded position until they are stapled together.

In accordance with the present invention, the cover panel blank is provided adjacent to each end with a longitudinal notch 14 which extends inwardly from the end of the side flange panel 3 along the wide longitudinal score 11, which defines the marginal flap 4 of said side flange panel, for a distance corresponding substantially to the length of the tongue 6 of the end flange 5 of the cover panel 2 of said blank, thereby separating the end portions of said side flange panel and its marginal flap. With this arrangement the present flanged corner cover is formed by first folding the

side marginal flap 4 over upon the side marginal flange 3 and adhesively or otherwise permanently securing said flap flatwise to said flange inwardly of the notch 14 located at the end of said flange along the wide longitudinal score 11 along which said marginal flap is folded, thereby leaving the end portions of said side flange and said marginal flap free of one another on opposite sides of said notch and leaving the space between said end portions of said side flange and flap open along their outer side margins as well as at their ends.

The folded and glued side marginal flange 3 is then bent at right angles to the cover panel 2. At the same time, the end flange 5 of the cover panel 2 is bent at right angles thereto while the tongue 6 at the end of said end flange is bent at an angle thereto and swung between the separated end portions of the side flange 3 and its folded marginal flap 4 through the spaces between the ends and longitudinal side edges of said portions, said tongue reaching its final position in the fully erected positions of the end flanges and the pre-folded side marginal flange of the cover panel. In this position of the parts, the end tongue 6 of the end flange 5 extends between the end portions of the side flange 3 and its folded marginal flap 4 for the full length of the notch 14 that separates said end portions and is disposed with its lower edge flush with the lower edges of said portions and with its upper edge abutting against the underside of the cover panel 2. With the parts in this position, the tongue 6 is secured in place between the separated end portions of the side flange 3 and its upturned lower marginal flap 4 by staples 15 or other suitable fastening means.

In the modified corner construction shown in Fig. 8, the free end portion of the flaps 4 of the folded side marginal flange 3 of the cover may be coped off or beveled, as at 4a along the notch 14 so that the tongue 6 of the end flange 5 is automatically piloted into said notch by placing said tongue against the exposed inner face of the corner portion of said side marginal flange.

The hereinbefore described improved flanged cover corner construction is simple and economical and strong and durable; it permits the flap 4 of the side flange 3 to be folded into position before erection of said flange and the end flanges 5; it enables the operator to quickly and easily swing the locking tongues 6 into position between the spaced end portion of the side flange and pre-folded flap thereof during the simultaneous erection of the end and folded side flanges; and it enables the folded and interlocked parts to be easily held in position for stapling.

What I claim is:

1. In a container having a cover with two angularly disposed corner forming margins, said cover being provided along one of said margins with a depending flange having a lower marginal flap folded upwardly along one side thereof and along the other of said margins with a depending flange having an inwardly bent end tongue extending between said first mentioned flange and the upwardly folded lower marginal flap thereof, said tongue being of a length at least equal to the width of said depending flange, the improvement which consists in providing said tongue receiving portion of said first mentioned flange with an opening along the folded lower edge thereof through which said tongue is passed to position it between said first mentioned flange and its folded flap.

2. In a container having a cover with two angularly disposed corner forming margins, said cover being provided along one of said margins with a depending flange having a lower marginal flap folded upwardly along the inner side thereof and along the other of said margins with a depending flange having an inwardly bent end tongue extending between said first mentioned flange and the upwardly folded lower marginal flap thereof, said tongue being of a length substantially greater than the width of said depending marginal flange, the improvement which consists in providing said tongue receiving end portion of said first mentioned flange with a slot extending along the folded lower edge thereof through which said tongue is passed to position it between said first mentioned flange and its folded flap.

3. A cover blank for a container comprising a panel having two angularly disposed corner forming edges, said panel being scored along one of its margins to provide a flange with a free side marginal flap, said flange having a notch extending inwardly from the end thereof along the flap fining score, said flap being folded upon said flange to bring said notch along the folded edge thereof and said flap being secured to said first mentioned flange inwardly of said notch and being left free on opposite sides thereof, and a score extending along the other margin of said panel and forming a flange therealong having an end tongue whose length is substantially equal to the width of said first mentioned marginal flange and flap.

4. A cover blank for a container comprising a panel having two angularly disposed corner forming edges, said panel being widely scored along one of its margins to provide a flange with a free side marginal flap, said flange having a notch extending inwardly from the end thereof along the wide flap defining score a distance substantially greater than the width of said flange, said flap being folded upon said first mentioned flange to bring said notch along the folded edge thereof and said flap being adhesively secured to said first mentioned flange inwardly of said notch and being left free for the full length thereof, and a score extending along the other margin of said panel and forming a flange therealong having a free end tongue.

5. The combination set forth in claim 4 wherein said notch is beveled along the side thereof nearest said flap so that the inner face of the outer corner portion of said first mentioned flange is exposed when said flap is folded thereupon.

6. In a container having a cover with two angularly disposed corner forming margins, said cover being provided along one of said margins with a depending flange having a lower marginal flap folded upwardly along the inner side thereof and along the other of said margins with a depending flange having an inwardly bent end tongue extending between said first mentioned flange and the upwardly folded lower marginal flap thereof, said tongue being of a length substantially greater than the width of said depending marginal flange, the improvement which consists in providing said tongue receiving end portion of said first mentioned flange with a slot extending along the folded lower edge thereof through which said tongue is passed to position it between said first mentioned flange and its folded flap, said end portion of said first mentioned flange extending beyond the corre-

sponding end portion of its folded flap so as to provide a pilot portion for said tongue.

7. In a container having a cover with two angularly disposed corner forming margins, said cover being provided along one of said margins with a depending flange having a lower marginal flap folded upwardly along the inner side thereof and along the other of said margins with a depending flange having an inwardly bent end tongue extending between said first mentioned flange and the upwardly folded lower marginal flap thereof, said tongue being of a length substantially greater than the width of said depending marginal flange, the improvement which consists in providing said tongue receiving end portion of said first mentioned flange with a slot extending along the folded lower edge thereof

through which said tongue is passed to position it between said first mentioned flange and its folded flap, said slot being beveled along the side thereof nearest said flap so that the inner face of the outer corner portion of said first mentioned flange is exposed when said flap is folded thereupon.

WALTER C. GEORGE.

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The following references are of record in the file of this patent:

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