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D. H. ZELL

2,232,504

CONTAINER

Filed April 26, 1939

Fig. 1.

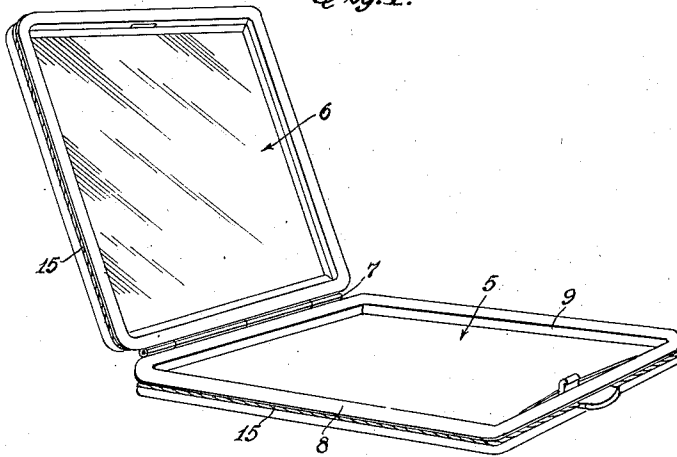


Fig. 2.

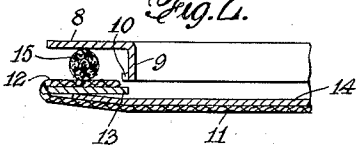


Fig. 3.

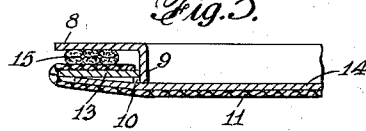


Fig. 5.

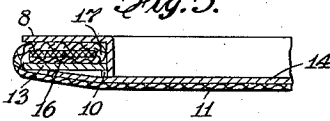


Fig. 4.

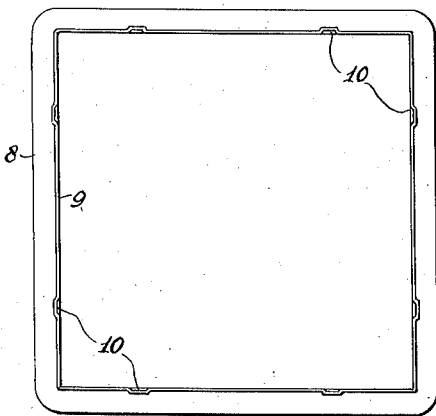
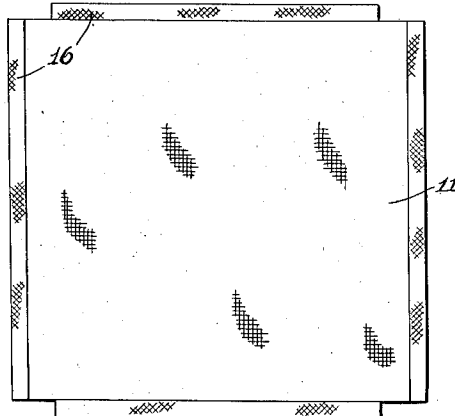


Fig. 6.



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CONTAINER

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2 Claims. (Cl. 150—46)

This invention relates to containers, and more particularly to a container of the type having a section embodying a marginal metallic frame member of desired configuration and an outer decorative sheet of fabric, leather or other flexible material, the general object and purpose of the invention being to provide simple, easily applied and highly efficient means for quickly and securely attaching the marginal edge portions of said decorative sheet to the metallic frame member.

A more particular object of the invention resides in the provision of a continuous rigid metal member corresponding in general form to the frame member of the case section and over which the marginal edges of the flexible sheet are inwardly turned, together with a highly compressible cushioning strip adapted to transmit uniform holding or clamping pressure throughout the edge portions of said flexible material as said rigid metal member and the frame member are moved towards each other, and coating parts on said members for locking the same against relative movement under the expansive pressure of said cushioning strip.

In one embodiment of the invention the cushioning strip may be in the form of an ornamental rope or strand visible at the edges of the container section and having high frictional adhesion with the fabric or leather sheet resisting relative movement of the latter under high strain. In another embodiment strips of elastic material may be applied to the marginal edge portions of the flexible sheet and then folded inwardly thereon and then interposed between the container frame and the cooperating rigid metal clamping member.

With the above and other objects in view, the invention consists in the improved container, and in the form, construction and relative arrangement of its several parts as will be hereinafter more fully described, illustrated in the accompanying drawing and subsequently incorporated in the subjoined claims.

In the drawing wherein I have shown several simple and practical embodiments of the invention and in which similar reference characters designate corresponding parts throughout the several views.

Fig. 1 is a perspective view of a conventional type of container provided with my present invention,

Fig. 2 is a fragmentary horizontal section, on an enlarged scale of one of the container sec-

tions and showing the relative arrangement of the parts prior to final assembly.

Fig. 3 is a similar view illustrating the interlocked relation of the parts after final assembly,

Fig. 4 is a bottom plan view of the frame member of the container section,

Fig. 5 is a sectional view similar to Fig. 3 showing a modified form of the device, and,

Fig. 6 is a plan view of the decorative flexible sheet having the cushioning means as shown in Fig. 5 applied thereto.

For the purpose of illustration, I have shown my invention as applied to a conventional type of container such as is commercially used for compacts, cigarette cases and the like and which embodies the two sections, generally indicated at 5 and 6 respectively, hingedly connected with each other as at 7.

One or both of the container sections may embody a continuous marginal frame of sheet metal, of any desired configuration, said frame having a top flange 8 and a comparatively narrow downwardly extending flange 9 at the inner edge thereof disposed substantially at right angles to the plane of the flange 8. The free edge of the flange 9 along each side of the frame is provided at suitably spaced points with the outwardly struck lips 10 for a purpose which will be presently explained.

The outer open side of the metal frame member above described, is adapted to be covered by an ornamental or decorative sheet of fabric, leather or other suitable material indicated at 11. The outer marginal edges 12 of this sheet are turned inwardly over and upon the continuous rigid metal member 13 conforming in contour to the frame member of the case section and having a width approximately equal to that of the flange 8. Preferably, a relatively stiff sheet of cardboard, fiber or other material indicated at 14, extends over the inner surface of the decorative sheet 11 and has its edge portions interposed between said sheet and the metal member 13.

It has been found in practice that it is exceedingly difficult to secure a direct clamping or holding pressure of the flange 8 and member 13 upon opposite sides of the edges 12 of the sheet 11, which will effectively prevent said edge portions of the sheet from being pulled outwardly between the metal surfaces when said sheet is subjected to high tensile strain. This is due to the fact that the clamping pressure is non-uniform. I have found however, that such uniformity of clamping and holding pressure upon the

edge of the flexible sheet may be obtained by the use of a suitable cushioning means. As shown in Figs. 1, 2 and 3 of the drawing this cushioning means may comprise a continuous cord or strand 15 of compressible fibrous material. Normally this strand is of substantially circular cross-sectional form and is inserted between the edge portions 12 of the sheet 11 and the flange 8 of the container frame. When the rigid metal member 13 is forced under pressure towards the flange 8, the cord 15 is flattened out and subjected to a high degree of compression as shown in Fig. 3 of the drawing. Therefore said flattened cord has an extensive surface area in contact with the edge portion 12 of the flexible sheet and offers very high frictional resistance to any relative outward movement between the edges of said sheet and the member 13. This compressible cord or cushion will thus transmit absolutely uniform pressure to the edges of the flexible sheet entirely around the container frame and tightly clamp the same at all points upon the surface of the member 13. At the end of the compressing action, the lips 10 on the flanges 9 of the container frame lock over the inner edges of the member 13 as clearly shown in Fig. 3 of the drawing, and therefor preclude any possibility of relative movement between said frame and the member 13 under the expansive pressure of the cushioning strip or cord 15.

If desired the compressible cord or strip 15 may be made of suitably colored or ornamental materials so that when it is compressed and flattened out, it will be visible at the outer edges of the container sections and thus enhance the ornamental appearance of the container.

In Figs. 5 and 6 I have shown a slight modification, in which instead of providing the compressible cushioning means in the form of an independent element as above described I may provide elastic strips or tapes indicated at 16 adhesively or otherwise permanently attached to one side of the flexible sheet 11 along the marginal edges thereof. In applying said sheet these taped edges are first folded inwardly on the sheet, and said folded edges as shown at 17 in Fig. 5, are then positioned between the flange 8 of the container frame and the metal clamping member 13. Thus after the two parts are forced together under pressure and locked in final position by the lips 10 as above explained, the elastic tapes 16 will be placed under compression and by their expansive action will uniformly urge the parts of the sheet 11 between which said tapes are positioned into tight frictional contact with the flange 8 and the member 13 respectively, to thus insure the retention of the edges of said flexible sheet in permanently connected relation to the container frame. By reason of such uniformly distributed pressure and the large areas of surface contact of the parts of the flexible sheet with the opposed metal surfaces, liability of said edge portions being pulled outwardly and being separated from the container frame under any tensile strains to which the flexible sheet might be subjected in the use of the container is obviated.

From the foregoing description considered in

connection with the accompanying drawing it will be seen that I have provided a very simple and inexpensive means whereby the ornamental outer cover sheet for the frame section of the container may be easily, quickly and securely attached thereto and the possibility of portions of said sheet at its marginal edges becoming loose or disconnected from the frame, as is a more or less common occurrence when adhesives or the ordinary clinching or clamping hold of opposed metallic members is employed, is practically precluded. Of course, it will be evident that the device as herein described may be advantageously employed in connection with different types of containers and of various other shapes and sizes than that illustrated in the drawing. Further while I have herein referred to two simple and serviceable embodiments of the compressible cushioning means, other equivalent means subserving the same purpose and functioning substantially as herein described may also be employed.

I claim:

1. In combination, a container section comprising a continuous frame member of angular form in cross-section having an upper horizontal flange and a depending flange at its inner edge, a sheet of non-metallic flexible material on one side of said container section, a rigid clamping member corresponding in contour to the container section and surrounding said depending flange, the marginal edges of said flexible sheet extending around and engaging the upper side of said clamping member adjacent said horizontal flange, cushioning means engaged with said marginal edges of the cover sheet placed under compression by movement of said container section and clamping member towards each other, and applying uniform linear pressure throughout the marginal edges of said cover sheet, and means on said flange of the container section contacting with the inner edges of said clamping member to lock said section and member together against relative movement under the expansion of said cushioning means.

2. In combination, a container section comprising a continuous sheet metal member of angular form in cross section having a body portion constituting a side of said frame member for face to face contact with the corresponding portion of a complementary frame member, said body portion at its inner edge having an inwardly projecting flange, a rigid clamping member corresponding in contour to the container section, a sheet of flexible material covering the opposite side of the container section and having its marginal edges turned inwardly around the outer edge of said clamping member to conceal the latter, and cushioning means engaging a side of said intumed flexible material and placed under compression, between the clamping member and body of the frame member, in the assembly of said clamping member in surrounding relation to the flange on said frame member, said flange and the inner edge of the clamping member having coacting means to lock the same together against relative movement under expansion of said cushioning means.

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