Feb. 25, 1936. S. A. HEIFETZ 2,031,887

COLLAPSIBLE CONTAINER

Filed April 4, 1934

Fig. 1

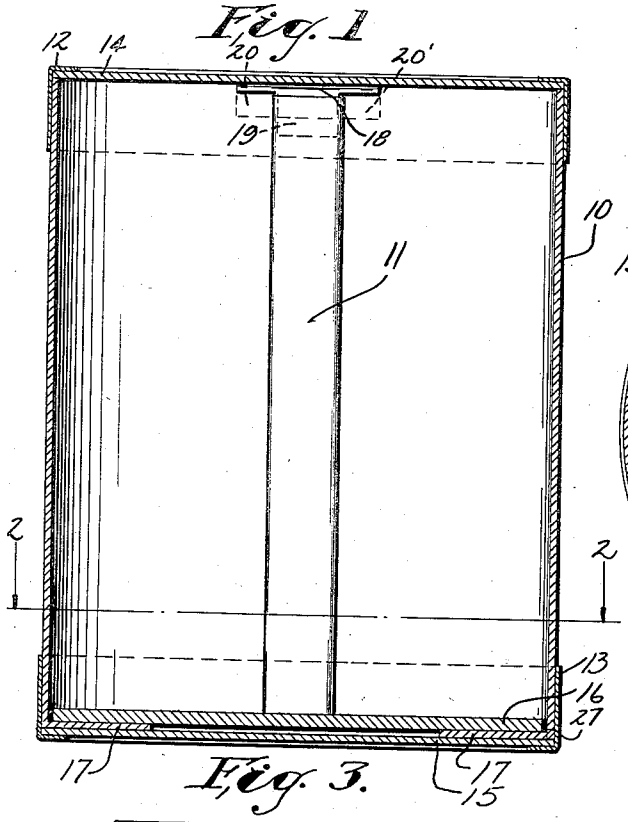


Fig. 2.

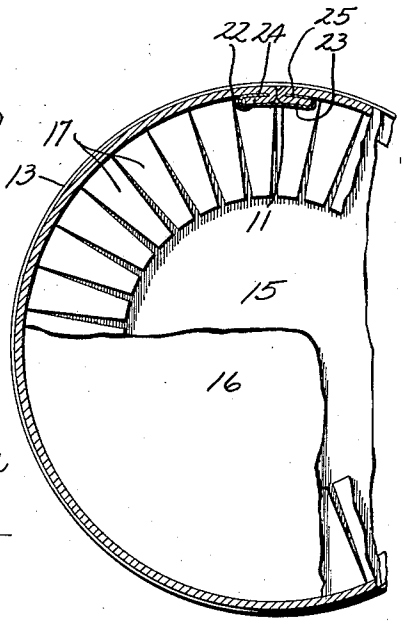


Fig. 3.

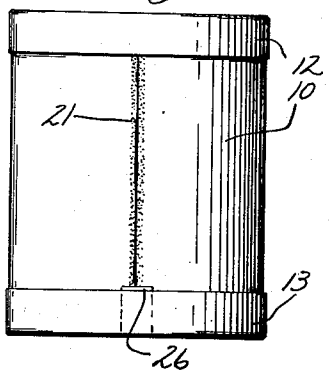


Fig. 4.

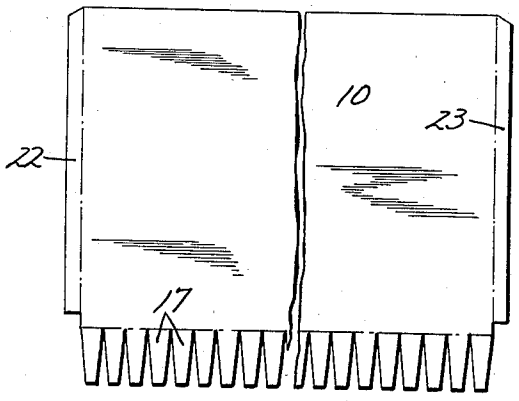


Fig. 5.

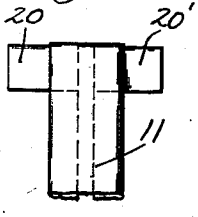


Fig. 6.



Fig. 7.

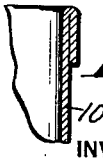
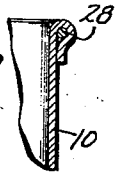


Fig. 8



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Patented Feb. 25, 1936

2,031,887

UNITED STATES PATENT OFFICE

2,031,887

COLLAPSIBLE CONTAINER

Solomon A. Heifetz, Milwaukee, Wis.

Application April 4, 1934, Serial No. 718,895

5 Claims. (Cl. 229—5.5)

This invention relates to collapsible containers and particularly to a container of the type which when assembled, is cylindrical in form.

An object of the invention is to provide a container constructed of flexible material reinforced by rigid elements to impart to it substantial strength.

Another object of the invention is to provide a cylindrical container which may be packed flat when knocked down and which when assembled is devoid of unsightly scoring or creasing in the body thereof.

Another object of the invention is to provide a collapsible cylindrical liquid-tight container.

Another object is to provide a flexible cylindrical wall and a rigid clip at the juncture or seam in said wall.

The foregoing and such other objects of the invention as will appear hereinafter as the description proceeds, will be more readily understood from a perusal of the following specification, reference being had to the accompanying drawing, in which:

Fig. 1 is a view in vertical section of a container embodying my invention.

Fig. 2 is an inverted plan view partly in elevation and partly in section showing the seam and clip employed in the device.

Fig. 3 is a view in elevation of the container showing the seam formed by the ends of the side wall which may be coated with rubber or other resilient material at the contact edges.

Fig. 4 is a fragmentary plan view of the blank which is folded to form the cylindrical wall of the container.

Fig. 5 is a view in elevation of a modified form of longitudinal clip the upper end of which overlaps the cylinder wall to maintain the rotundity thereof at said seam.

Fig. 6 is a view in side elevation of said clip.

Fig. 7 is a view in section of a modified form of upper rim for the cylinder wall.

Fig. 8 is a view in section of a similar top rim reinforced by a circumferential rod or wire.

Referring more particularly to the drawing, the container when assembled is formed of the cylindrical portion, 10, secured by the longitudinal clip, 11, the upper flanged ring, 12, and the lower flanged ring, 13. The ring, 12, serves to secure the cover disk, 14, and the lower flanged ring, 13, serves to retain the bottom disk, 15. To brace the container when assembled I insert a thick circular disk, 16, therein, fitting the same within the bottom thereof. The cylindrical portion, 10, has integral with its lower edge the tabs, 17, as shown in Fig. 4, and when the container is assembled the tabs are turned inwardly at right angles to the container wall and are firmly held between the bottom disk, 15, and the reinforcing disk, 16. A top clip, 18, has a tongue, 19, for insertion into the upper end of the longitudinal clip, 11, and ears, 20 and 20', which are rounded with the same curvature as the cylindrical portion serve to maintain its rotundity. A cylindrical element, 10, is formed of one piece of material and has a seam as at 21 of Fig. 2 formed by the contiguous edges of the material which are folded back as at 22 and 23. The clip, 11, has its longitudinal edges, 24 and 25, folded inwardly to engage the folds, 22 and 23, of the cylindrical element, 10. A snug sliding fit permits easy removal or application of the clip in knocking down or assembling of the container.

A modification of the invention is shown in Fig. 3, wherein the contacting portions of this cylindrical element, 10, at the seam, 21, are coated with rubber or other resilient material, and a rubber pad, 26, shown in dotted lines is held between the container, 10, and the ring, 13, at the lower end of the said seam 21. The outer peripheral edge of the reinforcing disk, 16, is coated with rubber or other resilient material in this modified form of the invention as at 27 of Fig. 1.

In Fig. 5 is shown a modified form of longitudinal clip in which the upper portion is overlapped and extended into ears, 20 and 20', which are slightly curved and serve to preserve the rotundity of the upper edge of the container wall, 10, at the seam thereof.

The upper edge of the container wall, to reinforce the same, may be folded downwardly as in Fig. 7 and in Fig. 8 is shown a similar structure with the additional reinforcement therein of a metal wire or rod. This rod, 28, is flexible to permit the knocking down and assembly of the cylindrical portion, 10. The rod, 28, may be so disposed that it will fall short of the seam, 21, on one of its ends and overlap it with its other end, thus effecting a more rigid juncture of the contiguous longitudinal edges of the cylindrical portion, 10.

It will be understood that the device is capable of numerous changes in structure and design without departing from the spirit of the invention.

Having thus described my invention what I claim and desire to secure by Letters Patent of the United States is:—

1. In a device of the class described a cylin-

drical body portion formed of a single sheet of material having a seam with edges folded back, a resilient coating formed on the contact edges of said seam, a ring encircling the lower edge of said cylindrical portion, and a pad of resilient material interposed between said ring and said cylindrical portion at the lower end of said seam.

2. In a device of the class described, a cylindrical body portion formed of a single sheet of material having a seam with edges folded back, a resilient coating formed on the contact edges of said seam, a flanged ring encircling the lower edge of said cylindrical portion, a pad of resilient material interposed between said ring and said cylindrical portion at the lower end of said seam, a reinforcing disc fitted within the cylinder at the bottom thereof, and a peripheral coating of resilient material on said disc.

3. In a device of the class described, the combination of a cylindrical flexible side wall having a longitudinal seam, folded resiliently coated edges contiguous at said seam, a longitudinal clip slideably engaging the folds, a flanged ring encircling the lower edge of said wall, inwardly folded tabs encircling the lower edge of said wall, and a rigid peripherally resiliently coated disc fitted within the cylinder at the bottom thereof to reinforce the same.

4. In a device of the class described, the combination of a cylindrical flexible side wall having a longitudinal seam, folded edges contiguous at said seam, resilient coating at the contact surface of said edges, a longitudinal clip slideably engaging the folds, an overlapping upper end of said clip spread into ears curved to maintain the rotundity of the upper edge of said side wall, a flanged ring encircling the lower edge of said wall, and a rigid peripherally resiliently coated disk fitted within the cylinder at the bottom thereof to reinforce the same.

5. In a device of the class described, the combination of a cylindrical flexible side wall having a longitudinal seam, folded resiliently coated edges contiguous at said seam, a longitudinal clip slideably engaging the folds, a flanged ring encircling the lower edge of said wall, inwardly folded tabs encircling the lower edge of said wall, a rigid peripherally resiliently coated disc fitted with the cylinder at the bottom thereof to reinforce the same, a downward fold in the upper edge of said cylinder wall, and a wire reinforcement therein.

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