Jan. 25, 1944. J. G. SHAKMAN 2,340,229

CONTAINER

Filed Aug. 24, 1939

Fig. 1.

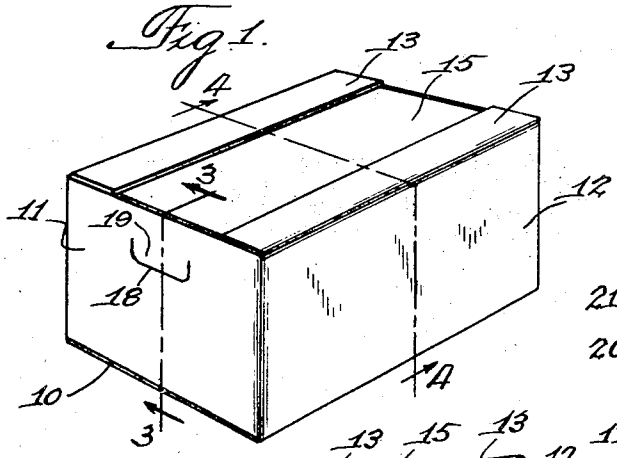


Fig. 3.

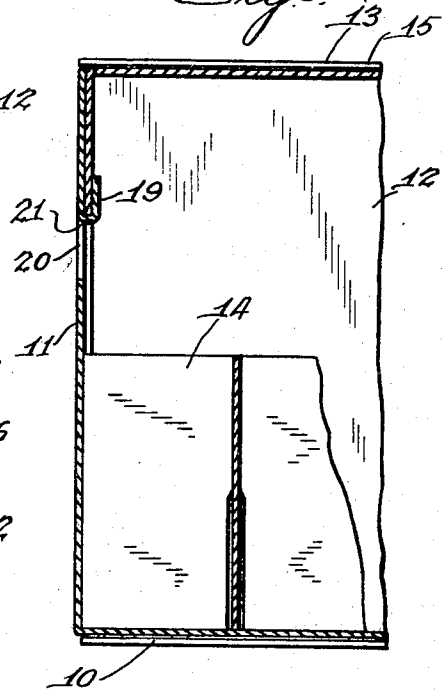


Fig. 2.

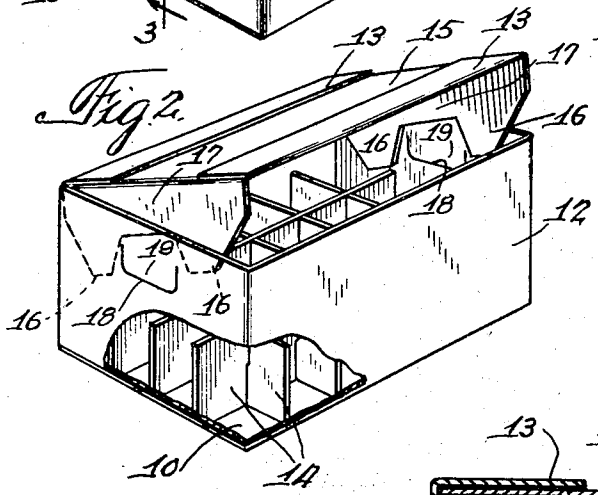


Fig. 4.

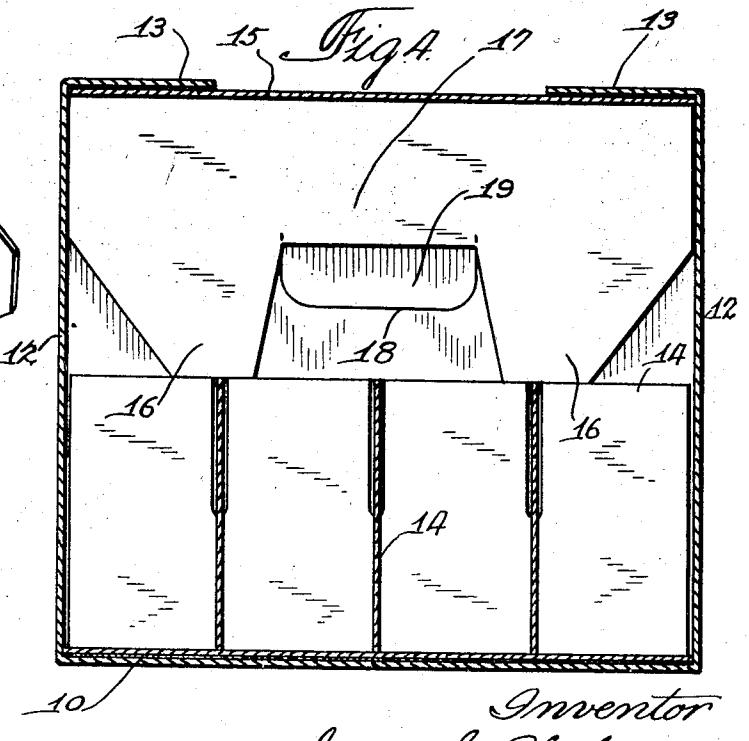
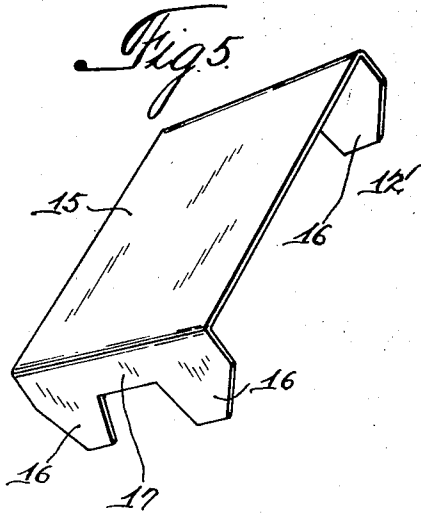


Fig. 5.



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UNITED STATES PATENT OFFICE

2,340,229

CONTAINER

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Application August 24, 1939, Serial No. 291,638

1 Claim. (Cl. 229—44)

My invention relates to shipping containers for bottled or canned goods, more particularly to containers for bottled goods that are injuriously affected by exposure to light for long periods, and my invention has for an object the provision of a durable and economical container or carton of this character.

Cartons or shipping containers have heretofore been constructed having reinforced hand holes in the end walls thereof and having closure members adapted to be unsealed along one edge to provide a hinged cover for the carton, and my invention relates to improvements in cartons of this character, further objects of my invention being to provide a construction in which the carton or container is normally closed against the entrance of substantial quantities of light while providing smooth surfaced hand holes that may be utilized if desired in lifting the carton, and in which improved means are provided for supporting the closure member and reinforcing the hand holes.

For a more complete understanding of my invention, reference should now be had to the drawing, in which:

Fig. 1 is a perspective view illustrating a sealed shipping container embodying my invention;

Fig. 2 is a similar view of the container shown in Fig. 1 partially broken away at one corner and with the hinged cover partially raised after having been unsealed by slitting along one edge;

Fig. 3 is an enlarged fragmentary sectional view taken along line 3—3 of Fig. 1 and illustrating the tab portion of the end wall bent inwardly to provide a hand hole;

Fig. 4 is an enlarged sectional view taken along line 4—4 of Fig. 1; and

Fig. 5 is a detail perspective view of a preferred form of closure member embodying my invention.

Referring now to the drawing, I have shown my invention as embodied in a shipping carton or container for bottled beer, which container is preferably formed of suitable material such as corrugated board or fiber folded so as to form a bottom wall 10, end walls 11, and side walls 12, the side walls 12 being provided with marginal flaps 13. The lower portion of the carton is provided, as shown, with the usual transverse and longitudinal partition members 14, and a closure member 15, preferably constructed as shown best in Fig. 5, is provided for completing the carton.

As shown, the closure member 15 is provided with depending end flaps shaped to provide a pair of spaced apart legs 16 connected by an intermediate portion 17. The legs 16 are of sufficient length so that, when the closure member 15 is initially positioned on the carton with the depending end flaps extending inside the carton alongside the end walls 11, the legs 16 rest on the upper edges of the partition members 14, as shown best in Figs. 3 and 4, and support the closure member so that the marginal flanges 13 on the side walls 12 may be adhesively or otherwise sealed to the edge portions of the closure member 15.

Each of the end walls 11 is provided, as shown, with a channel-shaped or U-shaped slit 18 which extends around and thus defines three edges of a tab portion 19, the fourth edge of which is integral with the end wall 11, and, when the closure member 15 is positioned on the carton as described above, the notch defined in each of the end flaps on the closure member 15 by the inner edges of the legs 16 and the lower edge of the intermediate portion 17 is directly opposite the tab portion 19 with the upper edge of the notch extending along the integral edge of the tab portion. Normally, the tab portions 19 are disposed in the plane of the end walls 11 and form continuations thereof so that the entrance of substantial quantities of light to the container is prevented. It is, of course, well known that beverages such as bottled beer are injuriously affected by exposure to light for extended periods and accordingly should be protected therefrom as much as possible. With cartons constructed in accordance with my invention, light may be excluded from the cartons during storage and transportation periods, and yet hand holes are provided to facilitate lifting the cartons after delivery to the consumer.

Whenever it is desired to utilize the hand holes for lifting the container or carton, it is only necessary to press the tab portions 19 inwardly so that hand holes 20 are formed through which the fingers of the one desiring to lift the carton may be inserted to grip the end wall. As shown in Fig. 3, the tab portion 19, when pressed inwardly, folds about the bending line formed by the lower edge of the intermediate portion 17 of the end flap on the cover member 15, so that the tab portion extends through the notch between the legs 16, and, when the carton is gripped through the hand hole 20, the inner edge of tab portion 19 will be bent upwardly about the portion 17 of the end flap so as to provide a smooth gripping portion 21 (Fig. 3) and so as to lock the end flap of the closure member 15 to the adjacent end wall 11 of the carton. Thus the end flaps on the closure member 15 serve as rein-

forcing members by means of which the hand hole 20 and the end wall 11 are reinforced against tearing, and it will be apparent that the major portion of the load is transmitted to the closure member. The slits 18 which define the tab portions 19 may, of course, be formed in any suitable manner, as by die-cutting the end walls 11 of the container or by perforating along lines corresponding to the slits 18, and the term "slit" as used herein is intended to define either a continuous cut or suitable perforations.

The carton may be unsealed by cutting one of the side walls 12 from end to end so as to sever the associated marginal flap 13 therefrom and the entire closure member may then be swung open as shown in Fig. 2, the opposite marginal flap 13 serving as a hinge. Since the tab portions 19 lock the end flaps of the closure member 15 to the end walls 11 only so long as the tab portions are being gripped through the hand hole 20, the tab portions 19, when not being gripped, permit the end flaps on the closure member 15 to move freely along the end walls 11 when the carton is opened, the outer edges of the legs 16 being tapered, as shown, to permit the closure member to swing about a hinge formed by either of the marginal flanges 13.

While I have shown particular embodiments of my invention, it will be understood, of course, that I do not wish to be limited thereto since many modifications may be made, and I, therefore, contemplate by the appended claim to cover any such modifications as fall within the true spirit and scope of my invention.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

A shipping container comprising end and side walls, said end walls being provided with slits defining tab portions therein, one edge of each tab portion being integral with the wall in which it is disposed, vertically extending partition members within said container, and a closure member having depending end flaps extending into said container alongside said end walls, each of said end flaps comprising spaced apart legs connected by an intermediate portion, said legs being of sufficient length to engage the upper end edges of said partition members to support said closure member with an edge of each intermediate portion being vertically spaced from the upper end edges of said partition members and extending along said integral edge of one of said tab portions, whereby said tab portions upon being pressed inwardly between said legs and upwardly about the edges of said intermediate portions provide hand holes having smooth gripping surfaces and lock said end flaps to said end walls to reinforce the same and prevent tearing, said side walls of said container being provided with upper marginal flaps sealed to the edges of said closure member, whereby severing one of said marginal flaps from its side wall permits opening of said container, the marginal flap of the other side wall serving as a hinge for said closure member and said legs having tapered outer edges to permit hinged movement of said closure member about either of said marginal flaps, said tab portions when not being gripped through said hand holes permitting free movement of said end flaps along said end walls.

JAMES G. SHAKMAN.