

A. H. STEVENSON.
SUPPORTING AND RETAINING DEVICE FOR ARTICLE CARRIERS OR CONTAINERS.
APPLICATION FILED JUNE 14, 1910.

992,998.

Patented May 23, 1911.

Fig 1

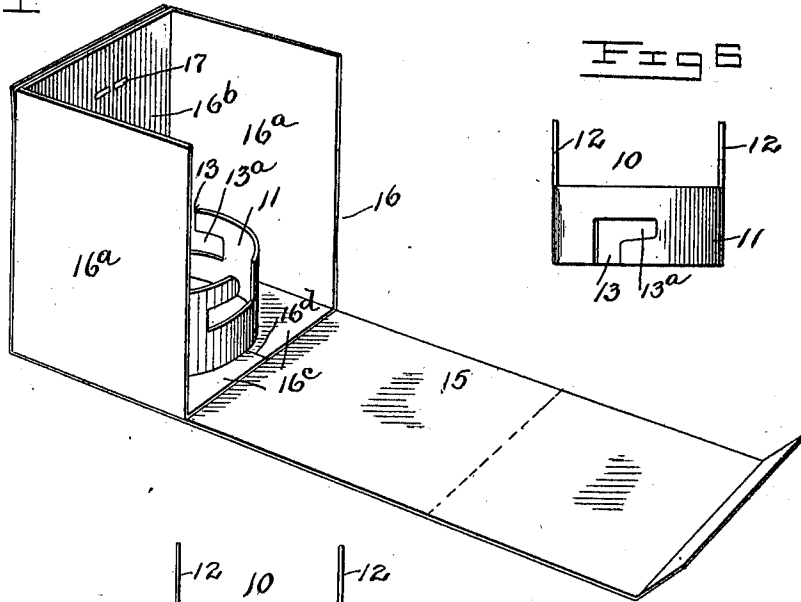


Fig 6

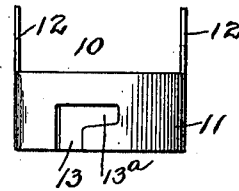


Fig 2

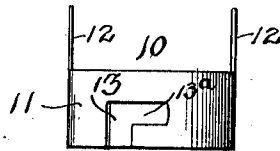


Fig 4

Fig 3

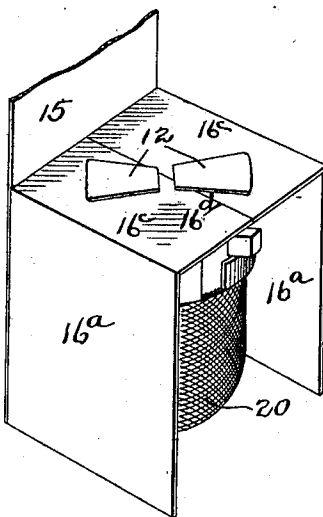


Fig 5

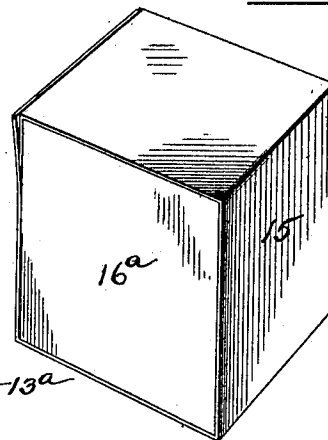
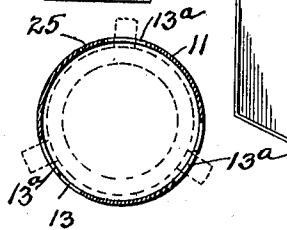
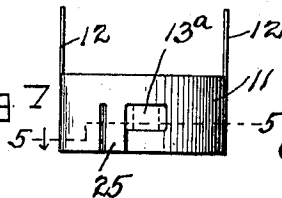


Fig 7



Witnesses

Alfred Springworth
Forace T. Deitz

Inventor

Albert Hugh Stevenson

By

Lucius C. Cushman
Attorneys

UNITED STATES PATENT OFFICE.

ALBERT HUGH STEVENSON, OF MANCHESTER, ENGLAND.

SUPPORTING AND RETAINING DEVICE FOR ARTICLE CARRIERS OR CONTAINERS.

992,998.

Specification of Letters Patent.

Patented May 23, 1911.

Application filed June 14, 1910. Serial No. 566,775.

To all whom it may concern:

Be it known that I, ALBERT HUGH STEVENSON, subject of the King of England, residing at Manchester, in the county of Lancaster and Kingdom of England, have invented new and useful Improvements in Supporting and Retaining Devices for Article Carriers or Containers, of which the following is a specification.

My invention relates to improvements in retaining devices for article containers or carriers and has particular relation to devices used for supporting and retaining fragile articles such as incandescent gas mantles, incandescent electric lamps and the like.

Among the objects of my invention are to be found the following: (1) To provide a device for this purpose which can be readily placed in position within the carrier or container and which forms practically a permanent part thereof. (2) The provision of a device for this purpose into which the article may be readily placed and thereafter turned to prevent a withdrawal thereof, and which, if desired, may have means for preventing accidental release or a returning movement of the article to an extent sufficient to permit its accidental withdrawal from the device. (3) To provide a device of this character which will serve as a securing element in the formation of the carrier or container. (4) To provide a device of this character which will support the article out of contact with any portion of the carrier or container, without affecting the ability to visually inspect the article when the carrier or container is opened out or uncovered, and without necessitating a removal of the article to permit such visual inspection.

Other and further objects of the invention are to provide a device of this character which can be secured to various types of carriers or containers, which can be readily placed in position therein, which serves as a strengthening device therefor, which is of relatively light weight, which is durable in construction, and which can be manufactured and placed in use at a low cost.

To these and other ends the nature of which will be readily understood as the invention is hereinafter disclosed, said invention consists in the improved construction and combination of parts hereinafter fully described, illustrated in the accompanying

drawings, and particularly pointed out in the appended claims.

In the accompanying drawings, in which similar reference characters indicate similar parts in each of the views,—Figure 1 is a perspective view of an article container to which my improved device has been applied, the container being shown in open position. Fig. 2 is a perspective view of a portion of the container shown in Fig. 1, the device being shown as having an incandescent gas mantle positioned therein. Fig. 3 is a perspective view of the container closed. Fig. 4 is a side elevation of my device detached from the container. Fig. 5 is a horizontal sectional view of the same taken on line 5—5 of Fig. 7. Fig. 6 is a view showing a modified form of my device. Fig. 7 is a side elevation of a still further modification.

Fragile articles of commerce, such as incandescent gas mantles, incandescent electric lamps, and the like, are generally packed in separate containers or carriers, in which the article remains from the time it is packed at the factory until it is to be placed in position for use, the carrier or container acting not only as a supporting means for the article, but also during its transportation, so that it is necessary that the article be positioned within the carrier in such manner as to prevent liability of the article being damaged while in storage or during transportation. To effect this result various forms of carriers or containers have been employed, and these have generally been in the form of foldable boxes formed of cardboard or the like in order that the weight of the container may be reduced to a minimum. The present invention does not pertain particularly to the character of the carrier or container, it being applicable for use in connection with various forms, some of which are well known in the trade. The invention pertains more particularly to the supporting or retaining means for positioning and holding the article in proper position within the carrier, or container, although the device itself may serve as a strengthening device or a connecting means for one type of box or container, as indicated in the drawings.

The principal feature of my invention consists of the retaining member 10, which is preferably in the form of an annular band-like portion 11, formed of metal, wood, cardboard or other suitable material, and

which is provided with one or more projections 12, the latter being adapted to pass through one of the walls of the container or carrier, and folded or bent downward thereon for the purpose of securing the member 10 to such wall. The band or ring 11 is also provided with a suitable number of bayonet slots 13 each having its entrance at the opposite edge of the ring from that from which the projection 12 extends. The number of bayonet slots 13 employed is controlled by the particular type of article to be carried; for instance, if the article is an incandescent gas mantle of the inverted type, as indicated in the drawings, the slots are preferably three in number and spaced equally about the periphery of the ring.

As will be seen from the drawings, the horizontal portion 13^a of the bayonet slot is spaced from the closed edge of the band or ring 11, which contacts with the wall, so that the article is retained out of contact with such wall, being supported entirely by the walls of the slot. As a result, pressure applied to the walls of the carrier or container can have no effect upon the article itself, such pressure simply being placed on the band 11, any movement of which obviously does not change the relative position of band and article.

As will be readily understood, the projection or projections 12 permits of the securing of the member 10 to any desired type of container or carrier. In the drawings I show one form of such carrier or container, said carrier being formed of two members 15 and 16, said members being connected together by a staple 17. The member 15 forms the closing member, while the member 16 is the inner member to which the retaining member 10 is secured, the member 16 being formed from a suitable blank which, when folded, will provide two side walls 16^a, a rear wall 16^b, and a bottom 16^c divided along the line 16^d, the staple 17 connecting the back wall 16^b to one end of the member 15 as indicated in Fig. 1. As indicated in Fig. 2, where two projections 12 are employed, said projections pass through the bottom 16^c on opposite sides of the line 16^d and are bent inwardly toward each other with the result that these projections 12 serve to firmly secure the divided bottom 16^c in permanent position against opening outward, while the fact that said bottom lies between the two opposing surfaces provided by the edge of the band 11 and the inner face of the projections when bent, prevents distortion of the bottom. As will be seen, the folding of the member 15 to the position shown in Fig. 3, places a wall of said latter member over the bent over portions of the projections 12, so that the latter are not exposed when the container is closed.

To place the article in position, the carrier

or container is opened out in the position shown in Fig. 1, and the article, in this case an incandescent gas mantle 20, placed in position by the entering of the base-ring projection formed thereon into the open ends of the slots 13 and then turning the mantle so as to place such projections into the horizontal portion 13^a of the slot. In this position, the mantle is held against a movement axially of the retaining member 10 so that the article is then supported in such manner as to be free from contact with any of the walls of the container or carrier.

If desired, means may be provided for retaining the article against a rotative movement, after having been placed in a secured position. Any suitable means may be employed for this purpose, two different ways being disclosed in the drawings, that shown in Fig. 6 being provided by making the opposing walls of the horizontal portion 13 inclined relative to each other, either one or both of such opposing walls being inclined, the projections in this case being retained in position by being forced into the wedge-like opening provided by such inclined walls. In Fig. 7 the means employed for this purpose consists in placing in one of the bayonet slots a tongue 25 which may be bent into and out of the slots, the operative position of the tongue being that in which it is located in the peripheral plane of the band, the tongue being bent upward or outward to permit of the entrance of the base ring projections, and being bent backward into place after the article has been rotated a sufficient distance to permit the tongue to reach its normal position. With this form of means the horizontal portion 13^a of the slot may be formed either as in Fig. 4 or as in Fig. 6.

As will be readily understood, the securing of the article positioned on the member 10 places it firmly in position in the carrier or container, and as the latter is of a sufficient size to prevent a contact of its walls with the article, excepting under the action of excess pressure thereon, the container or carrier may be folded to position, and provide a carrier of serviceable character. When it is desired to inspect the contents, it is necessary only to unfold the carrier or container thereby leaving the entire article exposed for inspection without necessitating a removal of the article from the member 10. When the article is to be placed in use, it is simply rotated to place the projections of the mantle in alinement with the open end of the slot 13 (the tongue 25 being bent out of position, if the latter structure is being employed) after which the article may be lifted out of the member 10 without in any way destroying the carrier or container.

While I have herein disclosed, and prefer to secure the member 10 to the bottom of the carrier or container, it is to be understood

that I do not limit myself to this particular positioning of the member, since it will be obvious that it may be secured to any of the remaining walls of the carrier, the particular position of the member 10 being dictated according to the preference of the manufacturer whose goods are being packed therein.

While I have herein shown and described the preferred form of carrying my invention into effect, it will be readily understood that variations therein may be made according to the circumstances of use, and I reserve the right to make any and all such changes as may fall within the spirit and scope of my invention as expressed in the accompanying claims.

Having thus described my invention what I claim as new is:

1. The combination with a carrier or container, of a ring-shaped article-receiving and retaining member having one or more projections on one edge adapted to secure the member to one of the walls of the carrier or container, said member having bayonet slots positioned to permit a ready insertion of the article, and to retain it out of contact with the walls of the carrier or container.

2. A receiving and retaining member for fragile articles such as incandescent mantles of the inverted type comprising a ring-shaped member having slotted ways leading inwardly from one edge and spaced from the opposite edge and adapted to receive and removably retain an article therein, and also having integral securing means at its opposite edge.

3. An article-receiving and retaining member comprising a ring-shaped member having slotted ways leading inwardly from one edge adapted to receive and removably retain an article therein, and also having one or more securing projections at its opposite edge.

4. The combination with a foldable carrier or container having one of its walls divided into two parts, of an article receiv-

ing and retaining member having projections extending from one edge thereof, said projections being adapted to be passed through said divided wall and secure the latter against substantial relative movement, said member also having means to receive and retain the article therein.

5. The combination with a foldable carrier or container having one of its walls divided into two parts, of an article-receiving and retaining member having projections extending from one edge thereof, said projections being adapted to be passed through said divided wall and secure the latter against substantial relative movement, said member also having slotted ways to receive and retain the article therein in spaced relation to said divided wall.

6. An article-receiving and retaining member comprising a ring-shaped member having slotted ways leading inwardly from one edge, and means extending into one of the ways for temporarily retaining the article therein.

7. An article-receiving and retaining member comprising a ring-shaped member having slotted ways leading inwardly from one edge, and means integral with the member and extending into one of the ways for temporarily retaining the article therein.

8. An article-receiving and retaining member comprising a ring-shaped member having slotted ways leading inwardly from one edge, and a bendable portion of less width than the width of the slotted way formed integral with the ring-shaped member, and movable into and out of a position to form a retaining element within a way for temporarily retaining the article therein.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ALBERT HUGH STEVENSON.

Witnesses:

ERNALD SIMPSON MOSELEY,
MALCOLM SMETHURST.