B. K. FORD.

RETAINER FOR CONTAINER CLOSURES.

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1,307,351.

Patented June 24, 1919.

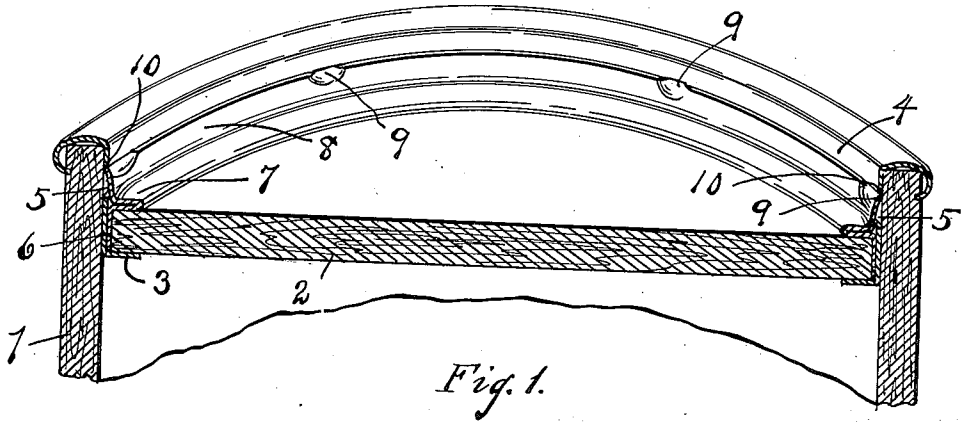


Fig. 1.

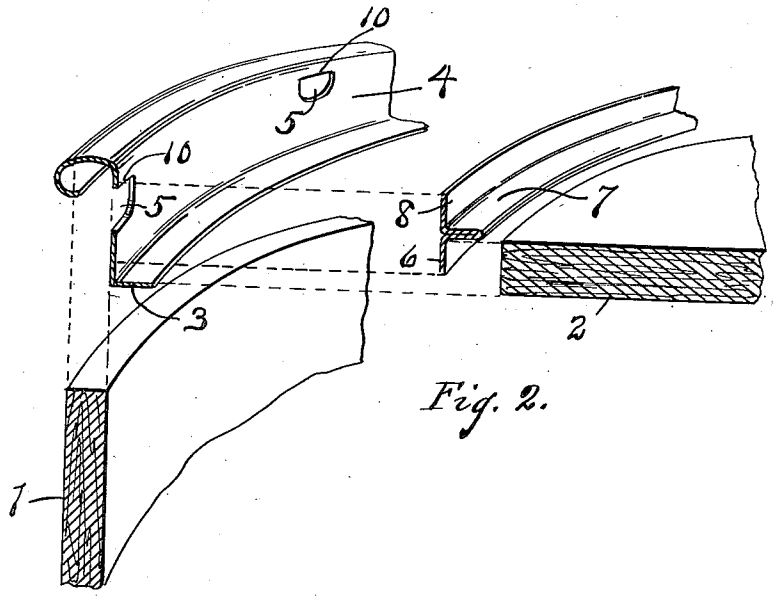


Fig. 2.

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RETAINER FOR CONTAINER-CLOSURES.

1,307,351. Specification of Letters Patent. Patented June 24, 1919.

Application filed June 22, 1918. Serial No. 241,404.

To all whom it may concern:

Be it known that I, BEN K. FORD, a citizen of the United States, and residing at East Orange, in the county of Essex and State of New Jersey, have invented a new and Improved Retainer for Container-Closures, of which the following is a specification.

This invention relates to retaining means for the heads and ends of barrels, boxes, pails and other containers, and its object is to provide a novel freely removable retainer which co-acts with a stationary support secured to the end of the container for positioning the closure.

This invention consists of a metallic support for the closure attached to the end of the container in such a manner as to constitute a shelf or flange against which the closure is held, and a retainer adapted to engage the head and support, being substantially T shaped in cross section, one of the arms extending between the support and the closure, the shank of the T lying against the closure and the other arm lying against the support outside of the closure, the support being formed with notches into which extend bent out portions of the edge of the outer arm of the retainer to hold the parts securely in position.

In the drawing, Figure 1 is a view, partly in section and partly in elevation of a container provided with this improved retainer. Fig. 2 shows the details of this construction. Similar reference characters refer to like parts throughout the several views.

The container 1 is shown to be cylindrical although the invention is adapted for containers of any other shape. The closure 2 fits loosely into the open end of the container and rests against a shelf or flange 3 of the supporting member 4 which is secured to the container in any desired manner. The support is formed at intervals with notches 5.

The retainer is preferably substantially T shaped in cross section, one arm 6 extending down between the closure and supporting member 4. The shank 7 of the T bears against the closure and presses it against the flange 3, while the other arm 8 of the T bears against the support. The upper edge of the arm 8 is formed with ears 9 corresponding in number to the notches 5 to extend into these notches below the upper edges 10 thereof, these ears being formed after the retainer is in position by means of a small punch and hammer, or even by means of a screw driver or other tool. These ears prevent the retainer from slipping outward under pressure.

When the closure is to be removed, a thin flat tool is inserted between the retainer and the support and moved longitudinally of the retainer under the ears 9 which are thereby sprung out of the notches 5, and, because of the upper edge of the arm 8 being normally just above the edges 10 of the notches, these ears will not spring back into them. After all the ears are thus lifted out, the retainer and closure will be freely removable. After being replaced the same ears or new ears can be sprung out into the notches. The advantage of the arm 6 is that it holds the retainer against the member 4, preventing the flange 7 from swinging up and releasing the closure. The proportions of the various parts may all be changed without departing from the spirit of my invention as set forth in the following claims.

I claim:—

1. In a retainer for container closures, the combination of a support comprising a shelf and a part integral therewith and secured against the inner side of the container at its end, said part having perforations in a row parallel to the shelf, and a sheet metal retainer which is T shaped in cross section and having its central portion formed by folding the sheet metal upon itself, and pressing against the closure, one edge extending down the edge of the closure and the other edge extending outwardly and bent out at intervals into said perforations.

2. In a retainer for container closures, the combination of a supporting member comprising a body lying flat against the inner side of the container and a flange extending at right angles therefrom to support the closure, and a retainer fitting against said body within and without the plane of the outer surface of the closure and having an intermediate portion extending in contact with said outer surface of the closure, the outer edge of said retainer and the body of the support being formed with interlocking members.

BEN K. FORD.