

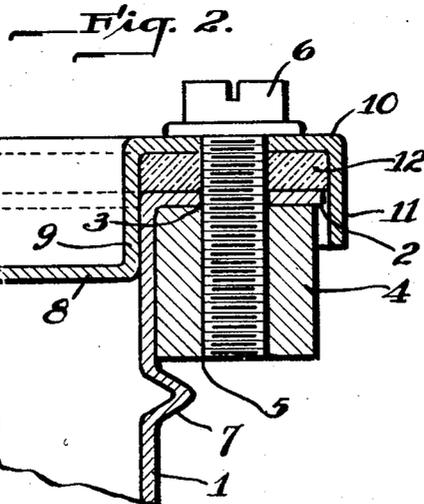
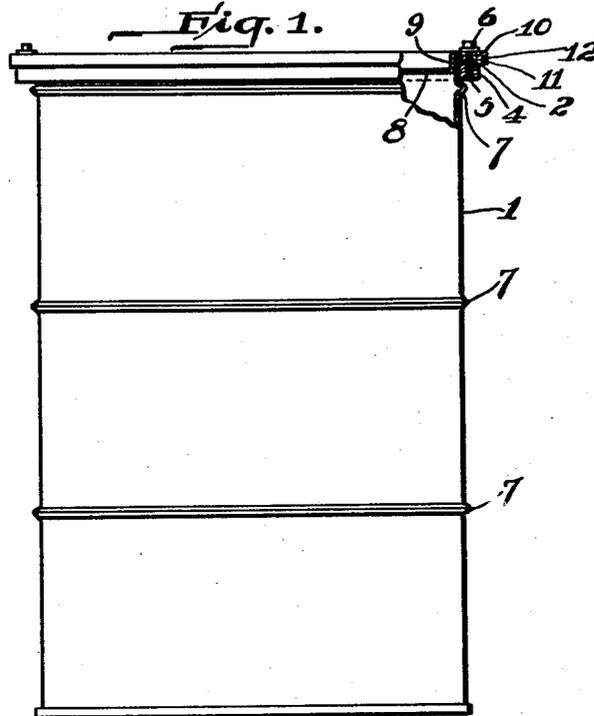
June 21, 1932.

H. W. MONSON

1,864,313

METAL SHIPPING CONTAINER

Filed May 27 1931



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UNITED STATES PATENT OFFICE

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METAL SHIPPING CONTAINER

Application filed May 27, 1931. Serial No. 540,316.

This invention relates to closure constructions for metal containers, and more particularly to containers in which a replaceable head is detachably held in place by means of bolts passed through cooperating flanges.

It is feasible to use metallic containers over and over again, and therefore it is desirable to provide them with replaceable heads which can be quickly and easily attached and removed, and which will effectively and safely seal the container when in place. The replaceable head constructions available hitherto ordinarily comprise several parts which are detached when the head is removed, and which must be put back in place when it is again applied to the container. Such loose parts are often misplaced or lost, thus causing delay, expense, and unnecessary waste of time in replacing the head. This is true in particular concerning gaskets, which must be handled carefully to prevent damage, and which must be carefully adjusted every time the head is attached. Furthermore, the rough handling which such containers are subject to often causes them to be damaged, particularly by denting or otherwise misshaping and damaging the chimes. This has been a serious disadvantage because the containers may be thus rendered useless through inability to replace the heads.

It is among the objects of my invention to provide a closure construction for metallic containers which is adapted to conveniently attach and remove a head, which reinforces the end of the container, effectively seals it, requires a minimum number of loose parts, and which provides means for holding a sealing gasket in place even when the head is removed. Other objects and advantages will appear hereinafter.

In the accompanying drawing, Fig. 1 is a side elevation of a metal container partly in cross section showing the preferred embodiment of the invention; and Fig. 2 an enlarged fragmentary cross section of a portion of the closure shown in Fig. 1.

The construction embodying my invention comprises a head having a side wall telescoped in the open end of a container, the side wall being extended outwardly from its

upper end to form a top flange over a lip extending outwardly around the container opening, and being then bent to form a depending skirt surrounding the lip. There is thus provided a recess within which a gasket can be pressed. The head is bolted to the container by means of draw bolts passed through the flange, lip and gasket and engaging a bolt ring held against the lower side of the lip by any suitable means.

Referring to the drawing, a metallic container 1 has an outwardly extending integral lip 2 at its open end provided with a plurality of bolt-receiving holes 3. Encircling the container directly beneath the lip is a bolt ring 4 provided with a plurality of threaded openings 5 adapted to receive bolts 6. The ring is held against the under side of the lip by any suitable means, such as a bead or swell 7 formed in the container wall. The ring takes the place of the nuts usually required for each bolt, and it thereby eliminates a source of loose parts with their attendant inconvenience and disadvantages. In order to provide maximum sealing surface for the head to bear against, and to insure a stronger chime, lip 2 and ring 4 are of substantially the same width.

The container is provided with a head 8 adapted to fit down within the end of the container in the customary manner. As shown well in Fig. 2, the head is provided with a side wall 9 integral with and extending upwardly from the body of the head. The side wall telescopes within the container opening. At its upper end side wall 9 is bent at a right angle to form a top flange 10 overlying and spaced from lip 2. The outer end of the flange is bent downwardly, forming a skirt 11 surrounding the lip. These portions of the head form an annular recess in which there is disposed a gasket 12. The top flange and gasket are provided with bolt holes similar to those in lip 2.

In assembly, the head is forced into position with the bolt openings in alignment. Bolts 6 are then drawn up to produce compression of the gasket, thereby forming a seal. The gasket is pressed into the channel formed by the side wall, flange and skirt, so as to remain

therein when lifted off by the head. This prevents damage to and loss of the gasket while the head is removed. Such a construction also saves time in removing or attaching the head because the gasket need not be touched.

The shape of the head also has the advantage of substantially strengthening the chime and preventing injury to the end of the container.

According to the provisions of the patent statutes, I have explained the construction and mode of use of my invention and have illustrated and described what I now consider to represent its best embodiment. However, I desire to have it understood that, within the scope of the appended claims, the invention may be practiced otherwise than as specifically illustrated and described.

I claim:

1. The combination with a metallic container open at one end and provided peripherally with a lip surrounding said end, of a bolt ring encircling said container on the under side of said lip, means associated with said container holding said ring adjacent said lip, a head for said end comprising a central body portion, a side wall extending upwardly from said body portion telescopically fitting within the end, a top flange forming a continuation of said side wall overlying said lip and bent downwardly about its periphery to form a skirt surrounding the lip, said skirt, flange and side wall forming with said lip a substantially enclosed annular chamber, a sealing gasket disposed in said chamber, the flange, lip, and sealing gasket being provided with bolt openings aligned with threaded bolt openings disposed about said bolt ring, and draw bolts in said openings fastening the head to the container.

2. The combination with a metallic container open at one end and provided with a continuous horizontal lip surrounding said opening, of a bolt ring encircling said container and held against the under side of said lip by a swell struck outwardly from said container, a head for said end comprising a body portion integral with an upwardly extending side wall telescopically engaging the container within said end, a top flange forming a continuation of said side wall overlying said lip and bent downwardly about its periphery to form a skirt surrounding the lip, said skirt, flange and side wall forming with said lip a substantially enclosed annular chamber, a sealing gasket pressed into said chamber, the flange, lip and sealing gasket being provided with bolt openings aligned with threaded bolt openings disposed about said bolt ring, and draw bolts in said openings fastening the head to the container.

In testimony whereof, I sign my name.
HEIMER W. MONSON.