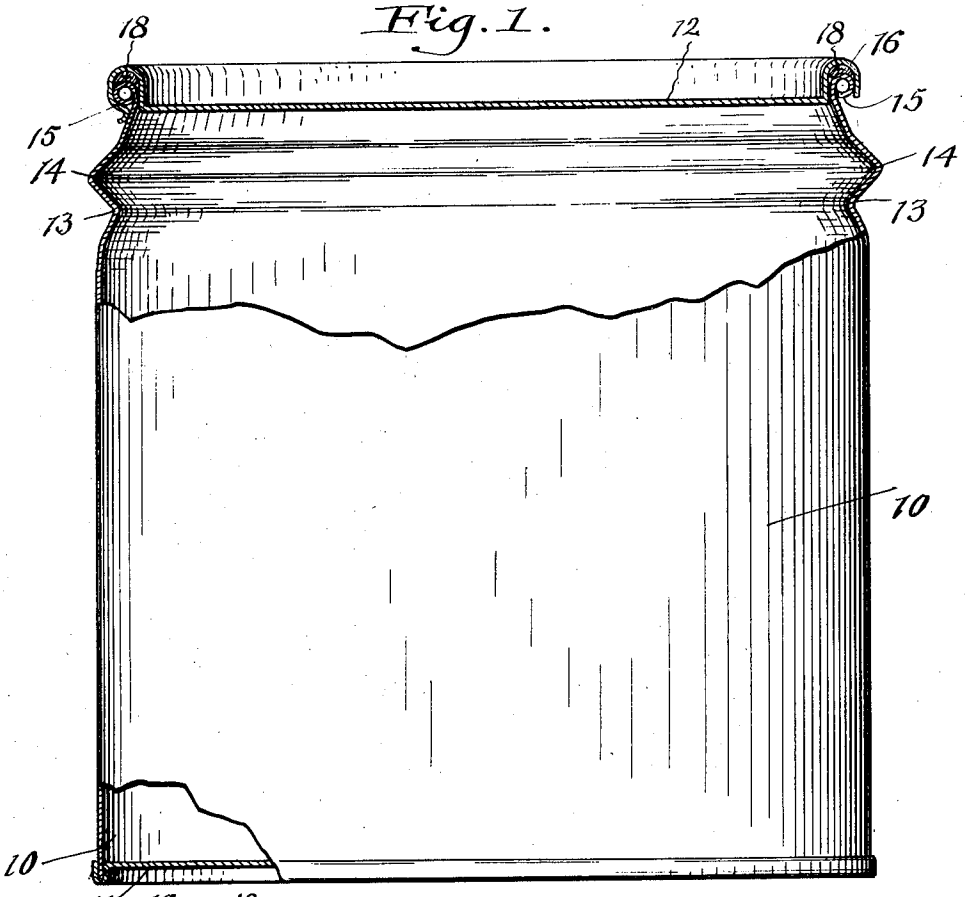
March 26, 1929. D. W. THOMAS 1,706,638

METAL CONTAINER

Filed Jan. 7, 1926

Fig. 1.



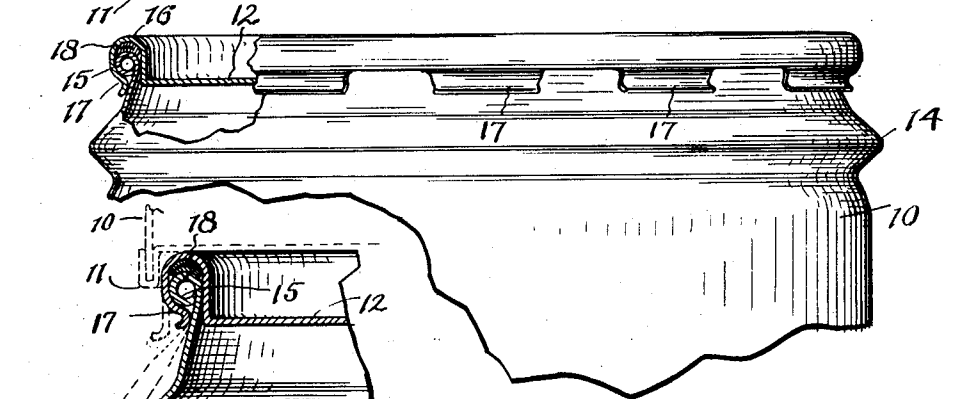


Fig. 2.

Fig. 3.

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Patented Mar. 26, 1929. 1,706,638

UNITED STATES PATENT OFFICE.

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METAL CONTAINER.

Application filed January 7, 1926. Serial No. 79,735.

This invention relates to certain new and useful improvements in metal containers such as are used for the shipment of paints and other liquid or semi-liquid materials, and has for its main object the provision of a container which is strong and durable, inexpensive to manufacture, and which has a removable cover which can be easily applied and fastened in position so as to make a leak-proof joint and can be readily and quickly removed.

The invention pertains to a container having a cover which is designed to be fastened or locked in position by bending inwardly beneath a bead or shoulder provided at the top of the container, a plurality of locking lugs or tongues, and it is a feature of the present invention that the container is provided near the top with an outstanding rib, preferably projecting beyond the body of the container as well as beyond the bead under which the lugs of the cover are designed to be bent, this rib not only serving to strengthen the top portion of the container, but as a protector for the lugs both during shipment before the container is filled and therefore before the lugs are bent inwardly, as well as after it is filled and the lugs have been bent to their final or locking position. Additionally it serves as a fulcrum for a suitable tool to pry the inwardly bent ends of the lugs outwardly for the removal of the cover, and by reason of the fact that there is provided what may be termed a reduced neck portion above the rib, of less diameter than the body portion, there is permitted a nesting of the containers for convenience in shipment.

The invention may be further briefly summarized as consisting in certain novel details of construction which will be described in the specification and set forth in the appended claim.

In the accompanying sheet of drawings, Fig. 1 is a side elevation of a container embodying my invention with the upper portion in section; Fig. 2 is a similar view of the upper portion of the container, the major part being in elevation; Fig. 3 is a slightly enlarged fragmentary sectional view illustrating by dotted lines how the containers may be nested in the manner referred to above and also how a cover releasing tool can be fulcrumed on the rib of the container to bend the lugs outwardly.

Referring now to the drawings, 10 represents the body of the container, 11 the bottom and 12 the cover, these parts being formed of sheet metal, and the container being preferably annular in shape.

The body of the container is provided near the top with a groove 13, and above the groove with an outstanding rib 14, preferably V-shaped in section, and above the rib the top portion is extended inwardly and provided at the extreme top with an annular bead 15.

The cover 12 is provided with a depressed portion which fits with a close but sliding fit inside the beaded top of the container, and its marginal portion is in the form of a channel 16 which is designed to fit down around the outside of the bead 15, the outer wall of the channel being formed with a plurality of locking lugs 17.

In the channel is a gasket 18, which is designed to be tightly compressed between the channel portion of the cover and the bead so as to make a leak-proof joint. The cover is adapted to be secured in place by a suitable applying tool which first presses the cover tightly downward so as to compress the gasket 18, and then bends the lugs 17 inwardly beneath the bead 15.

Containers having covers locked in position by the method herein illustrated, have not been satisfactory in all respects, especially on account of the liability of the lugs catching on projecting objects and being pulled outward, this being true not only while the containers are being shipped or handled, before the covers are sealed, but also after the containers are filled and the covers locked in place by the inward bending of the lugs.

This objection is substantially overcome by the present invention by the provision of the outstanding rib 14 just beneath the bead, for by reason of the fact that it projects outwardly, not only beyond the body of the container, but materially beyond the bead, it serves as a protector for the lugs.

It is to be noted that the bead is inset beyond the upright side of the body, and that the over-all or outside diameter of the cover is less than that of the body, this construction not only adding to the efficiency of the rib 14 in its lug protecting function, but it admits of the nesting of the containers one on top of the other, as indicated in Fig. 3, the bottom 11 of the container being preferably inset or de-

pressed so as to provide a marginal flange-like portion which will fit over the cover of the container beneath.

The rib 14 not only serves to strengthen the top portion of the container and as a protector for the lugs of the cover, but it reduces the liability of the cover otherwise being loosened or damaged by blows, and what is equally important, it serves as a continuous or annular fulcrum extending all about the top portion of the container against which a tool, indicated at 19 in Fig. 3, can be applied and fulcrumed to bend the locking lugs outwardly when removal of the cover is desired, the lugs when bent inwardly being preferably provided at the bottom with a slightly out-curved lip under which the point of the tool 19 can be placed so as to permit the lug to be readily bent outward by rocking the tool on the ridge of the rib as a fulcrum.

It will be seen from the above, that the improved features of construction, including the provision of the rib 14 and the necking-in of the top portion which is provided with the cover receiving bead, possess numerous important advantages which render the container very satisfactory as to durability and utility, and also in the respect that a very efficient container is provided at a relatively low cost.

Having described my invention, I claim:

A container having a body portion, a bead formed around the top of the body portion, a detachable cover having a marginal portion fitted over said bead, locking lugs extending from said marginal portion and bent beneath said bead, the free ends of said lugs projecting outwardly from said body portion, and an outstanding wedge-shaped annular shoulder projecting from said body portion below the free ends of said lugs and adapted to serve as a fulcrum for bending the free ends of said lugs away from the body portion in detaching said cover.

In testimony whereof, I hereunto affix my signature.

DAVID W. THOMAS.