J. JASZKUL.

METAL BARREL,

APPLICATION FILED MAR. 8, 1917.

1,231,368 Patented June 26, 1917.

Fig. 1.

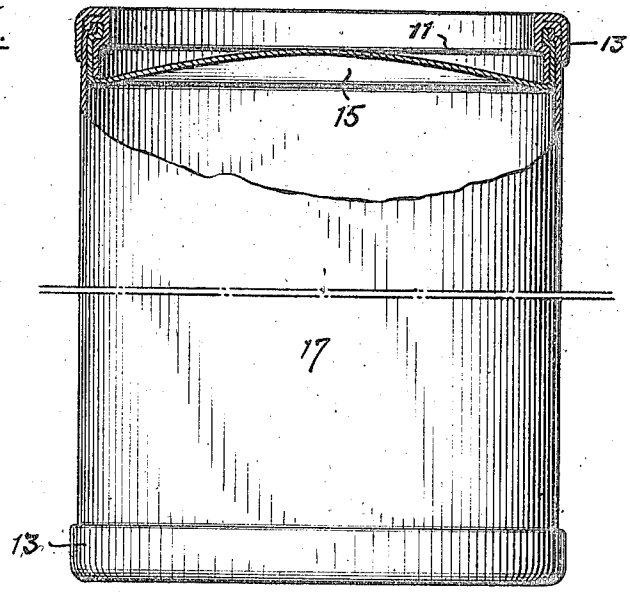


Fig. 2.

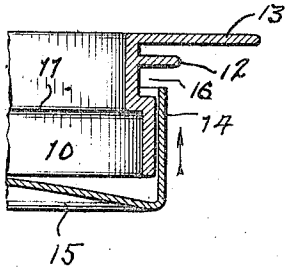


Fig. 3.

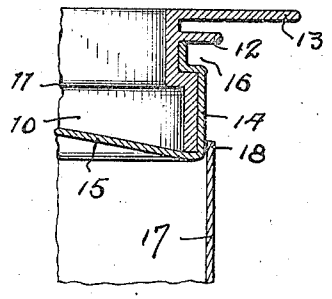


Fig. 4.

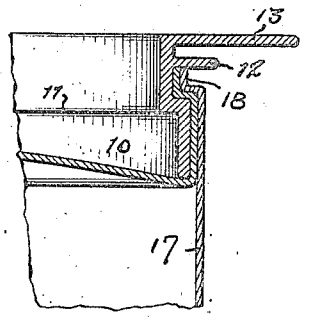


Fig. 5.

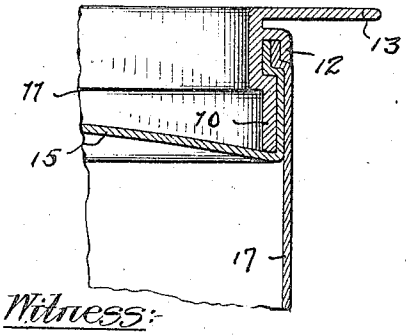
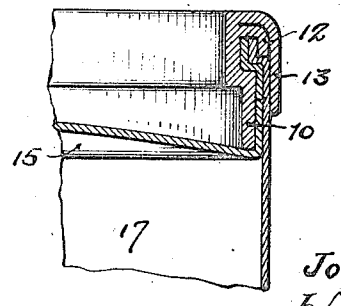


Fig. 6.



Witness:

Titus H Crane

Inventor

JOHN JASZKUL

by his Attorneys

Howson and Howson

UNITED STATES PATENT OFFICE.

JOHN JASZKUL, OF MASPETH, NEW YORK.

METAL BARREL.

1,231,368. Specification of Letters Patent. Patented June 26, 1917.

Application filed March 8, 1917. Serial No. 153,371.

To all whom it may concern:

Be it known that I, JOHN JASZKUL, a subject of the Emperor of Russia, and residing at Maspeth, Long Island, in the county of Queens and State of New York, have invented a certain new and useful Improvement in Metal Barrels, of which the following is a specification.

My invention relates to metal barrels and particularly to improved means for securing the barrel end to the barrel body, the object of my invention being to provide a tight, strong joint between the parts which will withstand injury from rough treatment during shipment.

Referring to the accompanying drawings;

Figure 1 is a broken side elevation, partially in section, of a barrel in which my invention is embodied;

Fig. 2 is a partial vertical section through the barrel end and locking ring detached;

Fig. 3 is a similar view of the locking ring and barrel end assembled and in position to enter the barrel body;

Fig. 4 is a similar view showing the barrel end crimped upon the locking ring;

Fig. 5 is a similar view showing the inner or holding flange of the locking ring crimped down upon the joint between the barrel end and body; and

Fig. 6 shows the outer or protecting flange to cover and secure the joint.

The present invention particularly relates to metal barrels such as are commonly used for shipping oil, gasolene and other substances which are likely to vaporize and create pressure within the barrel. In barrels of this type the danger of leakage is very great and the joint between the barrel end and the wall of the barrel must be very secure in order to keep the barrel tight. My invention relates to means for effecting such a joint and comprises a novel and improved locking ring which not only insures a tight joint when the barrel is made, but is sufficiently strong and rigid to withstand the shocks incident to rough handling during transportation. As here shown this locking ring comprises an annulus 10 of any suitable metal, preferably malleable steel, shouldered at 11 and having outwardly extending flanges 12 and 13 integral with the outer end of the ring lying beyond the shoulder 11. The diameter of the inner end of the ring is such that it fits snugly within the upstanding flange 14 of the cupped barrel end closure 15, and this flange 14 is of such depth that it extends beyond the shoulder 11 so that it may be rolled or crimped into the channel 16 formed between the shoulder 11 and the flange 12, as indicated in Fig. 3, thus locking the ring 10 to the barrel end. The ring and barrel end thus assembled may be set into the open end of the barrel 17, the edge 18 of which is positioned against the flange 12, and then similarly crimped or rolled into the channel 16 above the flange 14 of the end closure 15, as indicated in Fig. 4. This operation unites the ring 10 and closure 15 to the barrel body, but the joint is not strong enough to withstand internal pressure or the shocks incident to shipment. In order to render it so, I roll down the short flange 12 at the outer end of the ring into the channel 16 and thus clamp the parts together in a joint which is absolutely leak-proof even under a relatively high internal pressure, say up to thirty pounds per square inch. To reinforce this joint and protect the flange 12 against opening or injury incident to rough handling I roll down thereover the outer flange 13, the latter being of sufficient length to completely overlap the joint and extend inward to a point beyond the shoulder 11 on the annulus 10.

By making the flange 12 relatively light it is possible to roll it into the channel 16 above the offset ends of the closure flange 14 and barrel wall in such a manner as to render the joint much tighter than is now commonly secured, while the protecting outer flange 13 affords all the necessary strength and rigidity to withstand the shocks and strains incident to shipment. Moreover, both flanges 12 and 13 may be lighter than is now customary in locking rings for barrels of this type and this fact puts much less strain upon the machines which are employed for rolling or crimping the flanges. This not only expedites the operation, but also prevents the breakage of the crimping machine which is now an all too frequent occurrance, when it is attempted to push the machines for rapid work.

Various modifications of details of design, structure and proportion will readily occur to those skilled in the art which do not depart from what I claim as my invention.

I claim:—

1. In a metal barrel, an end closure lock-

ing ring having an external shoulder for forming joint with the barrel body and end closure, and outwardly extending spaced flanges at the outer end of the ring adapted to be crimped down upon the joint formed at the ring shoulder, substantially as described.

2. In a metal barrel, an end closure locking ring having an external shoulder for forming joint with the barrel body and end closure, and outwardly extending spaced flanges at the outer end of the ring adapted to be crimped down upon the joint formed at the ring shoulder, the end flange being of greater width and extending inward beyond the shoulder in the finished joint, substantially as described.

3. In a metal barrel, a cupped end closure having a marginal flange adapted to fit within the barrel body, a shouldered locking ring fitting within the marginal flange of the end closure and having at its outer end outwardly extending spaced flanges, in the finished barrel the end closure flange and barrel body wall being offset over said shoulder on the locking ring and the flanges on the latter being rolled down upon the joint so formed, to secure and protect the latter.

4. In a metal barrel, a cupped end closure having a marginal flange adapted to fit within the barrel body, a shouldered locking ring fitting within the marginal flange of the end closure and having at its outer end outwardly extending spaced flanges, in the finished barrel the end closure flange and barrel body wall being offset over said shoulder on the locking ring and the flanges on the latter being rolled down upon the joint so formed, to secure and protect the latter, the outer of said flanges extending inward beyond the joint and serving to protect the inner flange against injury incident to rough handling during transportation.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses.

JOHN JASZKUL.

Witnesses:
JOSEPH STERNBERG,
JOSEPH BOORAK.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."