June 14, 1960 G. A. THACKER 2,940,633

TAMPERPROOF METALLIC RECEPTACLE

Filed April 17, 1956

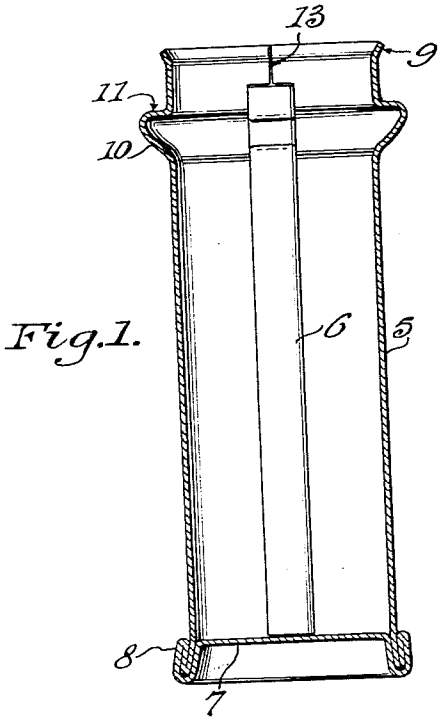


Fig.1.

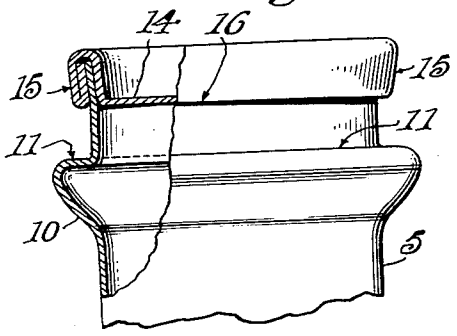


Fig.2.

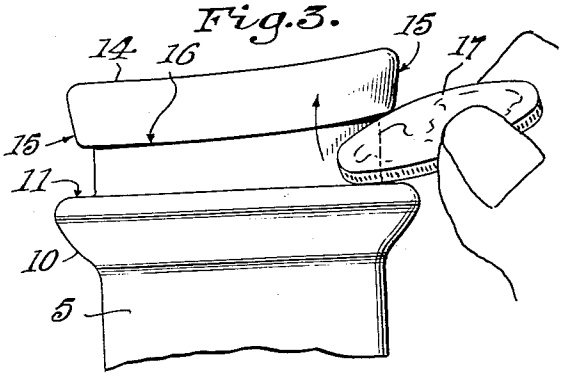


Fig.3.

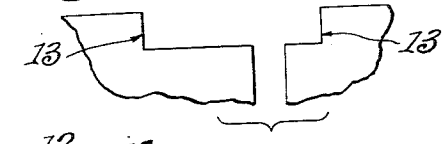


Fig.7.

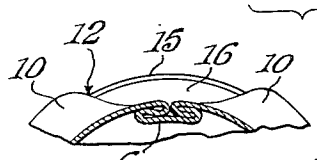


Fig.5.

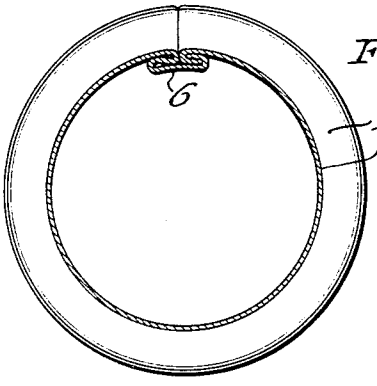


Fig.4.

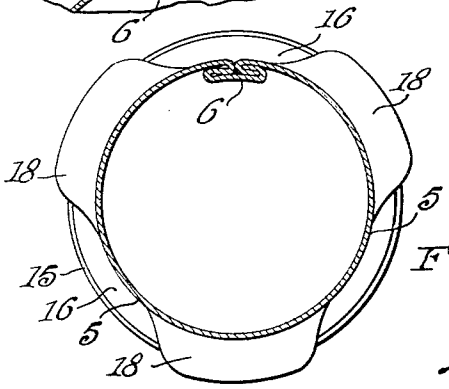


Fig.6.

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United States Patent Office 2,940,633 Patented June 14, 1960

2,940,633

TAMPERPROOF METALLIC RECEPTACLE

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Filed Apr. 17, 1956, Ser. No. 578,662

2 Claims. (Cl. 220—43)

The invention relates to metallic receptacles and seeks to provide a simple, attractive and economically manufactured container structure in which articles such as spark plugs or the like may be packaged, the container having tamperproof characteristics making it readily determinable whether the container has been opened by persons other than a first purchaser.

An object of the invention is to provide a container structure of the character stated including a tubular metal shell body, a metal closure secured on the body with a false seam, and coin or other pry tool supporting means on the body and spaced from the seam so that such a coin or tool may be engaged between the supporting means and the closure seam to readily pry the closure off its body mounting and expose the packaged article for removal.

An object of the invention is to provide a container structure of the character stated wherein the body is slightly flared at its end extremity above the coin or other pry tool supporting means.

A further object of the invention is to provide a container structure of the character stated wherein the coin or other pry tool supporting means is in the form of an outwardly projecting body bead which has a substantially horizontal supporting shelf portion and extends about the container body continuously, or continuously except at the position of the body side seam.

A still further object of the invention is to provide a container structure of the character stated wherein the coin or other pry tool supporting means is in the form of a plurality of body protuberances spaced equidistantly about the body below the upper closure mounting end portion thereof.

With the above and other objects in view that will hereinafter appear, the nature of the invention will be more clearly understood by reference to the following detailed description, the appended claims and the several views illustrated in the accompanying drawing.

In the drawing:

Figure 1 is a vertical cross sectional view illustrating a container structure embodying the invention, the container body being illustrated as devoid of its top closure.

Figure 2 is an enlarged fragmentary view partially in side elevation and partially in vertical cross section illustrating the top portion of the container of Figure 1 with a top closure applied thereon.

Figure 3 is a side elevation of the container portion shown in Figure 2, removal of the top closure by a prying action of an applied coin being shown in progress.

Figure 4 is a horizontal section taken through the container body below the prying tool supporting bead and looking toward said bead and the top closure.

Figure 5 is a fragmentary view similar to Figure 4 but confined to the side seam area and illustrating a modification in which the coin or other prying tool supporting bead is interrupted at the position of the side seam.

Figure 6 is a view similar to Figure 4 showing another modified arrangement in which the coin or other pry tool supporting means is in the form of a plurality of protuberances extending outwardly from the body in equidistantly spaced relation.

Figure 7 is a detail view illustrating a conventional notching of the body blank for the provision of the mennen seam and avoiding continuation of the mennen seam into the top closure seam.

In the example of embodiment of the invention herein disclosed, the improved container structure includes a body **5**, in this instance cylindrical in shape, and having a well known mennen side seam **6**, and a bottom closure **7** secured in place by a false seam **8**. At its upper terminous or top closure receiving mouth the body **5** is slightly flared outwardly as at **9**. An outwardly extending bead **10** is provided and is formed to include a substantially horizontal coin or other pry tool supporting shelf portion **11**. It is to be understood that in the making of the container body the bead **10** may be formed continuously about the body as shown in Figures 1 to 4, or it may be formed before the flat body blank is shaped into its intended tubular form and equipped with its side seam, and in this instance the bead may be terminated as indicated at **12** in Figure 5 at the location of the side seam structure. In order to avoid continuation of the mennen side seam into the top closure of the can, the blank may be notched in the usual manner as indicated at **13** in Figure 7, thus to terminate the inwardly folded portion of the side seam at the lower extremity of the top closure and provide only a single thickness of body metal at the top closure.

The top closure **14** is secured to the body by a false seam **15**, and it is preferred that this false seam be formed with square grooved roll means in order to assure the provision of a well defined transverse pry shoulder at **16**. It will be noted by reference to Figure 2 that the pry shoulder **16** is spaced above the supporting shelf portion **11** of the bead **10** and in parallel relation thereto. Thus by applying a coin **17** or any other suitable prying tool between the opposing shoulder and shelf equipments **16**, **11** and manipulating the tool as indicated in Figure 3, the top closure **15** may be readily pried off the container body in order to render the packaged article accessible to a user. It will be readily apparent that in the prying off of the top closure **15** in the manner illustrated in Figure 3, the top end extremity of the container body will be slightly deformed, but the flare thereon will not be entirely eliminated and the end extremity of the body would spring outwardly after the removal of the top closure in an amount to make re-application of the closure without the aid of appropriate tools substantially impossible. Thus each removal of a closure from a container constructed as herein disclosed would be made so obvious that prior tampering with the closure would be made quite evident to persons other than a first purchaser of the container.

Instead of providing a continuous bead **10** extending through the side beam **6** as in the illustrations in Figures 1 to 4, the bead may be terminated at **12** short of the side seam structure as before stated and as illustrated in Figure 5. Also, in Figure 6 there is illustrated another modification of the invention wherein the coin or other pry tool supporting means is in the form of a plurality of protuberances spaced equidistantly about the container body and projecting outwardly therefrom. In the case of either modification, a coin or other pry tool can be inserted between the interrupted bead **10** and the overlying top closure shoulder **16**, or between one of the protuberances **18** and said shoulder for the purpose of prying off a top closure in the manner illustrated in Figure 3.

While example disclosures of the container structure are disclosed herein, it is to be understood that other modifications may be made without departing from the spirit and scope of the invention as defined in the appended claims.

I claim:

1. A container structure of the character described comprising a tubular metal body having a side seam, a metal bottom end closure and a metal top end closure secured on the body with a false seam presenting an abrupt pry shoulder facing downwardly, said body including pry tool supporting means spaced beneath said pry shoulder so that a coin or other pry tool may be engaged between the supporting means and the top closure pry shoulder to pry the top closure off its body mounting and expose for removal a product packaged in the container, said pry tool supporting means comprising a plurality of protuberances extending outwardly from the body in equidistantly spaced relation with the body side seam extending upwardly between two of said protuberances.

2. A container structure of the character described comprising a tubular metal body having a side seam, a metal bottom end closure and a metal top end closure secured on the body with a false seam presenting an abrupt pry shoulder facing downwardly, said body including pry tool supporting means spaced beneath said

pry shoulder so that a coin or other pry tool may be engaged between the supporting means and the top closure pry shoulder to pry the top closure off its body mounting and expose for removal a product packaged in the container, said pry tool supporting means comprising a plurality of protuberances extending outwardly from the body in equidistantly spaced relation with the body side seam extending upwardly between two of said protuberances, each said protuberance presenting a substantially horizontal shelf portion and all said shelf portions bearing like parallel spaced relation to the overlying abrut pry shoulder of the top closure.

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