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CONTAINER

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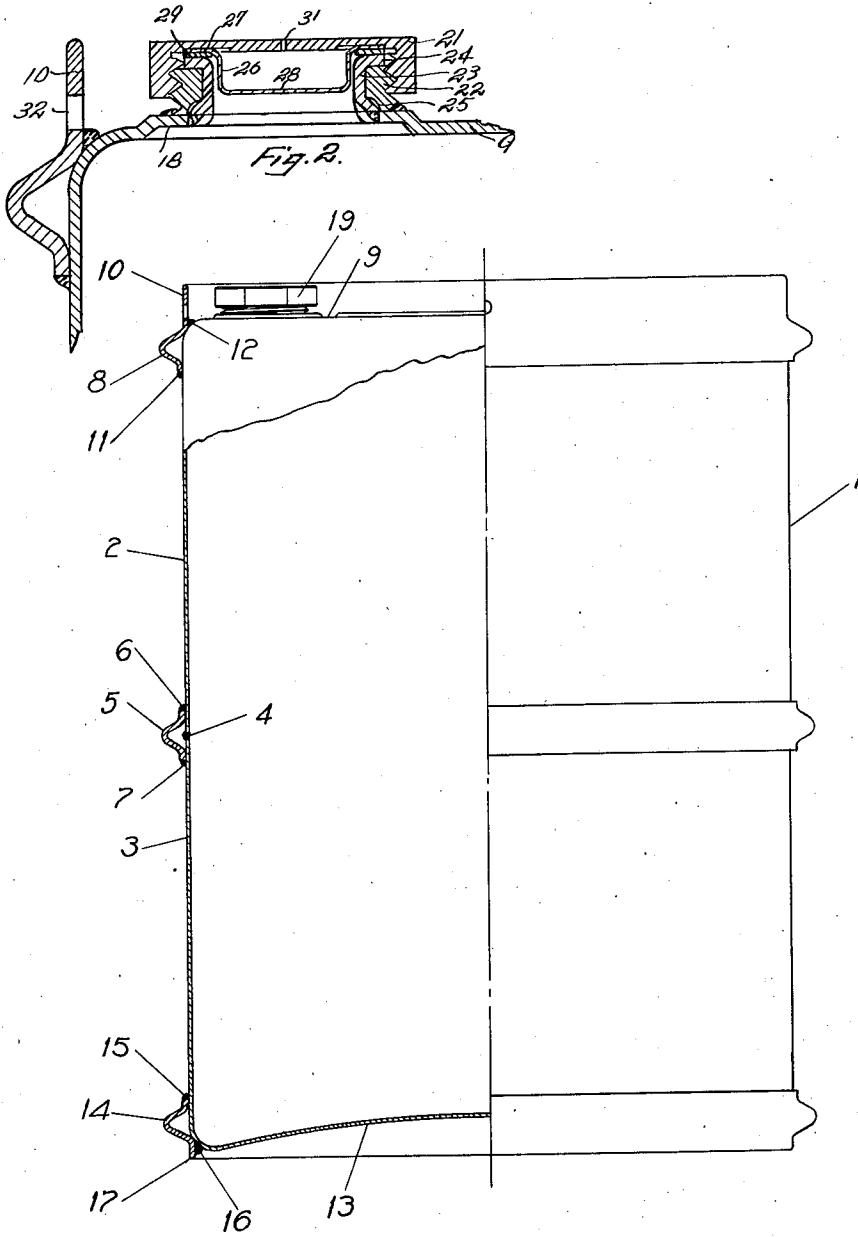


Fig. 1

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CONTAINER

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3 Claims. (Cl. 220—66)

This invention relates to a container, and more particularly to a metal shipping or storing vessel.

An object of the invention is to provide a novel joint and reinforcement for a container such as a barrel, drum or the like, formed of two or more metallic sections united circumferentially, and protected by an external annular band or rolling hoop of suitable form, the whole being so united and constructed as to present a container that will be light in weight, easy and simple to manufacture, yet strong and durable.

Another object is to provide a novel combined chime and rolling hoop which will protect the top or bottom of the container, and which will not be driven onto the container when the same is loaded, or subjected to a great force.

Referring to the drawing, Fig. 1 is a vertical sectional view of the container, and

Fig. 2 is a detailed sectional view of the combined chime and rolling hoop, and container closure.

1 is a metal container composed of upper and lower annular metal sections 2 and 3 and having their adjacent edges welded together at 4. An annular metal band or rolling hoop 5 is welded to sections 2 and 3 at points along its edges as at 6 and 7. The hoop 5 covers the welded joint 4, reinforcing and concealing the same, giving a more sturdy construction to the container and at the same time is of the same height as the end rolling hoops to provide a center rolling hoop or support when the drum is horizontal. An annular metal band or rolling hoop 8 extends beyond the outer end or top 9 of section 2 forming a chime 10. Rolling hoop 8 is welded to the side of section 2 at points along the line at 11 and along the line at the curved portion of section 2 at 12. The inside diameter of the chime 10 is less than the outside diameter of section 2 of the container, thereby preventing the combined rolling hoop and chime from being driven onto the drum when the same is loaded or subjected to other force. Preferably the inside diameter of the chimes 10 and 17 is such that functionally they are an extension of the side of the container i. e., they lie in the line which would be formed by extending the container walls upward to the chime. Thus any pressure directly on the chime is effectively transmitted and absorbed by the sides of the drum and the tendency to dent the edges of the drum body itself is minimized.

The bottom of the container is cupped at 13, and is protected by an annular band or rolling hoop 14 which is welded to the side of section 3

at points along a line at 15 and to the curved portion of section 3 along a line at 16, and extends beyond the end of section 3 forming a chime 17. The inside diameter of chime 17 is also less than the outside diameter of section 3 or the container.

A shallow inside well is formed in the top of the container by the recess at 18; the exterior raised portion of the well carries a closure 19 consisting of an internally threaded metal cap 21 which is threaded on threaded ring 22. A metal neck ring 23 having an annular flange 24 fits snugly in threaded ring 22, and is welded to the edges of the container opening. The lower edge of the neck ring is hammered or hammered and welded into recesses or notches 25 in threaded ring 22 to prevent turning of the thread ring. A cup shaped member 26 having an annular flange 27 is provided with a vent hole 28, and is secured to cap 21. A rubber gasket 29 forms a liquid tight seal between the flange 24 and flange 27. The vent hole 28 in cup shaped member 26 and vent hole 31 in cap 21 permit the escape of any gases evolved from the contents of the container, yet permit the liquid in the container to leave the same only at a very slow rate. The cup shaped member inhibits the actual loss of liquid because it is designed to hold substantial quantities of liquid and then to drain it back into the container. This is of great importance when shipping or transporting liquids giving off gases or vapors, since the liquid in the container is almost continually in motion and splashing against the venting device. This splashing is often very violent and excessive amounts of liquid would be forced out and lost were it not for the cup shaped member. The recessed top of the container and the closure permit the container to be completely drained. Openings 32 in chime 10 permit drainage of any liquid on top of the container.

The container and closure or venting device may be formed of any metal suitable to the material enclosed in the container. We have formed the same of aluminum and found it very satisfactory for such materials as do not corrode aluminum and cause stoppage of the vent holes, and it is especially suitable as a hydrogen peroxide container. As will be seen this closure structure will permit the container and all parts of the closure structure being fabricated of the same material, for example aluminum, in all parts which come in contact with the liquid; at the same time provision is made for such strength of closure thread as may be needed, by constructing the threaded portion of metal substantially hard-

er than aluminum. The method of constructing the body of the drum and the rolling hoops further permits the rolling hoops and chimes being made of metal whose gauge is substantially heavier than that of the main body of the drum without complicated interfolding of edges; or, the rolling hoop and chime, for purposes of rigidity and strength, may be constructed of metals other than the metal of the drum. Thus the drum body itself may be made of substantially pure aluminum whereas the rolling hoop and chime may be constructed of an aluminum alloy well adapted to stand the shock incident to transportation and use.

15 It is obvious that many modifications may be made without departing from the spirit and scope of the invention, and that more than two annular sections may be welded together, and that the container may have any number of rolling hoops.

20 While welding of the rolling hoops to the body section is shown as preferred in order to avoid slipping, the hoops can be rolled to a tight fit, and if necessary slightly crimped into the drum body, so that the welding may be dispensed with.

25 Metal ring 23 may be made integral with the top of the container as by rolling out the metal from the opening in the body wall. If desired, any number of cup shaped members may be used, and may be secured directly to the metal cap with or

without flanges or may be secured to the metal ring in any well known manner.

We claim as our invention:

1. In a cylindrical container an annular metal band at the end thereof forming an integrally constructed rolling hoop and chime, both of the supporting edges of said rolling hoop being attached to said container and the diameter of said chime being such that the chime lies in a line formed by the extension of the walls of the container.

2. A rolling hoop for the end of cylindrical containers having a chime integrally constructed therewith, the diameter of said chime being such that the chime lies in a line formed by the extension of the walls of the container, and the rolling hoop edges being attached to and supported by the container walls at a plurality of points.

3. A rolling hoop for the end of cylindrical containers having a chime integrally constructed therewith, the mean diameter of said chime being equal to the mean diameter of the container adjacent to said chime and the rolling hoop edges being attached to and supported by the container walls at a plurality of points.

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