A. J. BENTLEY.

REINFORCING BAND FOR METAL CONTAINERS.

APPLICATION FILED APR. 26, 1920.

1,385,602. Patented July 26, 1921.

Fig. 1

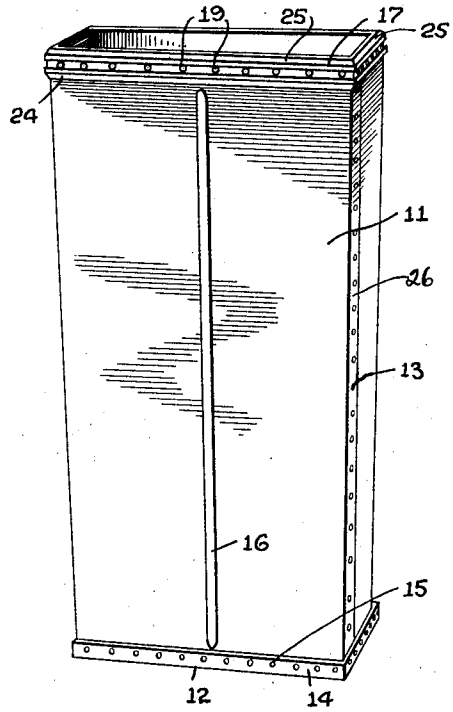


Fig. 2

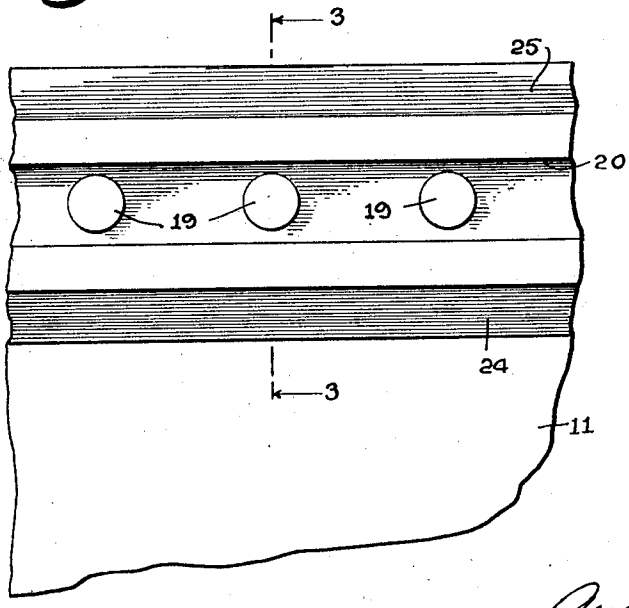
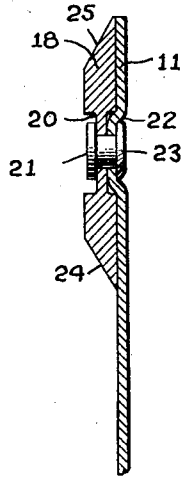


Fig. 3



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REINFORCING-BAND FOR METAL CONTAINERS.

1,385,602. Specification of Letters Patent. Patented July 26, 1921.

Application filed April 26, 1920. Serial No. 376,667.

To all whom it may concern:

Be it known that I, ANSON J. BENTLEY, a citizen of the United States, and a resident of the city of Niles, county of Trumbull, and State of Ohio, have invented an Improvement in Reinforcing-Bands for Metal Containers, of which the following is a specification.

My invention relates to reinforcing bands for receptacles and is particularly useful in reinforcing the receptacles in which artificial ice is formed.

In the manufacture of artificial ice a large number of cans are inserted into a tank of brine through openings formed by a frame work which is usually constructed of wood. Inasmuch as these cans must be lowered and raised through these openings not only does any projection on the can tend to catch on the wooden frame and tear the frame but furthermore the openings in the frame must be of sufficient size to permit the receptacle reinforcement to pass therethrough. For these reasons it is desirable that whatever reinforcement is used on such receptacles be so formed that it is of minimum thickness and yet carries no portions likely to catch and tear the frame work. The object of my invention is to provide a receptacle which satisfies these requirements and in the drawings accompanying this specification and forming a part thereof I have shown, for purposes of illustration, one embodiment which my invention may assume. In these drawings:

Figure 1 shows a general view of a receptacle reinforcing according to my invention,

Fig. 2 is a detail elevation of the reinforcement of Fig. 1, while,

Fig. 3 is a section along the line 3—3 of Fig. 2.

In Fig. 1 I have illustrated a receptacle designed for use in the manufacture of ice and comprising a rectangular body 11 closed at the lower end by a bottom 12. This body 11 may be formed of a single sheet of metal stamped and bent into the desired form and the two ends thereof may be secured together to complete the body by causing one end to overlap the other as shown at 26 and subsequently securing together the overlapped portions by means of rivets 13. The bottom 12 is herein illustrated as consisting of a single sheet having an up-turned rim 14 which snugly fits the outside of the body 11 and is secured thereto by means of rivets 15. In order to facilitate removal of the ice the body 11 is formed smaller at the bottom than at the top. In practice it has been found desirable to reinforce or strengthen the sides of the body 11 and ribs stamped up from the body have been found suitable for this purpose but with receptacles employed for the manufacture of ice ribs extending in any direction other than longitudinally of the body interfere with the removal of the ice so that rib reinforcement in such case is limited to longitudinal ribs such as that shown at 16. In order to strengthen the top of the receptacle it is desirable that a reinforcing band be secured about the receptacle at the top edge thereof and I have herein illustrated at 17 a new and improved band for this purpose. It will be understood that this band may be duplicated as many times as desired along the body of the receptacle not only with a receptacle employed for the manufacture of ice but also with receptacles employed for other purposes.

The reinforcement 17 herein shown comprises a metal band 18 formed in any suitable manner such as by rolling a strip and then welding this strip into a hoop. This band is then secured to the receptacle body 11 by means of a plurality of rivets 19 which extend through the band and the body. In order to prevent the heads of the rivets from projecting beyond the exposed face of the band 18 or through into the receptacle the band is formed with an outer channel 20 in which the outer heads 21 of the rivets are received and with an inner channel 22 into which the body 11 of the receptacle is forced to permit the inner heads 23 of the rivets to lie flush with the inside surface of the receptacle. It will be understood that the channels 20 and 22 provide a counter-sink into which the rivet heads or the equivalent metal of the receptacle body may be seated and that this counter-sink may be provided by the same rolling operation which forms the band itself and thus eliminate the expense and labor incident to providing individual counter-sinks for each rivet.

The lower edge of the band 18 may be beveled as shown at 24 and the upper edge may also be beveled as shown at 25.

It will be understood that by the use of the construction herein disclosed I provide a reinforcement for a receptacle which not only is of minimum thickness but also contains no projecting parts which are likely

to catch and tear objects against which the receptacle rubs or be themselves deformed by engagement with such objects.

It will be understood that the disclosure herein is for purposes of illustration and my invention is, therefore, not limited to the embodiment herein shown or to the particular use herein referred to.

I claim:

1. A reinforcing band for a receptacle recessed on its exposed face to receive the outer ends of the rivets which hold together the band and receptacle and recessed on its inner face to receive bent in portions of the receptacle wall surrounding the rivets to thus permit the inner ends of the rivets to lie flush with the surface of the receptacle wall.

2. A reinforcing band to be attached to a receptacle by rivets, said band having the edges of its exposed face beveled and also having a channel along its inner face to receive bent in portions of the receptacle wall to permit the ends of the rivets to lie flush with the inner surface of the receptacle.

In testimony whereof I have signed my name to this specification this 22nd day of April, 1920.

ANSON J. BENTLEY.