

F. G. WACKER.
METALLIC RECEPTACLE.
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1,314,445.

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Fig. 1.

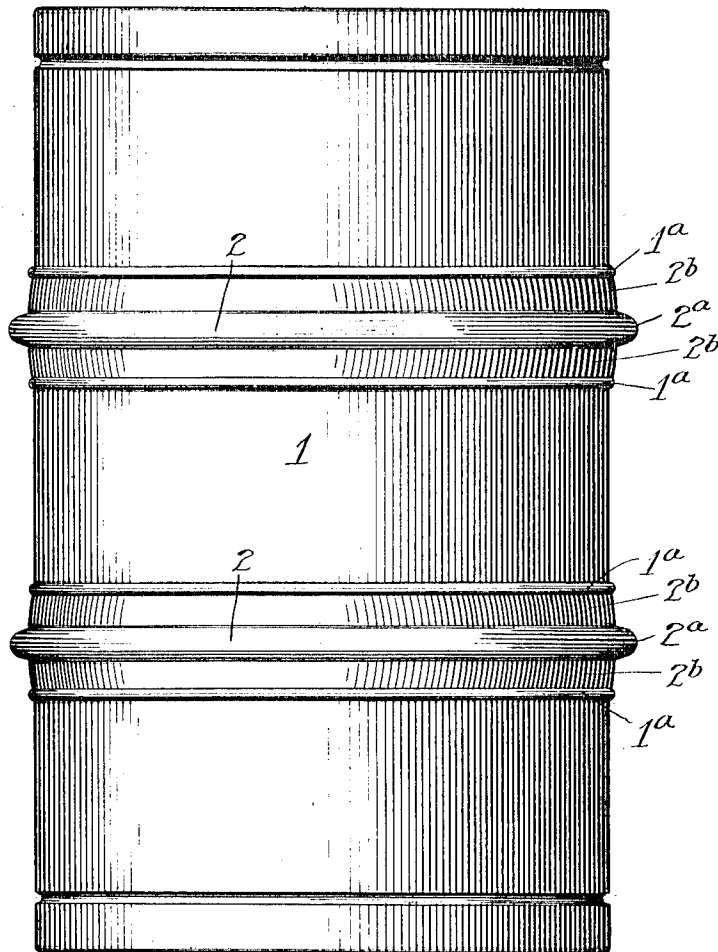


Fig. 2.

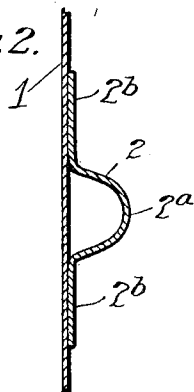


Fig. 3.

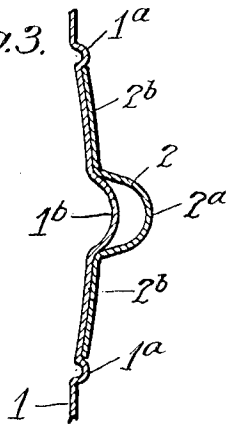
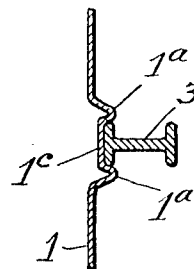


Fig. 4.



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METALLIC RECEPTACLE.

1,314,445.

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To all whom it may concern:

Be it known that I, FREDERICK G. WACKER, a citizen of the United States, residing at Chicago, Cook county, Illinois, have invented certain new and useful Improvements in Metallic Receptacles, of which the following is a specification.

My invention relates to metallic receptacles such as barrels, casks, drums and the like, and the object thereof is to improve the construction particularly as to the body of the barrel and the so-called rolling hoops thereof, thereby producing an improved and stronger construction.

In the drawings Figure 1 is an elevation of a barrel or drum embodying my invention; Fig. 2 a sectional detail of a portion of the body and a rolling hoop showing the initial stage of the formation of the structure; Fig. 3 a similar view but illustrating the final structure, and Fig. 4 a detail similar to Fig. 3 but illustrating a modified form of construction particularly as respects the rolling hoop.

Referring to the embodiment of my invention as herein shown, the barrel or drum includes the cylindrical body portion 1 and rolling hoops 2, which as shown are generally two in number, located as shown in Fig. 1. As shown in Fig. 2 the hoop consists of a substantially central circumferential bead portion 2^a and the two flange portions 2^b. In practice each hoop is of slightly larger diameter than the external diameter of the body of the barrel, thereby fitting loosely thereupon.

In the production of my improved metallic receptacle each hoop is slipped over its end of the barrel and the following rolling operations are performed in order to produce the final structure illustrated by Fig. 3. After the hoop is in proper position with relation to the body of the barrel such body is rolled outwardly at two points to form the outwardly extending beads 1^a at the outer edges of the flanges 2^b. At the same time or as the result of a subsequent rolling operation the body of the barrel, located between these beads 1^a, is rolled outwardly as shown in Fig. 3, thereby forming a seat for the hoop, which seat is tightly forced against the hoop flanges, and the central part of such expanded portion of the barrel, as illustrated at 1^b, is expanded outwardly and into the bead portion 2^a of the hoop. In the formation of the beads 1^a and the expanding of

the intervening portion of the barrel body, such latter portion is displaced outwardly so as to be out of line or in another plane with respect to the barrel body, carrying with it the contacting parts of the hoop flanges 2^b, as shown in Fig. 3. In the expanding operation, the portion 1^b of the barrel body is stretched, thereby exerting a tension against the inner edges or corners of the bead 2^a, with the result that the associated parts are kept in close and tight relationship, including the flanges 2^b in contact under pressure with the beads 1^a. The joint displacement of registering zones of both the barrel-body and the hoop (namely the zones within the width of flanges 2^b) outwardly, each beyond its initial circumferential position, as shown in Fig. 3, insures firm and even seating of the hoop on the body. Moreover, expanding of the barrel body makes a truss or locally bulged construction which is very practical and efficient as the weight of the barrel in rolling is borne by these rolling hoops and any tendency of flattening of the truss is effectually resisted by the construction thus provided. The beads 1^a and the outward expansion of such central part therebetween are preferable but not essential in the broader aspect of my invention.

In Fig. 4, I have illustrated a modified form of construction particularly with respect to the rolling hoop 3 which is here shown as of I-beam construction. In this form of metallic receptacle the same beads 1^a are formed in the barrel body and such body is outwardly expanded at 1^c to bear tightly against the base of the I-beam, it being understood that such hoop fits the barrel body loosely just as the hoop 2 already described.

I claim:

1. A metallic barrel including a body having two small parallel circumferential outwardly directed beads, and a large outwardly directed bead located intermediate the small beads, and a rolling hoop having a central portion interlocking with said large bead, said hoop having laterally directed flanges bearing against said small beads.

2. A metallic barrel including a body, and a rolling hoop having an outwardly directed bead, the body of the barrel having a circumferential bead extending partially into said hoop bead and bearing against the inner corners of the hoop bead with pressure.

3. A metallic barrel including a body hav-

- ing two parallel circumferential beads and an intermediate circumferential bead, and a rolling hoop having intermediate its width a circumferential bead cooperating with the intermediate bead of the body, the edges of the hoop bearing against said two parallel circumferential beads of the body according to the pressure exerted by the intermediate body bead upon its cooperating bead.
4. A metallic barrel including a body having two parallel circumferential beads and an intermediate circumferential bead, and a rolling hoop having intermediate its width a circumferential bead cooperating with the intermediate bead of the body, the edges of the hoop bearing against said two parallel circumferential beads of the body according to the pressure exerted by the intermediate body bead upon its cooperating bead, the body of the barrel lying between such two parallel beads being displaced outwardly against and into the bead of the hoop and out of line with the main body of the barrel.
5. A metallic barrel including a body having circumferential parallel beads and an intermediate portion integrally connecting said beads, a rolling hoop around said intermediate portion, said intermediate portion of the barrel body being displaced outwardly from the plane of the remainder of the body and bearing against the hoop.
6. A metallic barrel including a body and a rolling-hoop therearound, the body having beads snugly paralleling the hoop-edges, and a zone intermediate the beads outwardly displaced beyond its initial circumferential position and putting the beads into pressure-exerting contact with the hoop-edges.
7. A metallic barrel including a body and a rolling-hoop having a preformed inwardly opening circumferential recess, the body of the barrel being displaced outwardly into the recess the full width of, but less than full depth of, said recess, exerting pressure oppositely on the inner edges of said recess.
8. A metallic barrel comprising a generally cylindrical body and an encompassing sheet-metal rolling hoop, the latter having between its edges a pre-formed outwardly displaced bead, said body having outwardly displaced beads closely flanking both edges of the hoop and having an intermediate portion outwardly displaced into the hoop-bead, said flanking-beads of the body bearing with pressure against the edges of the hoop.
9. A metallic barrel comprising a body and an encompassing rolling-hoop, the latter preformed to present two flange zones and an intervening outwardly presented bead, said body having parallel beads flanking the outer edges of the hoop-flanges and an intermediate bead entering the bead of the hoop, the said body beads bearing against the outer and inner edges of the hoop flanges with pressure.
10. A metallic barrel comprising a body and an encompassing rolling-hoop having side flanges and an intervening outwardly extending bead, said body having a bead expanded into the hoop bead, and registering parts of said body and the hoop-flanges being jointly displaced outwardly beyond their preformed positions and in close contact with each other.
11. A metallic barrel comprising a body and a rolling hoop, said body having outwardly displaced beads closely flanking the edges of the hoop, and said bead and hoop having super-imposed zones between said beads equally outwardly bulged and stretched.
12. A metallic barrel comprising a sheet-metal body and a sheet-metal rolling hoop, said body having outwardly-displaced beads closely flanking and contacting with the edges of the hoop, and said body and bead having zones of their super-imposed portions, between said beads, similarly bulged and stretched outwardly, the flanking beads maintaining pressure-contact with the hoop edges.
13. A metallic barrel having a rolling-hoop pre-formed to present a projecting bead with an inwardly facing channel flanked by integral flanges, the body of said barrel having outwardly directed beads snugly gripping the flange-edges and pressing thereon.
14. A metallic barrel having a rolling-hoop pre-formed to present a projecting bead with an inwardly facing channel flanked by integral flanges, the body of said barrel having outwardly directed beads snugly gripping the flange-edges and pressing thereon, the flanges of said hoop and the underlying body-zones of the barrel being correspondingly bulged outwardly.
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