March 6, 1928. 1,661,578

C. H. ROLLASON

SHEET METAL DRUM

Filed Sept. 17, 1926

FIG 1

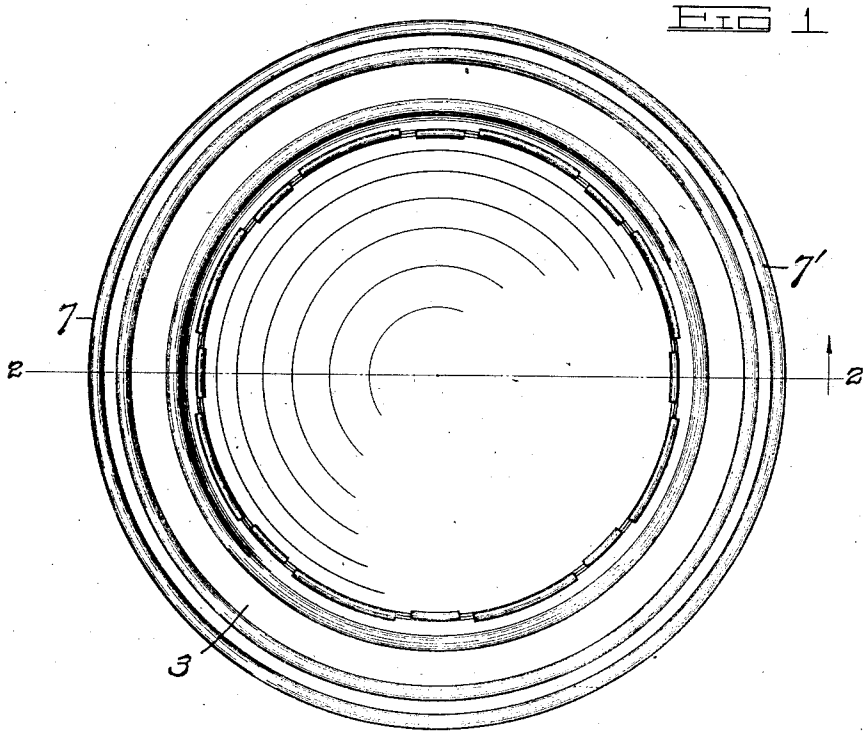


FIG 2

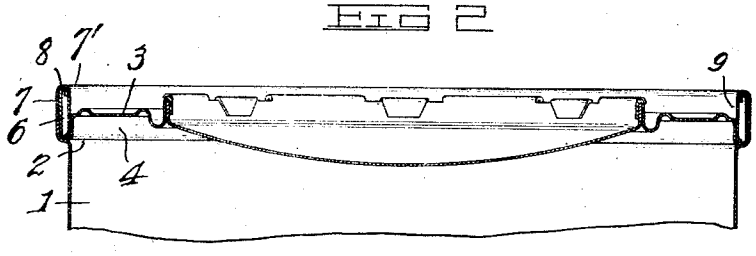


FIG 3

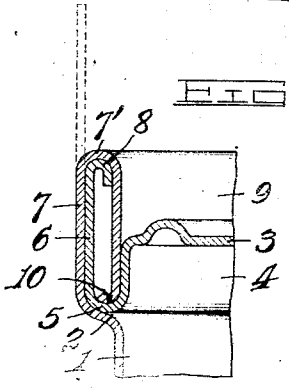
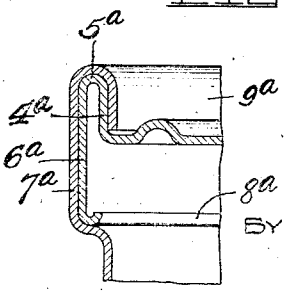


FIG 4



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UNITED STATES PATENT OFFICE.

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SHEET-METAL DRUM.

Application filed September 17, 1926. Serial No. 136,062.

This invention relates broadly to sheet metal containers, and more specifically to a sheet metal drum of the removable-cover type employed as containers for heavy articles, as metal castings.

The primary object of the invention is to provide, in a drum made of light gauge sheet metal, a container body and a head which are connected in a novel manner to form a substantial chime joint which will successfully withstand the rough handling to which drums of this character filled with heavy articles are ordinarily subjected in shipment.

In describing the invention in detail, reference is herein had to the accompanying drawings, in which—

Figure 1 is a plan view of the head end of a drum constructed in accordance with my invention;

Figure 2 is a section on line 2—2, Fig. 1;

Figure 3 is an enlarged detail section showing the joint between the head and the body; and—

Figure 4 is a similar section showing a modified form of joint.

Referring to said drawings, 1 designates the body of a drum formed of sheet metal of light gauge. The metal of said body is flared outward slightly adjacent to its head end, forming an internal upwardly-facing inclined shoulder 2 which constitutes a seat upon which rests an annular portion of a head 3, as will hereinafter be explained. From said shoulder 2 the metal of said body is extended upward vertically throughout a substantial distance and is adapted, following introduction of the head, to have its terminal edge portion turned inward and downward into securing relation to the latter.

The head 3 has an annular rim produced, first, by bending the metal thereof downward to form a vertical leg 4, thence curving the metal outward and upward to form a seating portion 5 which rests upon the shoulder 2, and is thence extended upwardly vertically to form a member 6 which is closely embraced by the vertical chime portion 7 of the body 1. The upper, or terminal, edge portion of said member 6 is preferably turned inward and downward to form a roll 8 over which the portion 7′ of the chime 7 is then turned into seated position and is thence extended downward to form a leg 9 which seats upon the rim of the head within the channel 10 which is formed intermediate the leg 4 and the member 6.

It will be noted that the joint formed between the head 3 and the body 1, as described, is distinguished from the tight-seam joints of prior structures of the general character to which this invention relates in that the parts thereof are resiliently related and are adapted to yield more or less readily to impacts and strains imposed thereon by rough handling without tending to become detached or to be ruptured. Otherwise expressed, the strain of shocks imposed upon the head by the heavy contents of the drum when the latter is dropped from considerable heights, instead of tending to detach the head from the body, or to rupture the joint between said head and said body, as in the case of heads attached by tight rolled seams, are absorbed by the resiliently related leg 4 and member 6 of the head, on the one hand, and the inturned leg 9 of the chime, on the other, without disassociation of said members one from the other.

In the modified structure shown in Fig. 4, the rim of the head embodies an upwardly extending vertical leg 4^a instead of the downwardly extending leg 4, a downwardly extending member 6^a embraced by the chime portion 7^a of the body, and a terminal portion or roll 8^a which seats upon the shoulder 2. A curved portion 5^a forms a rest over which the terminal or leg portion 9^a of the chime is turned, the latter being disposed interiorly of the leg 4^a, as shown.

What is claimed is—

1. In a sheet metal drum, a body having an end portion thereof shaped to form an outwardly offset vertical chime and an intermediate upwardly facing internal shoulder, and a head having an integral rim provided with a seating portion for resting upon said shoulder, said seating portion being offset with respect to the plane of said head, said rim comprising a pair of separated resilently related parallel members of which one is closely embraced by said chime, the terminal edge portion of said chime being turned inward into overlying securing relation to said rim.

2. In a sheet metal drum, a body having an end portion thereof shaped to form an

outwardly offset vertical chime and an intermediate upwardly facing internal shoulder, and a head having an integral rim seated upon said shoulder, said rim comprising a downwardly extending leg, a curved seating portion, an upwardly extending member closely embraced by said chime and a terminal roll, the chime having an extension thereof turned into overlying seated relation to said roll.

3. In a sheet metal drum, a body having an end portion thereof shaped to form an outwardly offset vertical chime and an intermediate upwardly facing internal shoulder, and a head having an integral rim seated upon said shoulder, said rim comprising a curved seating portion and two substantially parallel vertical members separated by said seating portion, the outer of said members being embraced by said chime and having a terminal roll, the edge portion of said chime being disposed in overlying seated relation to said roll.

4. In a sheet metal drum, a body having an end portion thereof shaped to form an outwardly offset vertical chime and an intermediate upwardly facing internal shoulder, and a head having an integral rim seated upon said shoulder, said rim comprising a curved seating portion and two substantially parallel vertical members separated by said seating portion, the outer of said members being embraced by said chime and having a terminal roll, the edge portion of said chime being turned into overlying seated relation to said roll and having its terminal portion disposed in external embracing relation to the inner vertical member of the rim.

5. In a sheet metal drum, a body having an end portion thereof shaped to form an outwardly offset vertical chime with an intermediate upwardly facing internal shoulder, and a head having a vertically disposed rim seated upon said shoulder, said rim being bent to form a downwardly extending leg, a curved seating portion at the lower end of said leg, an upright member rising from said seating portion parallel to and at a considerable distance outward from said leg whereby is formed an intermediate upwardly facing channel, and an inturned terminal roll, said upright member being closely embraced by said chime, and said chime having an extension thereof directed into overlying seated relation to said roll and thence vertically downward into said channel and disposed in externally embracing relation to said leg of the rim.

In testimony whereof, I affix my signature.

CHARLES H. ROLLASON.