

UNITED STATES PATENT OFFICE

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CONTAINER

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4 Claims. (Cl. 220-84)

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The invention relates to improvements in Containers as described in the present specification and shown in the accompanying drawings that form a part of the same.

One object of the invention is to provide a container in which the body adapted to accommodate the contents is made of plastic, or other suitable light and sanitary material, suitably reinforced to insure durability.

Another object of the invention is to provide a container wherein the contents will at all times be free of contact with metal, or other material, which might contaminate such contents.

A further object of the invention is to provide a container constructed of a material which will not rust and which can be easily cleaned.

A still further object of the invention is to provide a container having a reinforcing frame suitably formed to provide legs adapted to support the body and further being formed to reinforce and support the bottom wall of the plastic body.

And generally the objects of the invention are to provide a light and sanitary container of simple and sturdy construction and which can be produced at small cost.

The invention consists in the novel features of construction, combinations and arrangements of parts described in the present specification and more particularly pointed out in the claims for novelty following.

In describing the invention reference will be made to the accompanying drawings, in which—

Figure 1 is a perspective view of the wire reinforcing and supporting frame for the plastic body.

Figure 2 is a perspective view of the plastic body as it appears prior to incorporation with the wire supporting frame.

Figure 3 is a central vertical sectional view through the container in its completely assembled condition.

Figure 4 is a plan view of the container with the handle removed.

Figure 5 is a central vertical sectional view through a modified form of the invention.

Figure 6 is an enlarged sectional detail of a portion of the structure shown in figure 3.

Like numerals of reference indicate corresponding parts in the various figures.

Referring to the drawings. For purposes of illustration the invention is shown herein as applied to a pail but it is of course understood that receptacles other than pails may be constructed according to the invention.

A indicates generally the reinforcing and sup-

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porting member and B indicates the plastic body which is adapted to be incorporated with the said member.

In the embodiment of the invention shown herein the member, or frame, A consists of a plurality of circumferentially spaced vertical wires 1 suspended from a wire ring 2, about which latter the vertical wires are looped at their top ends, as at 3.

The wires 1 extend downwardly to points not far removed from their lower ends, from which points they are bent inwardly to provide relatively short horizontal feet 4 which are adapted to rest on the ground, and are then turned upwardly for short distances, as at 5, and the remaining portions are bent outwardly towards the main side portions to provide horizontal arms 6 which terminate short of the main side members of the frame. The ends of the horizontal arms 6 are secured, by spot welding or otherwise, to the inner face of a ring 7 so that the top faces of said arms will be on the same horizontal plane as the top face of said ring. The ring 7 and the arms 6 provide a support for the bottom of the plastic container and as this ring is of lesser diameter than the inner diameter of the frame at the point where the ring is located an annular space 8 is left between said ring and the main side wires for the insertion of the plastic body B.

The plastic container initially comprises a unitary tubular member which is adapted to be inserted in the frame A and extended downwardly between the bottom ring 7 and the main side members of the frame so that the lower end thereof will project downwardly below said ring. This projecting portion is provided with slots 9 spaced according to the spacing of the horizontal arms 6 and aligned therewith for the purpose to be explained in detail hereinafter.

A bottom 10 of the diameter to snugly fit the interior wall of the plastic body above the ring 7 is then placed in said body to rest on the said ring and the container is then heated to the extent that the said bottom will become vulcanized to the surrounding wall and become an integral part thereof to provide a unitary plastic structure.

While the plastic body is still hot, and therefore pliable, the portions of the wall below the ring 7, and between the slots 9, are turned inwardly around the said ring and are forced upwardly between the arms 6 into engagement with the lower face of the bottom 10 to which latter they will adhere and therefore provide an annular reinforcement for the bottom of the container.

While the plastic body is still pliable the top

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edge is rolled around the annular ring 2, as at 11, to completely enclose said ring including the looped top ends of the side wires 1.

Lugs 12 positioned just below the rolled top edge of the container and suitably secured to diametrically opposed wires 1 provide means for supporting a suitable handle 13 by means of which the container can be lifted and carried.

It will thus be apparent that while the container presents a smooth interior entirely free of metal, the plastic body and its supporting frame are securely united by the rolled upper edge of the body encircling the top ring 2 and by the lower portion of said body extending around the bottom ring 7 and united with the under face of the plastic bottom, and further that the frame provides sturdy legs by means of which the plastic body is supported free of engagement with the ground.

In Figure 5 a modified construction is shown in which the vertical frame wires are embedded in the plastic body and project downwardly therebelow to provide legs 14 turned inwardly to provide feet 15, and the bottom is reinforced by a metal ring 16 embedded in the edge of the bottom 17 and projecting therefrom and suitably secured, by spot welding, or otherwise, to the various vertical wires.

While in this modification the main side wires are shown as terminating in horizontal feet 15 it is of course understood that these wires may be of such length as to permit of their being extended beyond the feet upwardly into contact with the bottom to provide additional reinforcement for the bottom.

While I have illustrated and described the present preferred forms of construction for carrying out my invention, these are capable of variation and modification without departing from the spirit of the invention. I, therefore, do not want to be limited to the precise details of construction set forth but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

What I claim is:

1. A receptacle comprising a bottom and a surrounding wall, a supporting frame for said receptacle comprising an annular member around which the top edge of the wall of the receptacle is adapted to be rolled, circumferentially arranged spaced vertical members depending from said annular member and at points equi-distant from their lower ends being turned inwardly to provide feet and then being turned upwardly and then outwardly and ter-

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minating with their ends equi-distant from the vertical portions of said members, and a ring embracing said outwardly turned portions and secured to the ends thereof in spaced relation to said vertical members and providing a support for the bottom of the receptacle positioned on a higher plane than said feet, and means integral with the wall of said receptacle extending inwardly parallel with said bottom below said ring and holding said bottom into engagement with said ring.

2. A container according to claim 1 in which two of said vertical members diametrically opposed to one another are provided with lugs adapted for the attachment of a handle thereto.

3. In a container, a frame consisting of an annular member, a plurality of spaced vertical wires depending from said annular member, said wires being bent inwardly equi-distant from their lower ends to provide feet and being further bent upwardly and then turned outwardly towards the outer vertical portions and terminating short thereof, a ring embracing the ends of said outwardly turned portions and secured thereto along its inner face whereby the top faces of said outwardly turned portions and the top face of said ring are on the same horizontal plane, said ring being spaced from said vertical wires to provide a passage surrounding said ring, and a receptacle comprising a bottom seating on said ring, and a surrounding wall, a portion of which latter extends below said ring through said passage and is turned inwardly to embrace said ring.

4. A container according to claim 3, in which said portion of the wall thereof located below said bottom is provided with vertical slots aligned with the respective upwardly and outwardly turned portions of said wires.

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The following references are of record in the file of this patent:

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