D. J. FAHLMAN.

CAN CONSTRUCTION.

APPLICATION FILED DEC. 6, 1920.

1,409,336. Patented Mar. 14, 1922.

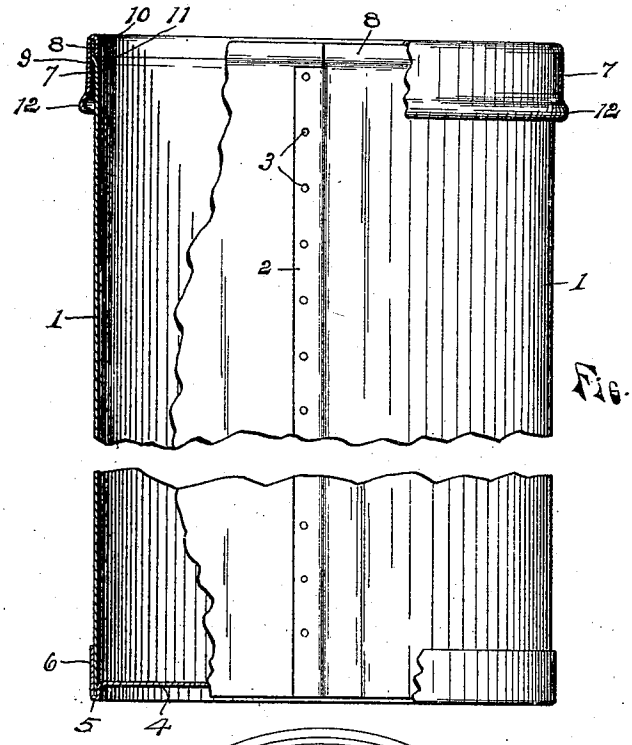


Fig. 1.

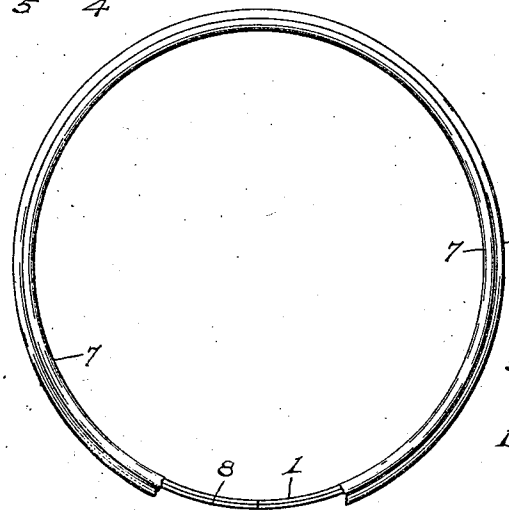


Fig. 2.

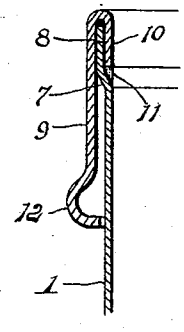


Fig. 3.

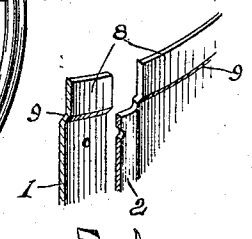


Fig. 4.

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CAN CONSTRUCTION.

1,409,336. Specification of Letters Patent. Patented Mar. 14, 1922.

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To all whom it may concern:

Be it known that I, DUNCAN J. FAHLMAN, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Can Constructions, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to metal containers such as cans and the like made from sheet metal and particularly adapted for the carrying and transportation of ice cream and similar products, which cans are subject to rough usage.

An object of the invention is to provide a sanitary container having an upper edge re-inforcement providing a smooth, rounded upper edge for the can and which is so constructed as to prevent the opening up of any seams for the lodgment of foreign matter and thus make the can sanitary. It is also an object of the invention to so construct the re-inforcement as to provide a continuous smooth inner surface for the wall of the can from end to end thereof and to apply the re-inforcement in such a manner as to provide for the tinning of parts before assembly, thus preventing the metal from rusting and becoming unsanitary.

A further object is to so construct a re-inforcement for a can body having overlapping edges that the overlap of the body may be cut away at its upper end to provide a substantially continuous end edge with the re-inforcement connecting and holding this edge portion and thus provide a very rigid upper edge for the can. It is also an object of the invention to provide certain other new and useful features in the construction and arrangement of parts, all as hereinafter more fully described and particularly pointed out in the appended claim, reference being had to the accompanying drawing, in which—

Figure 1 is a side elevation of a container illustrative of the invention and showing parts broken away and in section to more clearly disclose the construction;

Fig. 2 is an end elevation of the same with a portion of a re-inforcing rim member broken away;

Fig. 3 is an enlarged sectional detail of the upper end portion or rim of the container with a re-inforcing ring applied thereto, and

Fig. 4 is a perspective detail illustrating the construction of a portion of the container body.

As shown in the drawing, 1 represents the body of the container which is formed from a single sheet of metal rolled into tubular form with its edges overlapped, one of said edges being offset, as at 2, the thickness of the sheet metal to overlap the adjacent edge and these edges are secured together in overlapped relation by means of a series of rivets 3. The bottom 4 of the can or container is formed with an annular groove 5 to receive the end edge of the body 1 and also with an upstanding flange 6 forming a hoop or ring embracing the lower end of the body and secured thereto in any suitable manner.

Adjacent its upper end or rim, the body 1 is offset outwardly, as at 7, thus providing a rim portion 8 of slightly greater diameter than the diameter of the body. To reinforce and strengthen the upper end or rim of the body, a hoop or ring 9 is rolled from sheet metal with its upper end portion turned inwardly and downwardly to provide an inside flange 10, which is spaced from the body of the ring 9 to receive the end flange 8 of the body, the ring being rolled inwardly to form the flange 10 and thus providing a smooth rounded finish for the upper edge or rim of the can. The offset rim portion 8 of the body is preferably offset a distance equal to the thickness of the flange 10 and thus the inner surface of said flange lies in the plane of the inner surface of the can body. The slight notch 11 which is formed by the offsetting of the body adjacent the lower edge of the flange 10, is preferably filled in with solder or other suitable material to provide a smooth flush interior surface for the can which will afford no place for the lodgment of matter which would make the can unsanitary. The ring 9 embracing the body is formed at its lower edge with a bead 12, the edge of the metal being turned inwardly toward the can body to give a smooth surface and the bead provides a stop for a suitable cover or closure (not shown) for the can, which is slipped over this ring. The ring 9 thus provides a very strong edge re-inforcement for the upper edge or rim of the can to prevent the same from being bent out of shape, the inturned flange 10 of the ring providing a rounded smooth rim and an edge portion for the can which is formed of three thicknesses of metal. As the metal of the

ring itself is turned inwardly and over the edge of the can body, there is no edge seam which is liable to open should the rim of the can be dented or distorted in any way, and thus the lodgment of dirt is prevented.

In the manufacture of containers, the body of the can may be rolled and formed with the offset edge portion 8 and then tinned. The ring 9 with its inturned flange 10 may be formed up complete, then tinned and thereafter applied to the end of the body, thus providing for the tinning of every part to prevent rusting.

When the body 1 is formed with the offset edge flange 2, this flange is cut away adjacent the offset or outwardly bent end portion 8 of the body so that the edges of this end portion or flange 8 may lie in abutting relation when the edges of the body are secured together by the rivets 3. The end edge or rim of the offset flange 8 is thus made continuous around the can to receive the channel of the re-inforcing ring 9 which channel is formed by the inturning of the flange 10 thereon, and thus the unconnected edges of the offset rim portion 8 are securely connected and held by the application of the re-inforcing ring to the upper end of the body.

By providing the channeled reinforcing ring for the upper end of the can portion, all joints or places for the lodgment of dirt are eliminated and a very strong rigid construction provided which will withstand the hard usage to which containers for this purpose are subjected, and further, as the body is rolled from a substantially flat continuous sheet of metal, hardened sheet steel may be employed, and thus the container is further strengthened and a body provided which will withstand rough usage without being dented or distorted.

Obviously changes in the size or proportion of parts or the particular configuration thereof may be made without departing from the spirit of the invention, and such other changes in the construction as fall within the scope of the appended claim are also contemplated.

Having thus fully described my invention, what I claim is:—

A container comprising a sheet metal body having an outwardly offset end edge portion, and a reinforcing ring for said end of said body formed with a channel to receive and embrace the offset portion of the body, said channel being formed by turning an edge portion of the ring inwardly and downwardly to form a long flange portion engaging the outer face of the offset end portion of the body and a short flange to engage and lie flat upon the inner face of said portion with its inner surface lying in the plane of the inner surface of the wall of the body below said offset portion, said long flange being inturned along its lower edge with the edge of the metal facing the outer side of the body below said offset portion thereof and lying adjacent thereto.

In testimony whereof I affix my signature in presence of two witnesses.

DUNCAN J. FAHLMAN.

Witnesses:

LEWIS E. FLANDERS,

ARTHUR MINNICK.