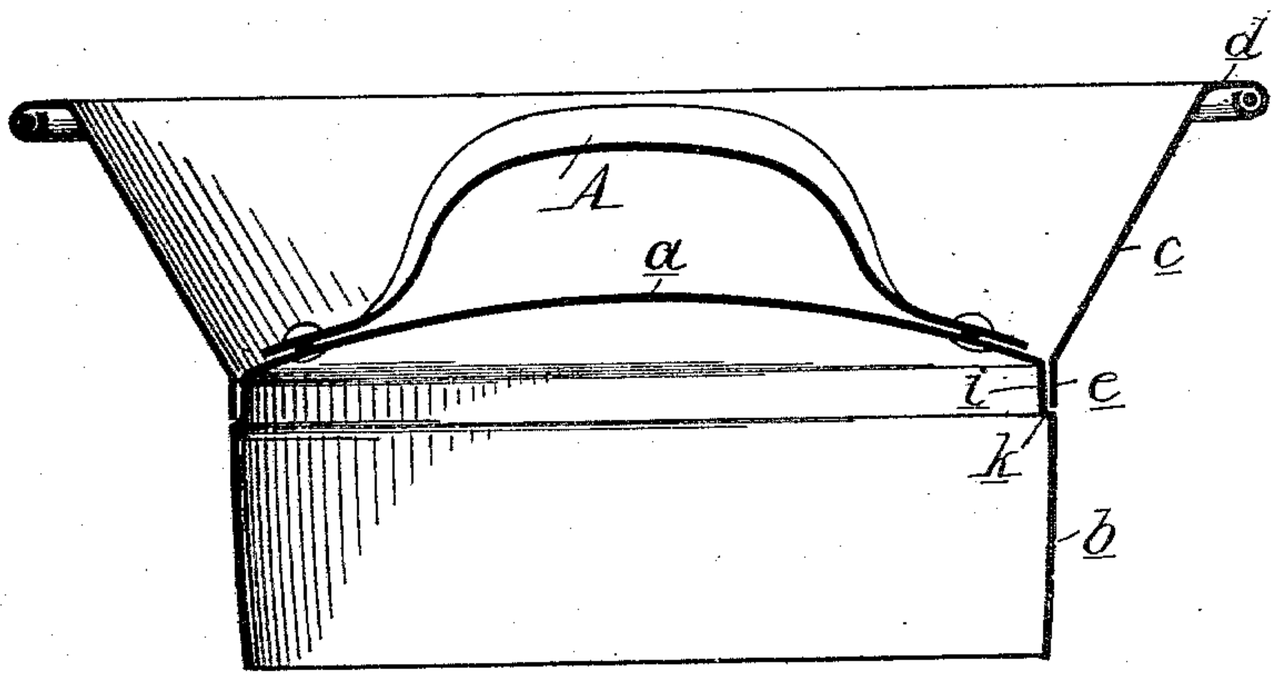
(No Model.)

T. W. FORSTER.

COVER FOR MILK CANS.

No. 563,659. Patented July 7, 1896.



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UNITED STATES PATENT OFFICE.

THOMAS W. FORSTER, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-HALF TO THE BUHL STAMPING COMPANY, OF SAME PLACE.

COVER FOR MILK-CANS.

SPECIFICATION forming part of Letters Patent No. 563,659, dated July 7, 1896.

Application filed December 9, 1895. Serial No. 571,491. (No model.)

To all whom it may concern:

Be it known that I, THOMAS W. FORSTER, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Covers for Milk-Cans, of which the following is a specification, reference being had therein to the accompanying drawing.

The invention consists in the construction, arrangement, and combination of the various parts of a cover for milk-cans, whereby I produce a cover better adapted to withstand the hard usage to which such devices are subjected without damage, and whereby, further, I form such cover without grooves or seams in which dirt can accumulate, all as more fully hereinafter described.

In the drawing which accompanies this specification I show a vertical central section through a milk-can cover embodying my improvements.

At the present time the manufacture of milk-cans to be used in carrying milk to the large cities is a considerable industry, and the demand requires that such cans shall be made substantial, so as to have a long life under the rough handling which they receive. In making the covers for such cans heretofore it has been usual to make the guard-ring and the cap or diaphragm in a single piece and to solder to the under side a cylindrical entering collar. In this construction, the handle being secured to the cap, any undue angular strain in pulling off the cover was liable to cause a breakage, as the only connection between the portion to which the handle-pull was applied and the entering collar was the soldered joint. It has also been proposed to make the guard-ring and entering collar in one piece and solder in the diaphragm, to which the handle is secured, but this is open to the same objection.

My invention is intended to overcome these objections and to produce a cover which is exceptionally strong, easily manufactured, and which is free from creases or grooves in which dirt can collect.

To this end I take a piece of sheet metal and draw it or shape it into substantially cup shape, comprising what I will call for convenience sake the "cap" or "diaphragm" *a* and the marginal flange or collar *b*, depending around the same. This collar is adapted to enter the mouth of the can (not shown) and is preferably slightly tapering to assist in more easily entering it therein. To the diaphragm is secured the handle A, preferably by riveting.

c is the guard-ring, shaped from a single piece of sheet metal, and preferably drawn seamless into substantially the shape of an inverted cone. At the top is preferably a lateral flange *d* with its edge reinforced by a wire in the usual manner, and at its lower edge is a vertical securing-flange *e*, which is soldered or otherwise secured to the collar *b* of the cap portion of the cover. With this construction it is evident that the pull is entirely upon the cap portion, which is integral with the collar *b*, so that no strain comes upon the soldered joint. Indeed, so true is this that I find that by tinning the cover after the parts are assembled a sufficiently strong joint will be formed between the two parts.

I find that it is desirable for many reasons to form the flange *b* with the portion *i* at the top of lesser diameter, or, in other words, to form a shallow notch or gain at the top of this collar, of a depth and width corresponding to the thickness and width of the securing-flange *e*. With this construction, which is the one I have shown in the drawing and deem by far the most preferable one, the securing-flange *e* fits in this gain of the collar, with its outer face flush with the outer face of the collar *b*, its lower edge resting against the shoulder *k*. This strengthens the top of the collar *b*, upon which the bending or prying strains would be applied if angular strains were applied to the handle. It also forms a cover without any grooves in or near the entering collar in which dirt can collect.

What I claim as my invention is—

A cover for milk-cans comprising the cap or diaphragm and the entering collar integral therewith and both shaped or drawn from a single piece of sheet metal, the annular gain formed at the top of the collar, a flaring guard-ring, a securing-flange at the lower edge thereof secured in said gain, and the handle secured to the diaphragm.

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

THOMAS W. FORSTER.

Witnesses:

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