T. BRAY.

MILK CAN COVER.

APPLICATION FILED JAN. 13, 1908.

915,931 Patented Mar. 23, 1909.

Fig. 1.

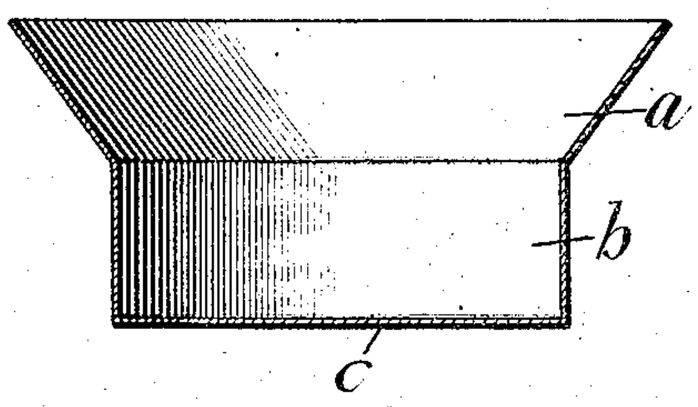


Fig. 2.

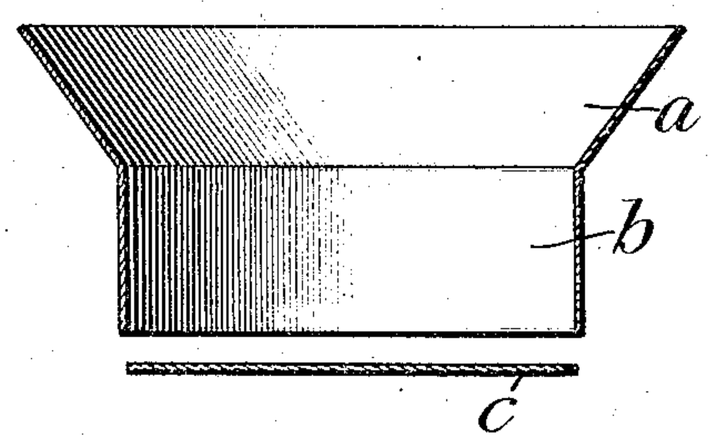


Fig. 3.

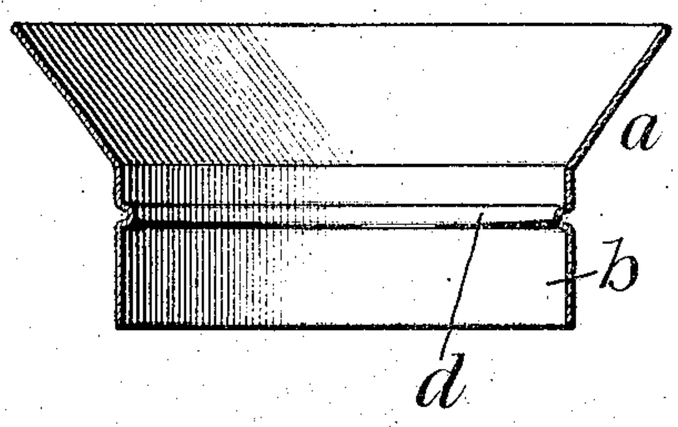


Fig. 4.

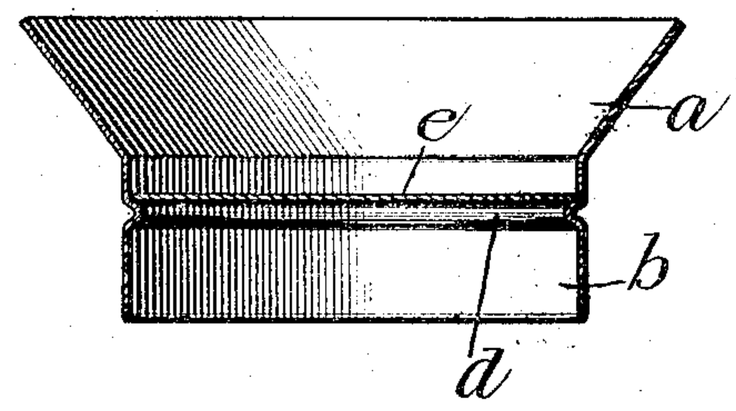


Fig. 5.

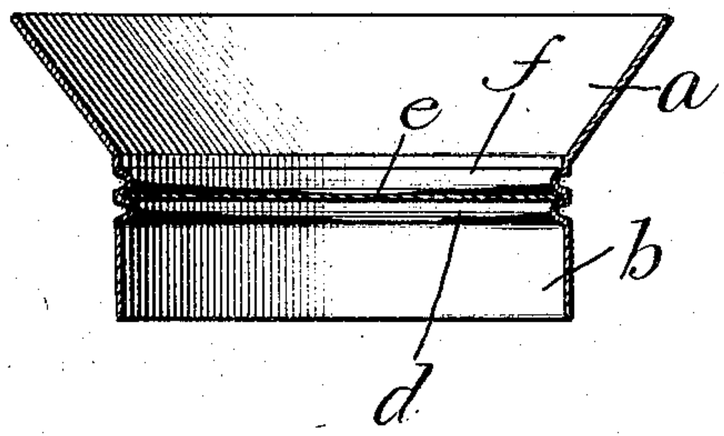
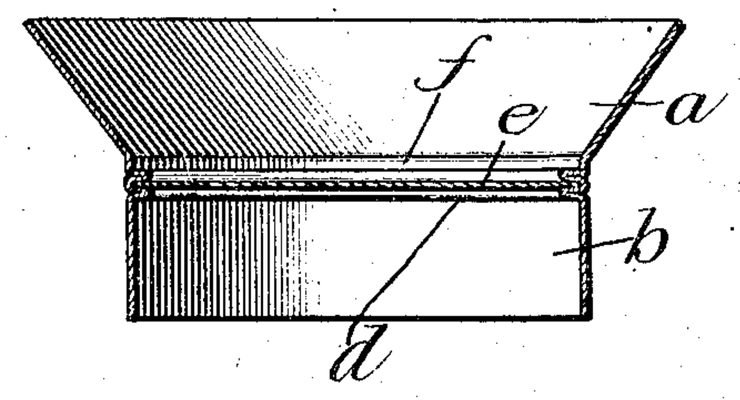


Fig. 6.



Witnesses:
Z. A. D. Perry
G. V. Donaruma Jr.

Inventor:
Thomas Bray.
by Bond, Adams, Pickard & Jackson
his Attorneys.

UNITED STATES PATENT OFFICE.

THOMAS BRAY, OF ARLINGTON HEIGHTS, ILLINOIS, ASSIGNOR TO BRAY & KATES, OF ARLINGTON HEIGHTS, ILLINOIS, A FIRM.

MILK-CAN COVER.

No. 915,931. Specification of Letters Patent. Patented March 23, 1909.

Application filed January 13, 1908. Serial No. 410,577.

To all whom it may concern:

Be it known that I, THOMAS BRAY, a citizen of the United States, residing at Arlington Heights, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Milk-Can Covers, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to covers for cans, preferably, milk-cans and has for its object to provide a construction wherein the usual diaphragm or plate that lies within the main or body portion of the cover will be securely held in place.

The article produced is the result of one suitable method of manufacture hereinafter described, the various steps taken to produce the completed cover being illustrated in the accompanying drawing.

Figure 1 is a central, vertical section illustrating the initial step in the manufacture of the cover, the sheet of metal being drawn to the form there shown. Fig. 2 is a similar view after the bottom shown in Fig. 1 has been cut out. Fig. 3 is a similar view showing the annular, inwardly projecting rib or bead upon which the cut out bottom is to rest. Fig. 4 is a similar view showing said cut out bottom resting upon said rib or bead. Fig. 5 shows the cover confined in position by a second annular rib or bead, and Fig. 6 is a similar view of the completed article.

In the making of my improved cover a sheet of metal is drawn in the ordinary way into the form shown in Fig. 1, there being thus produced a flaring portion *a*, a cylindrical portion *b* and a bottom *c*. The next step in the operation is to cut out the entire bottom *c*, as shown in Fig. 2, which is done at a single operation by an ordinary cutting die. Following such removal of the bottom the cylindrical part *b* has formed on its exterior an annular groove, as clearly shown in Fig. 3, which necessarily produces an interiorly-projecting rib or bead, indicated by *d*. After the formation of such rib or bead *d* a diaphragm or plate of a size and shape to fit within the cylindrical part *b* is placed in such part so as to come against and rest upon said rib or bead *d*, as shown in Fig. 4. The bottom piece *c* hereinbefore referred to may be employed for such diaphragm or plate, as it is well adapted for such use by reason of its size and shape, but I do not wish to be restricted to the use of such bottom piece for this use, and as such diaphragm or plate may be cut from some other piece of metal I have designated it by the letter *e*. After this diaphragm or plate has been placed in position a second interiorly-projecting rib or bead *f* is formed in the cylindrical portion *b*, said last-named rib or bead being similar to the first-formed rib or bead *d* and so located with reference to the diaphragm or plate *e* as to hold such diaphragm or plate between it and the said rib or bead *d*. This stage in the manufacture of the cover is shown by Fig. 5. The next and final step is to press the two ribs or beads *d* and *f* toward each other, which is best done by suitable dies. This pressing of the ribs or beads toward each other causes them to grip tightly between them the entire edge portion of the diaphragm or plate so that such diaphragm or plate is held locked immovably in place, as shown in Fig. 6. After the diaphragm or plate is thus secured in place, the cover as a whole will ordinarily be subjected to a tinning bath, during which any little spaces that may exist between the ribs or beads and the diaphragm or plate will become filled, rendering the joint an absolutely tight and perfect one.

I have not shown any handle in connection with the cover, but it will be understood that a suitable handle may be applied in any well-known manner.

That which I claim as my invention and desire to secure by Letters Patent, is,—

1. A sheet-metal cylinder, in combination with a diaphragm or plate fitting therein and held in place by two interiorly-projecting ribs or beads formed integral with said cylinder, between which ribs or beads said diaphragm or plate projects.

2. A sheet-metal cylinder, in combination with a diaphragm or plate fitting therein and held in place by two interiorly projecting ribs or beads formed integral with said cylinder, between which ribs or beads said diaphragm or plate projects, said ribs or beads being compressed against said diaphragm.

THOMAS BRAY.

Witnesses:
ANTHONY T. KATES,
SARAH PROCTOR.