

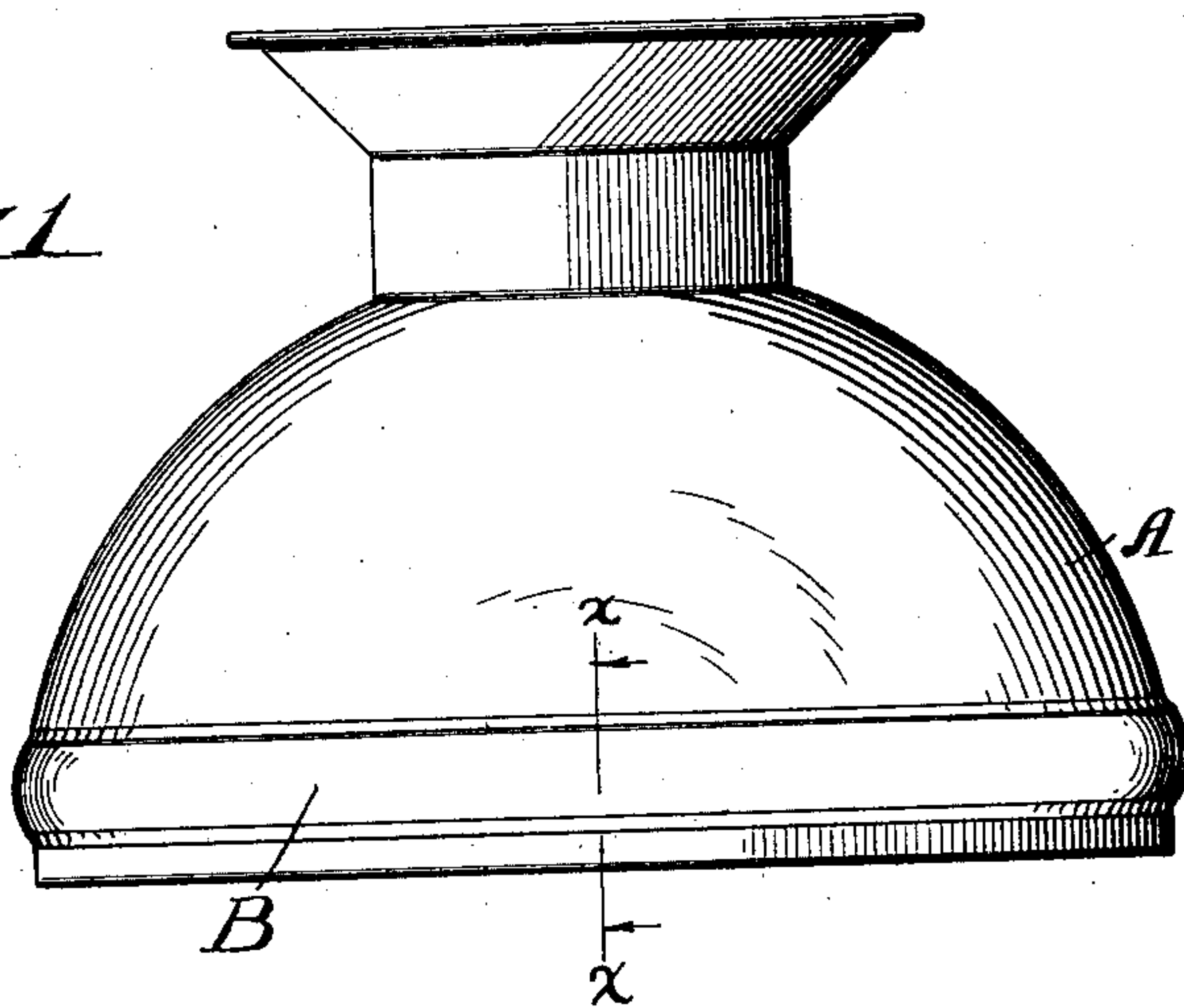
No. 753,581.

PATENTED MAR. 1, 1904.

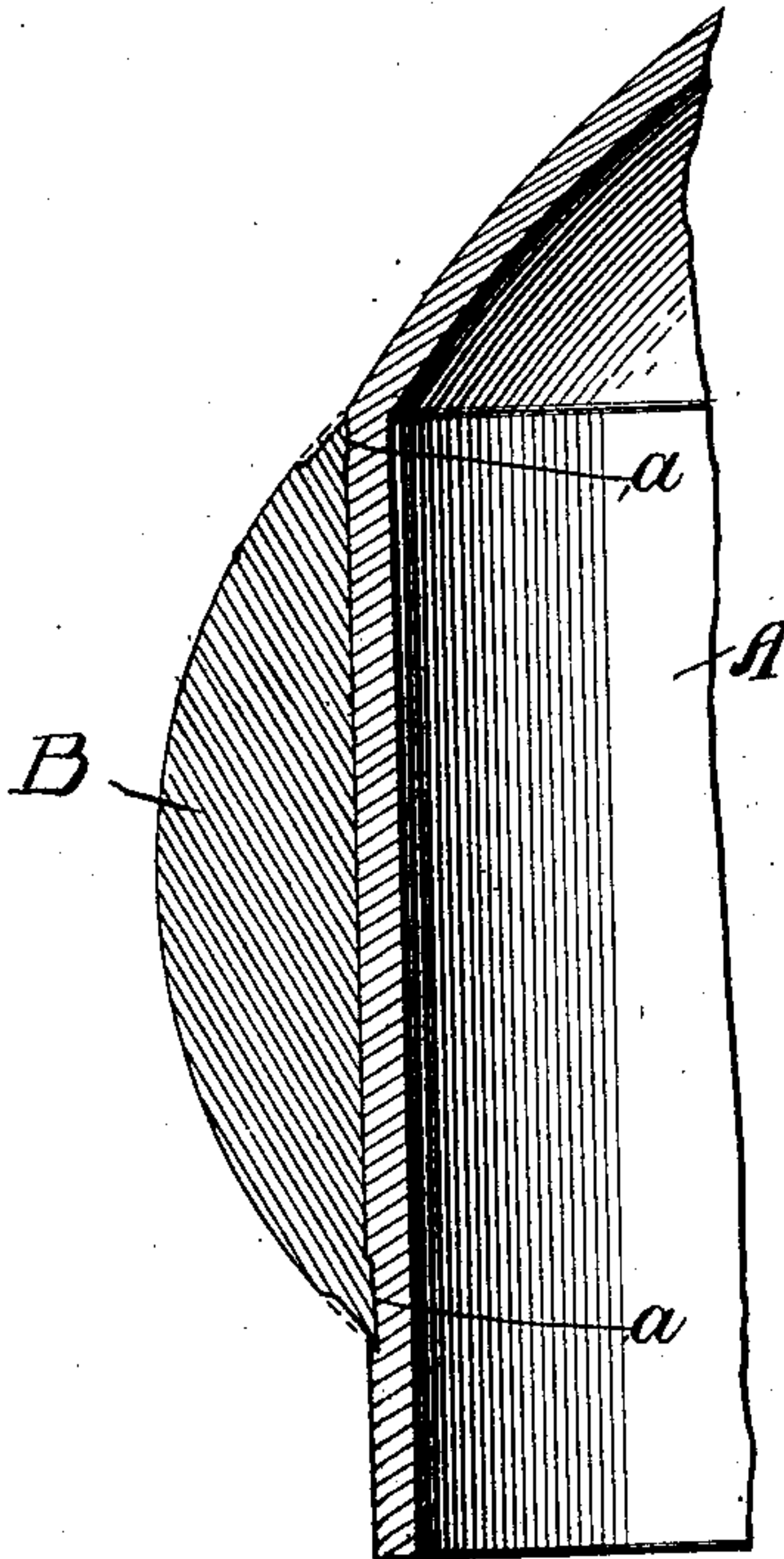
A. T. KATES.  
SHEET METAL CAN.  
APPLICATION FILED SEPT. 15, 1903.

NO MODEL.

*Fig. 1*



*Fig. 2.*



Witnesses.

G. U. Domarus.

Robert W. Wein

Inventor:

Anthony T. Kates.  
by Bond, Wideman, Richard & Jackson  
Attys.



# UNITED STATES PATENT OFFICE.

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

## SHEET-METAL CAN.

SPECIFICATION forming part of Letters Patent No. 753,581, dated March 1, 1904.

Original application filed March 30, 1903, Serial No. 150,257. Divided and this application filed September 15, 1903. Serial No. 173,348. (No model.)

*To all whom it may concern:*

Be it known that I, ANTHONY T. KATES, 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 Sheet-Metal Cans, of which the following is a specification, reference being had to the accompanying drawings.

On the large cans used by dairymen and milk-dealers it is customary to apply to the breast of the can a heavy metal hoop for the purpose of strengthening such part and guarding it in large measure from injury as a result of the rough usage to which such cans are ordinarily subjected. Various means have been adopted for securing such hoops in place, such as riveting it to the breast, and also by providing the inner face of the hoop with an annular groove, into which the metal of the breast was forced. The various means adopted have been found objectionable either on account of the expense involved or the impossibility of making the hoop fit exactly upon the breast. A milk-can to be perfectly satisfactory to the user must have such hoop fit with great accuracy upon the breast, so as to absolutely prevent the admission between it and the breast of any milk or dirt, for it will be readily understood that the admission of such matters beneath the hoop and the practical impossibility of entirely removing them will soon cause a disagreeable odor.

The object of my invention is to provide a construction in which the hoop referred to will be secured in place in a novel manner and so tightly at its edges as to leave no space in which milk that may run down the side of the breast or any dirt or other matter may enter. I accomplish this by providing a construction wherein the edges of the said hoop are embedded slightly in the metal of said breast, the method by which this is accomplished being fully set forth in a pending application filed by me on the 30th day of March, 1903, Serial No. 150,257, and of which said application this is a division.

In the accompanying drawings, Figure 1 is

a side elevation of a milk-can breast of ordinary form with its hoop applied thereto and secured thereon in my novel manner, and Fig. 2 is an enlarged section at line *xx* of Fig. 1.

Referring to the drawings, A indicates a milk-can breast of ordinary form and construction, and B indicates the metal hoop applied and secured thereto. The hoop shown is of the shape ordinarily employed for such use—that is, its inner face is adapted to fit against the vertical cylindrical lower portion of the breast and its outer face is curved from its central portion toward its edges—and the hoop, as is always the case, is of a size to adapt it to fit as closely as may be upon the breast. No matter how tight the fit may be, however, it is necessary to provide means for positively securing it in position, and by my construction I not only so secure it, but at the same time and by the same securing means eliminate the possibility of foreign matter entering between the hoop and the breast. I accomplish this by embedding the hoop along its edges in the metal of the breast, as indicated at *a a*. By “embedding” in this connection is meant a compressing of the hoop’s edges, whereby such edges are slightly displaced and forced into the body, and a much closer and firmer union between the two parts is had than where the edge of the hoop is turned so as to project into a groove previously formed in the body. Such embedding of the metal of the hoop need be but slight, as indicated; but, as has been demonstrated, it will effectually hold the hoop in place and will also act to prevent the admission of foreign matter beneath the hoop. If any slight opening is left between the hoop and the breast at the edge of the hoop into which milk might pass, and which is sometimes the case owing to slight imperfections either in the hoop or the breast, such slight opening would be sealed when the completed article is subjected to the usual tinning operation, for it will of course be understood that after the hoop has been applied and secured in place the completed article is to be tinned in the usual manner.

It is especially desirable that provision be



made for so attaching the hoop that a perfectly tight joint be made at the upper edge of the hoop, for it is at that place, much more than at the lower edge of the hoop, that there  
5 is liability of foreign matter entering beneath the hoop, particularly milk that may be spilled upon and flow down the curved side of the breast; yet as it forms a better article to have both edges embedded as shown and as such  
10 edges can both be embedded simultaneously, as set forth in my said pending application, I prefer to so secure the hoop.

It will be evident from the foregoing description that the present embodiment of the  
15 invention includes a sheet-metal body and a metal hoop surrounding the body, a portion of the hoop being displaced and embedded in said body, the latter being correspondingly displaced solely by the displacement of the  
20 hoop. In the present case the displacement of

the body extends partially through the same, by virtue of which no protrusion is present on the inner surface of said body.

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

1. The combination with a sheet-metal body, of a metal hoop surrounding said body, said hoop having its upper edge compressed and slightly embedded in said body, substantially  
as specified.

2. The combination with a sheet-metal body, of a metal hoop surrounding said body, said hoop being compressed along its edges and, at such edges, slightly embedded in the body, substantially as specified.

ANTHONY T. KATES.

Witnesses:

THOS. BRAY,

H. ROSENWINKEL.