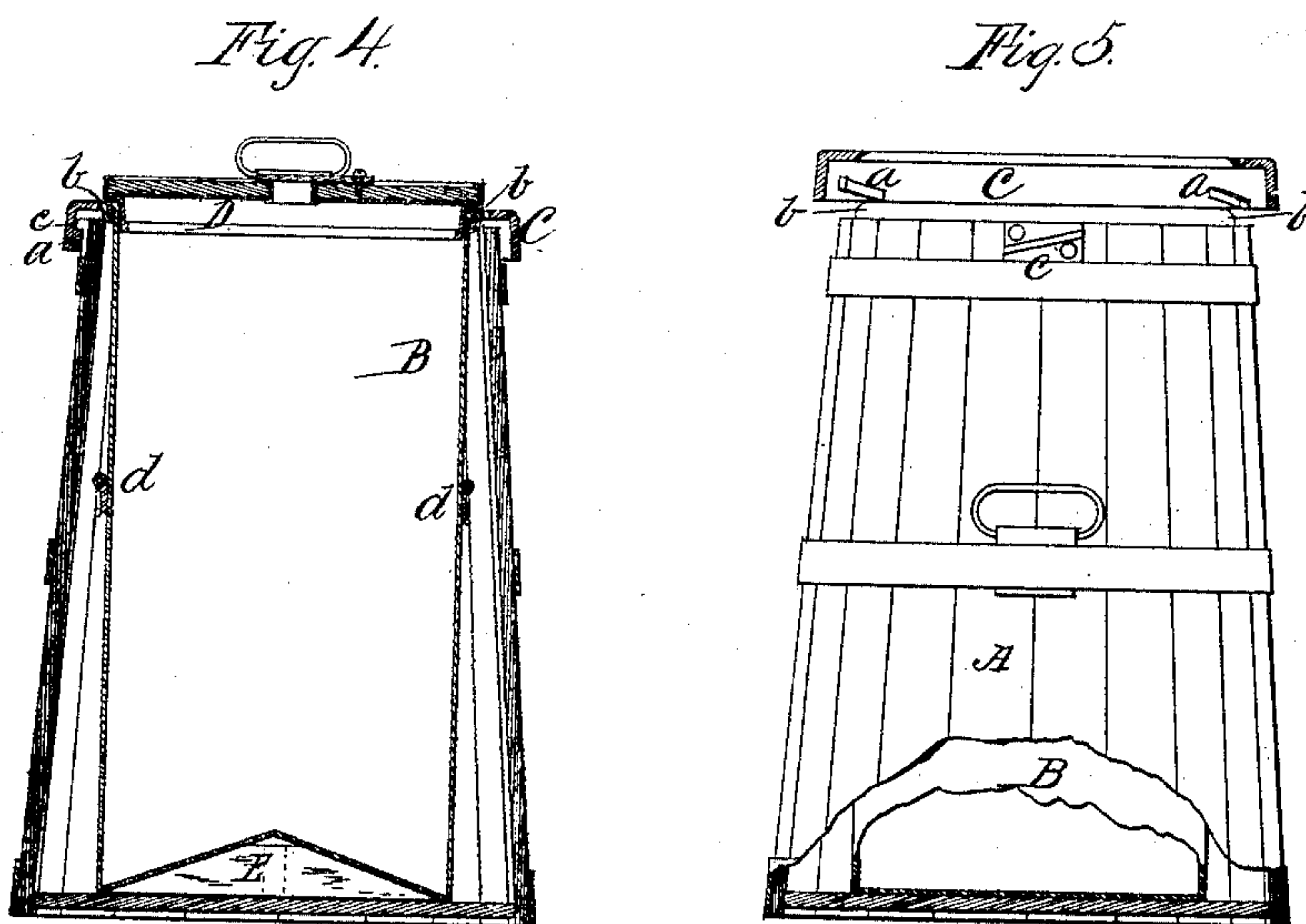
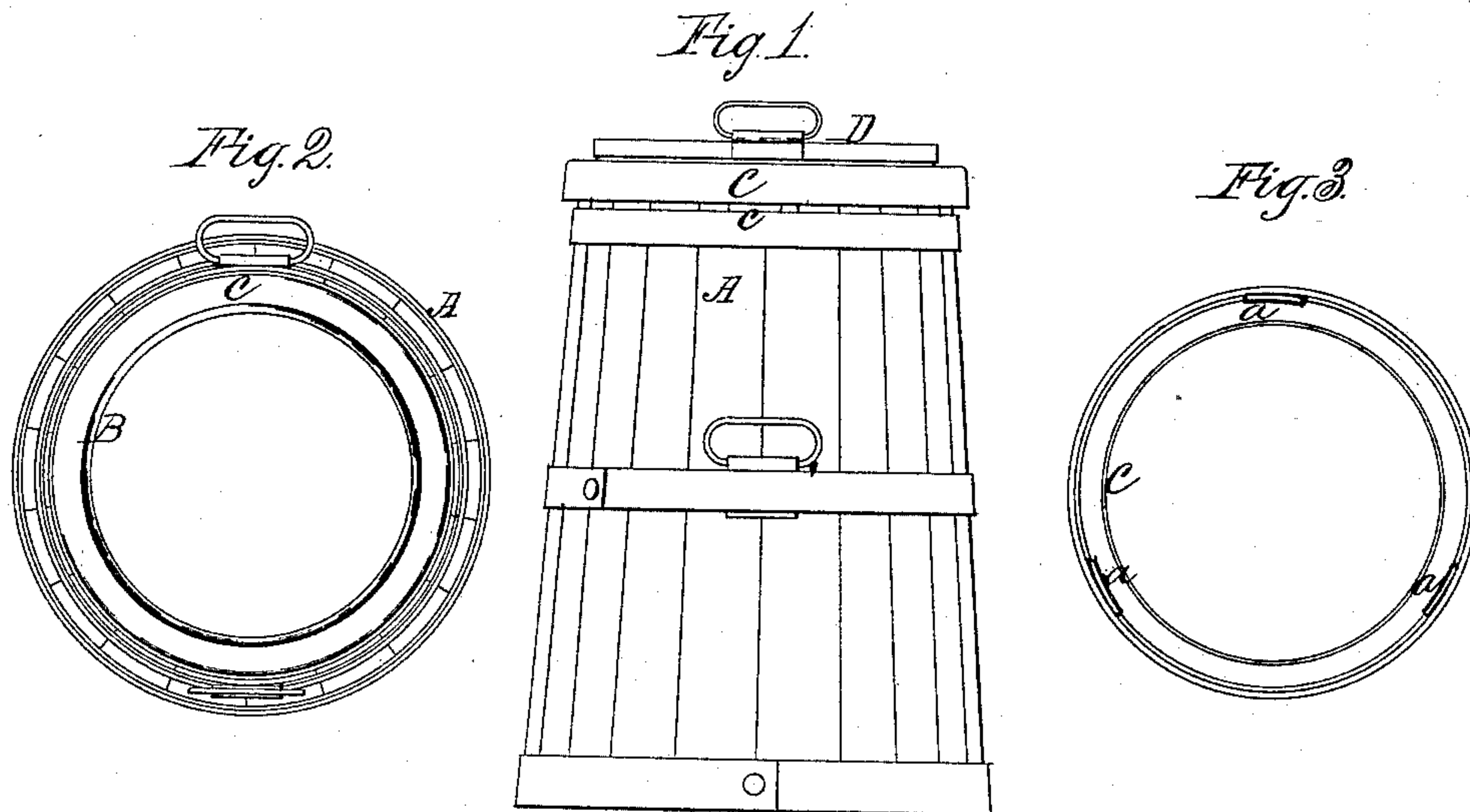


(No Model.)

J. F. SWAB.
TRANSPORTATION CAN.

No. 328,082.

Patented Oct. 13, 1885.



Witnesses.
Amos G. Clark
James. Wilson

Inventor.
Joseph F. Swab.
By Justus M. St. John
His Atty.

UNITED STATES PATENT OFFICE.

JOSEPH F. SWAB, OF CEDAR RAPIDS, IOWA.

TRANSPORTATION-CAN.

SPECIFICATION forming part of Letters Patent No. 328,082, dated October 13, 1885.

Application filed April 18, 1885. Serial No. 162,637. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH F. SWAB, a citizen of the United States, residing at Cedar Rapids, in the county of Linn and State of Iowa, have invented certain new and useful Improvements in Transportation-Cans, of which the following is a specification.

The object of my invention is to provide the metallic can used in transporting milk with a simple, strong, and durable casing, in which the can may be securely fixed or removed therefrom at pleasure, the casing being adapted to protect the can from mutilation and the contents thereof from extremes of temperature.

The invention consists, essentially, in a round casing formed of hoops and staves, flaring at the bottom, large enough at the top to freely admit the milk-can, and provided with a ring adapted to bear upon a flange or bead at or near the top of the can, and to hold the can in position through the action of catches connecting the ring with the casing. It further consists in providing the bottom of the casing with angled or curved ribs to match and support the concave bottom of the can when such cans are used, and in the general combination and adaptation of parts, as herein set forth.

In the accompanying drawings, Figure 1 represents an elevation of the invention; Fig. 2, a plan view of the same; Fig. 3, a plan view of the fastening-ring from the under side; Fig. 4, a vertical section of the invention, and Fig. 5 a sectional elevation of the same.

Similar letters of reference indicate corresponding parts.

The casing A is similar to a vat or tub, being made with staves bound with hoops, and having a lower head or bottom. To gain simplicity in form and the greatest degree of strength, as well as to conform to the can itself, the casing is made round. It is tapered, that the hoops may be driven on tightly, and flared at the bottom to prevent their dropping off in transportation. Suitable handles attached to the sides admit of its being carried in an upright position. The upper open end is made large enough to freely admit the can B, which, resting upon the bottom, extends a short distance above the casing. Around the can at or near the top is formed a bead or

flange, b. In Fig. 4 it is shown as formed by turning the material of the can back over a ring of half-round wire or rod, which may be also soldered to the can. The can is provided with a suitable cover resting upon the extreme upper edge. It should also have handles d d, for convenience in carrying when removed from the casing.

To hold the can in position the casing is provided with a metallic ring, C, the inside diameter of which is somewhat smaller than the extreme diameter of the can, over the bead or flange upon which it is adapted to rest, allowing the edge to extend slightly above it to support the cover, as shown in Fig. 4. The ring is fastened to the casing by suitable catches or hooks. A neat, simple, and effective device for this purpose is shown in the drawings. An annular flange somewhat larger than the top of the casing is formed on the ring, and is provided with internal diagonal ribs, a a. Plates having corresponding ribs, c c, are attached to the casing near the top. Two or more may be used. In practice I prefer three. The ring is screwed down upon the bead or flange of the can by a simple short turn, as will be readily seen.

For general use it is desirable to have the bottom of the can concave, as represented in Fig. 4. This not only makes the bottom stiffer, but also protects it greatly from wear and injury when used separate from the casing. Nevertheless, it is apt to bulge between the sides and the center, to prevent which I provide the bottom of the casing with ribs E, corresponding to the concave. The ribs may be of any number desired, though four are ordinarily sufficient. In the case of a can not designed to be used outside the casing the bottom may be level, as shown in Fig. 5. The ribs E may be permanently attached to the bottom, or adjustable to any bottom, as circumstances require.

The form of casing herein shown is advantageous in several respects. As already stated, it is stronger than any polygonal casing can be, and its taper admits of the hoops being driven and the staves drawn much more tightly than is possible with a straight cylinder. By reason of this the casing may be made water-tight, and in hot weather the space be-

tween it and the can may be filled with cold water, and the milk kept cool thereby. The form also admits of easy access to the handles while the vessels are standing close together in the wagon or elsewhere. The manner of attaching the can admits of its easy and quick removal from the casing for repairs, or for use in moderate weather.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with a milk-can and means for securing it in position, a casing composed of hoops and staves and a bottom provided with ribs corresponding to the concave of the bottom of the can, substantially as specified.

2. In combination with the casing A and

can B, having bead or flange *b*, the metallic ring C, adapted to rest upon said bead or flange and connect with the casing by means of hooks or catches, substantially as set forth.

3. In combination with the casing having lugs *c*, and the milk-can B, having bead or flange *b*, the metallic ring C, having an annular flange provided with lugs *a a*, whereby the can is fastened securely in the casing by a short turn of the ring, substantially as set forth.

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

JOSEPH F. SWAB.

Witnesses:

E. H. POWELL,
FRANK G. CLARK.