

(No Model.)

W. W. FLINT.
METALLIC VESSEL.

No. 458,361.

Patented Aug. 25, 1891.

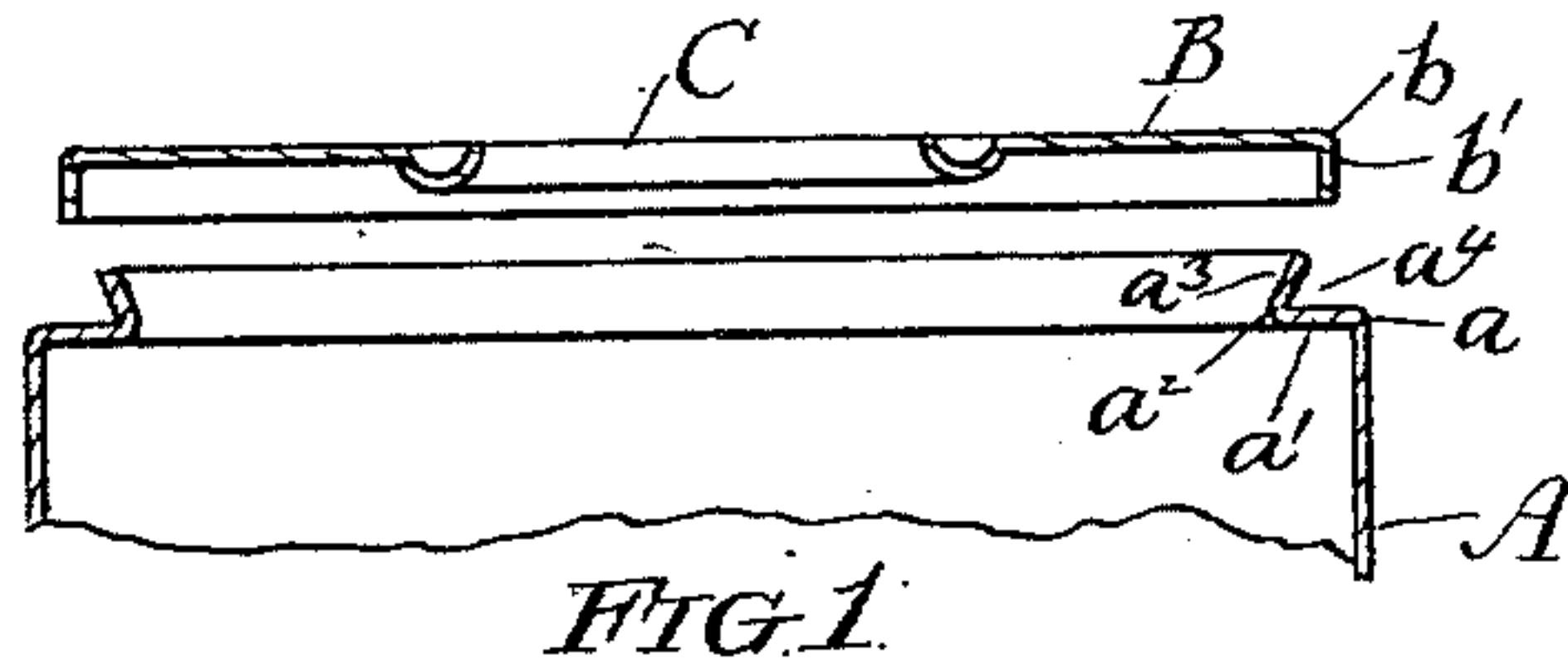


FIG. 1.

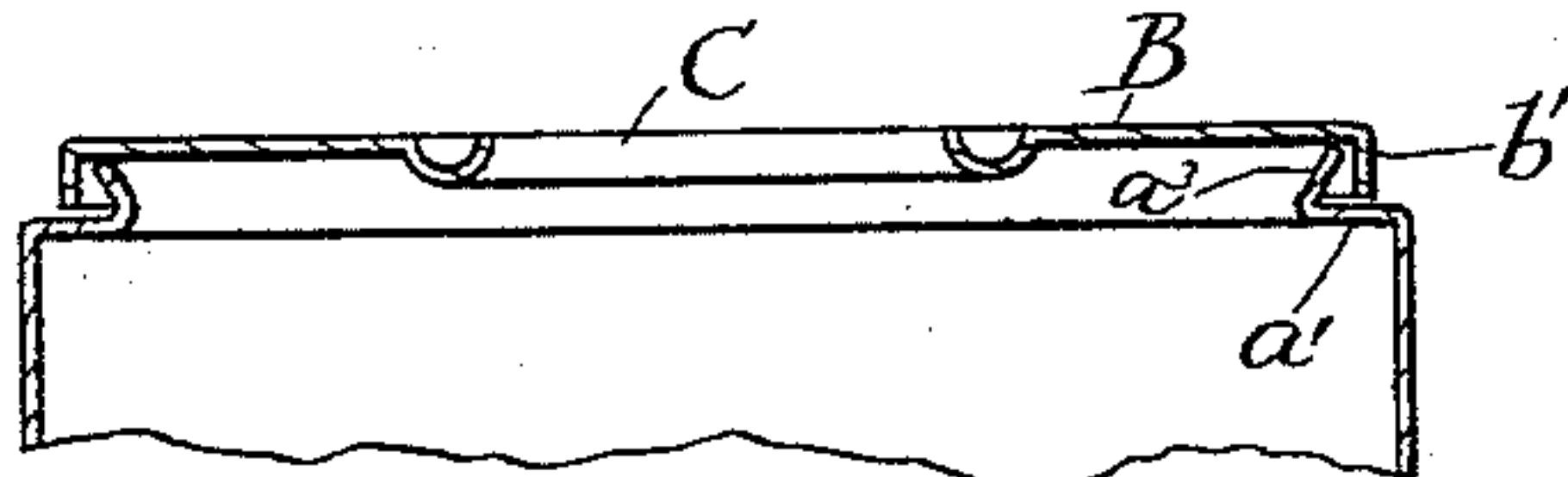


FIG. 2.

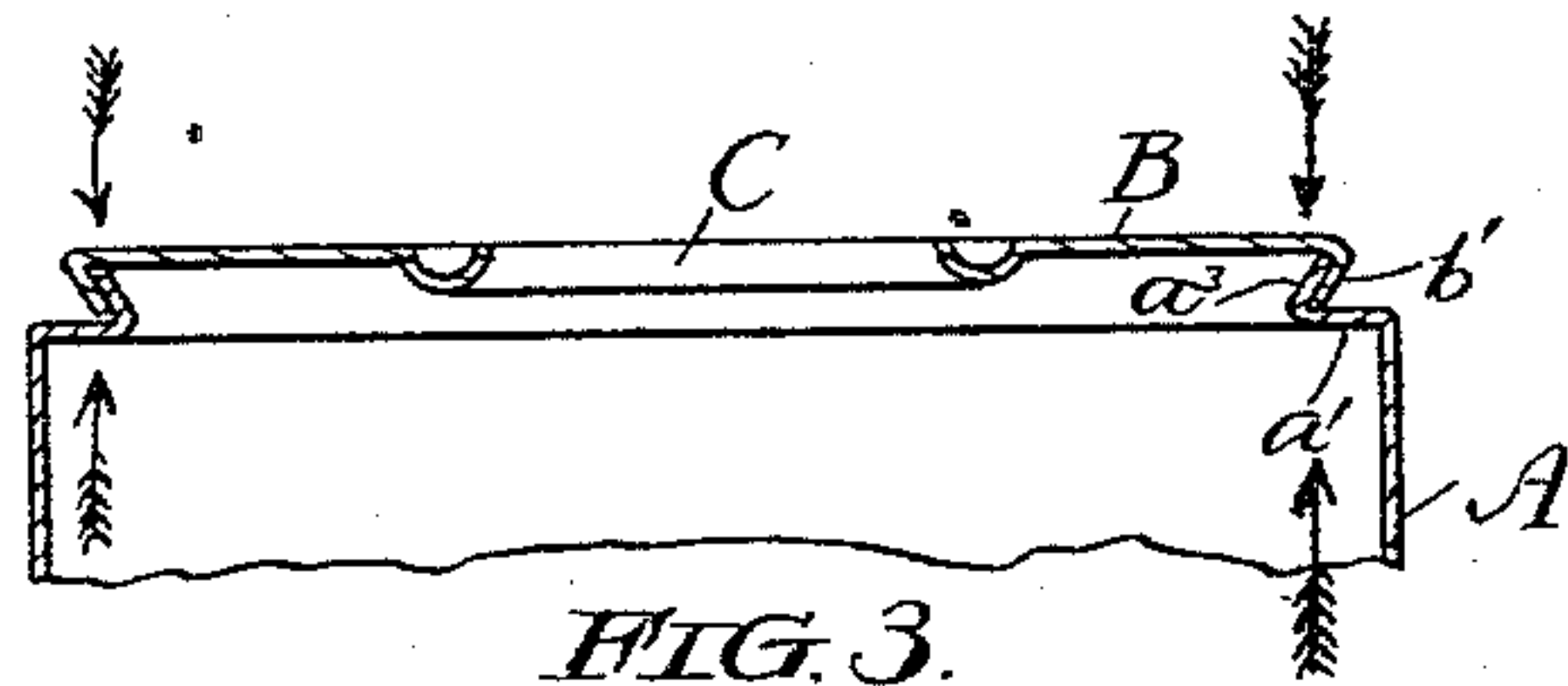


FIG. 3.

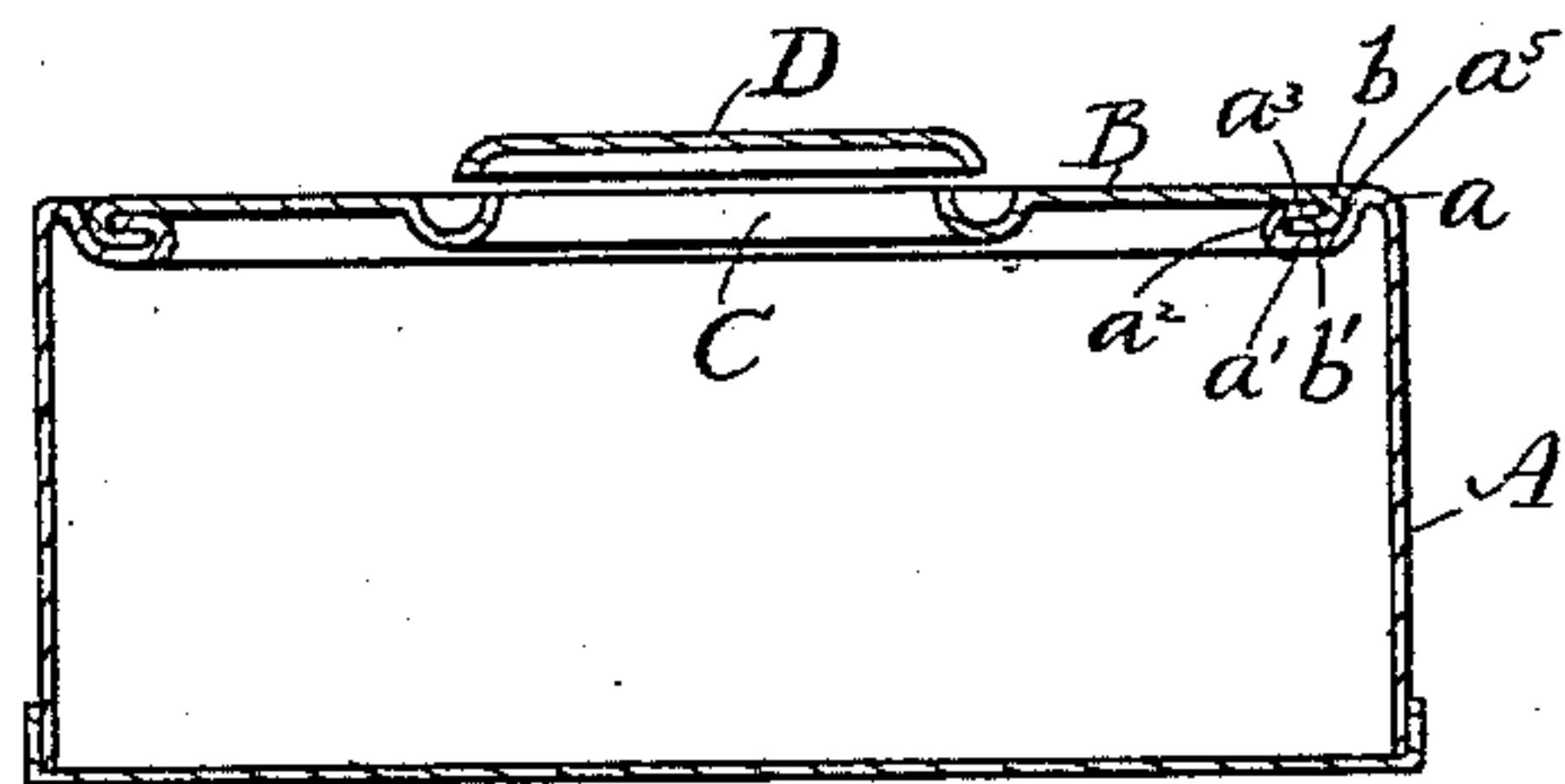


FIG. 4.

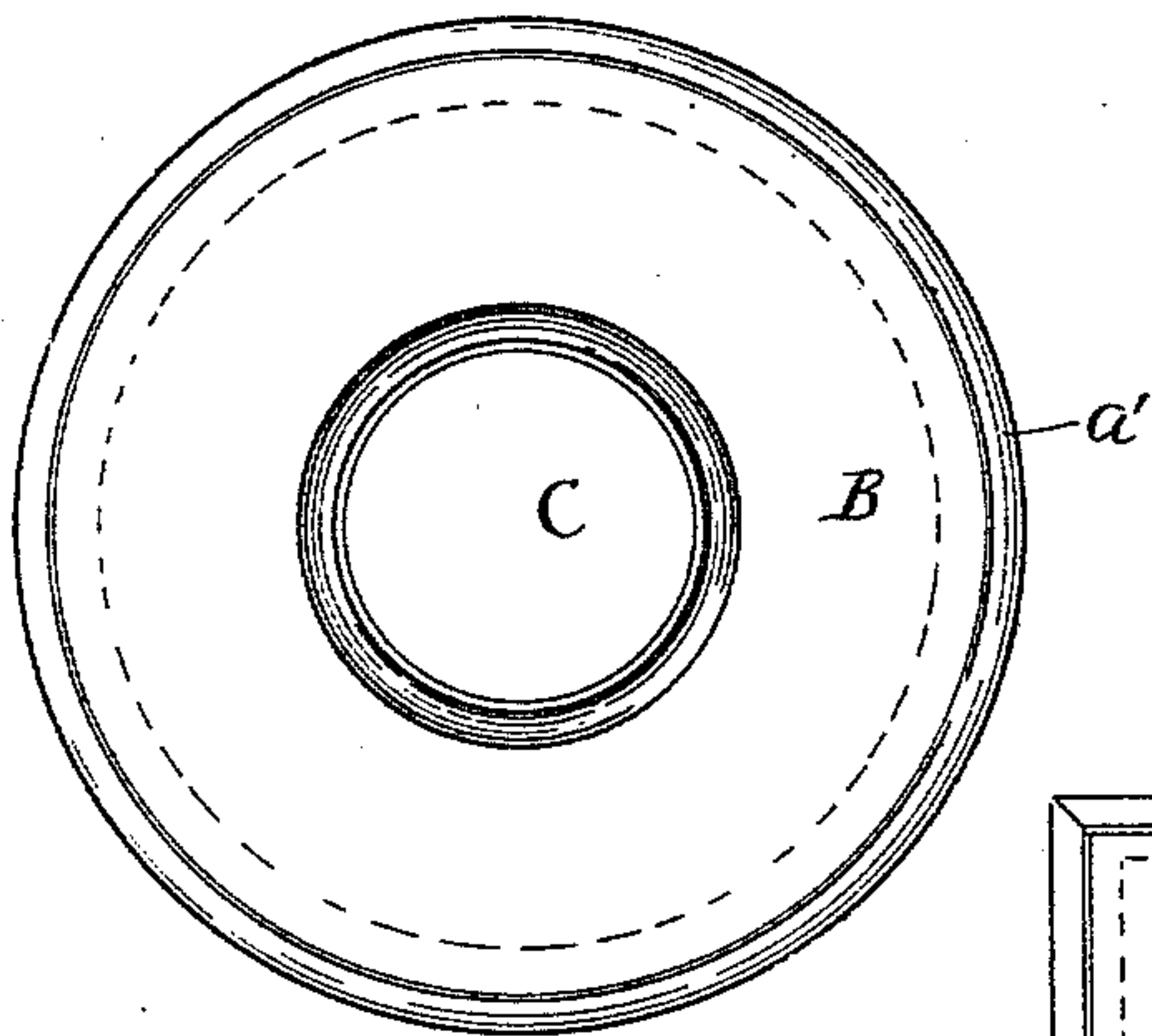


FIG. 5.

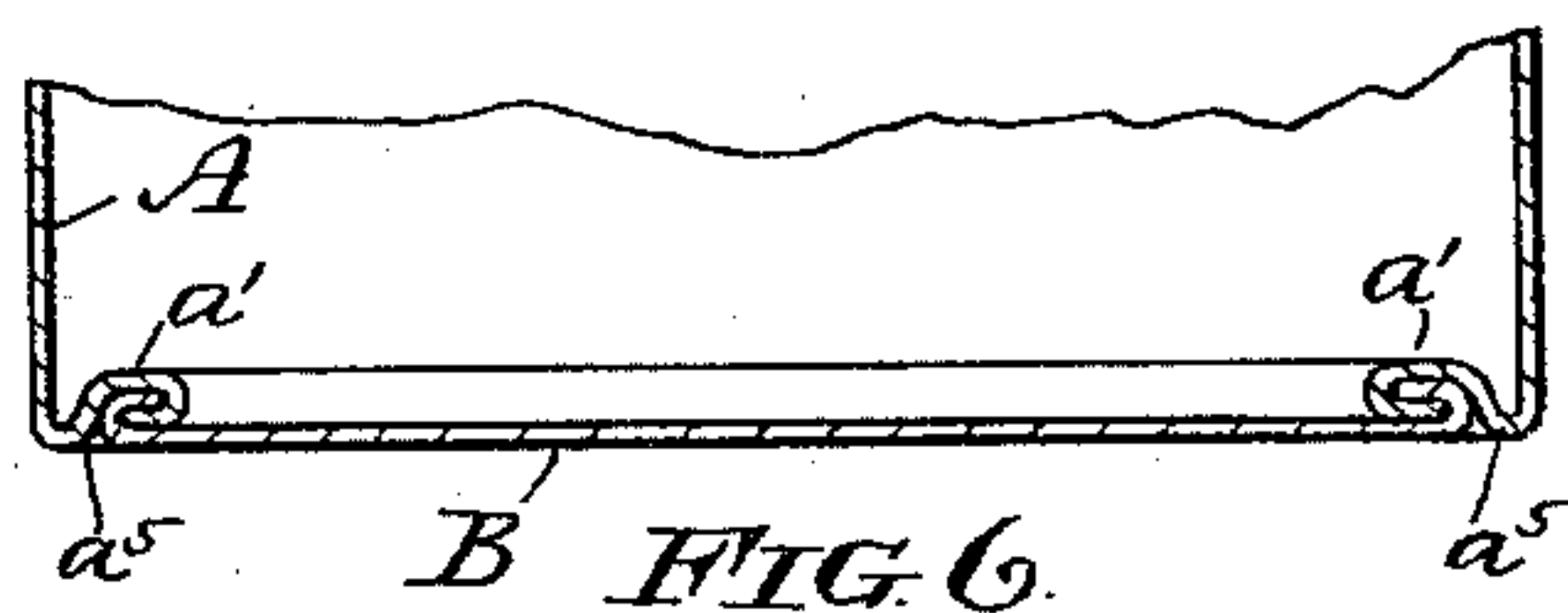


FIG. 6.

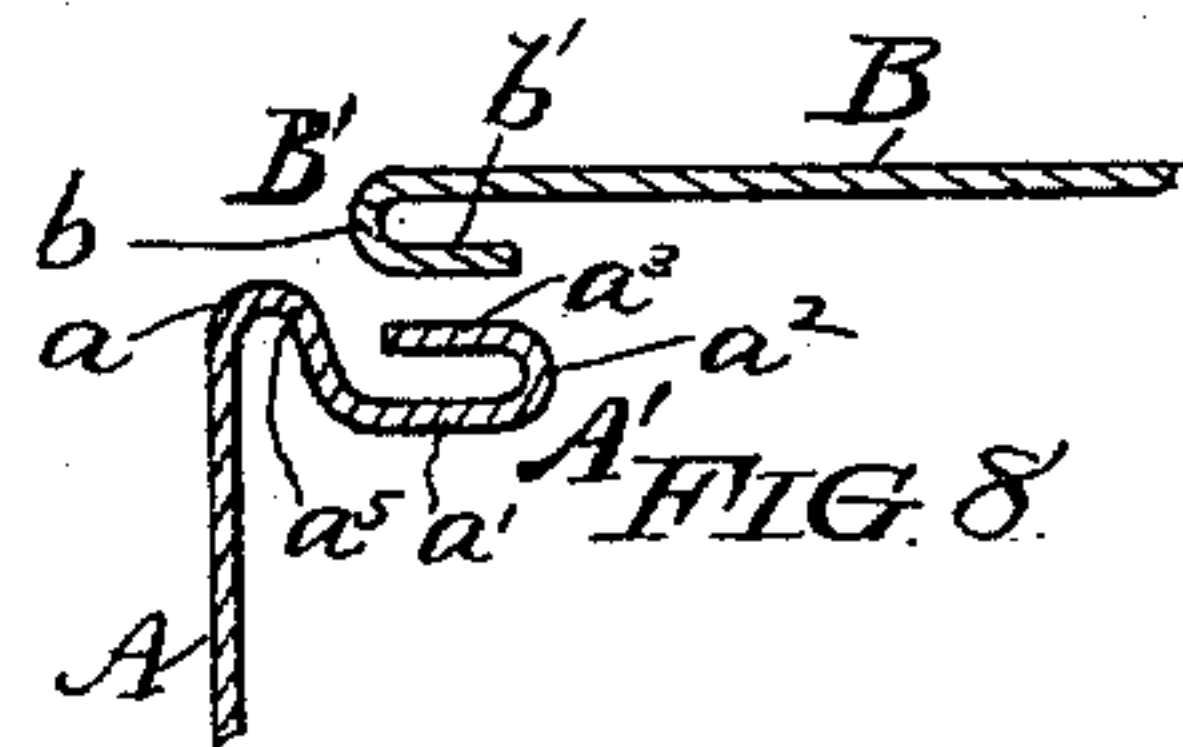
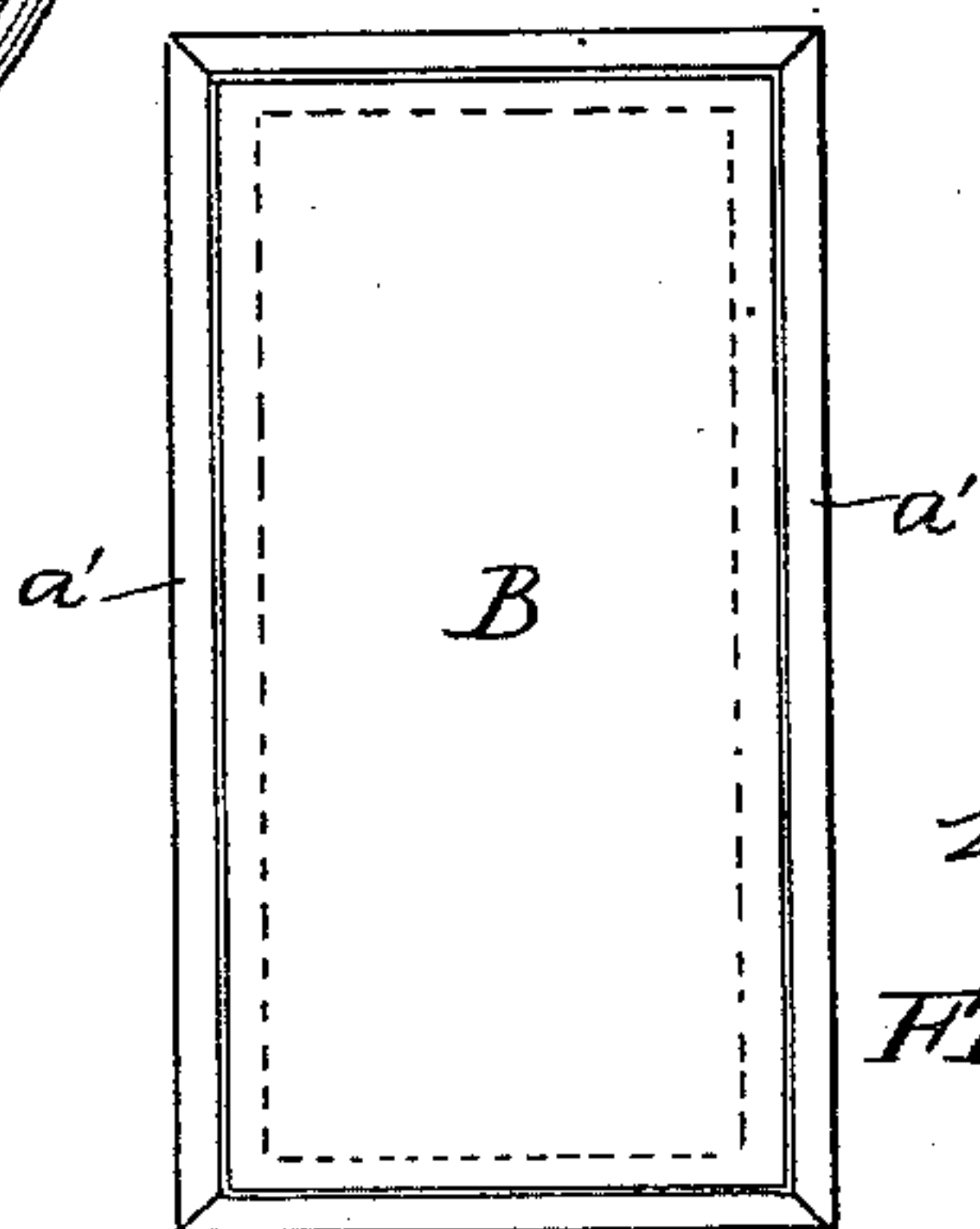


FIG. 8.

Witnesses:
J. Halpenny
Geo. F. Bailey

Inventor:
William W. Flint
By
FIG. 7.
Snoddy & Hopkins
His Attys.

UNITED STATES PATENT OFFICE.

WILLIAM W. FLINT, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE CHICAGO STAMPING COMPANY, OF SAME PLACE.

METALLIC VESSEL.

SPECIFICATION forming part of Letters Patent No. 458,361, dated August 25, 1891.

Application filed March 3, 1891. Serial No. 383,566. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. FLINT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Metallic Vessels, of which the following is a specification, reference being had to the accompanying drawings, which are made a part hereof, and in which—

Figures 1, 2, 3, and 4 are axial sections showing the parts of a round vessel at four different stages in the course of its construction according to my invention. Fig. 5 is a plan view of said vessel. In the foregoing figures the invention is shown applied to the top of the vessel. Fig. 6 is a section of a vessel having its bottom secured in place in accordance with my invention. Fig. 7 is an under side view thereof. Fig. 8 is a section on a larger scale, showing the shape of the parts when they have reached the stages shown in Figs. 4, 5, 6, and 7, only detached fragments being shown.

The object of the present invention is to enable the tops or bottoms of sheet-metal vessels of all sizes and shapes to be secured in place, water-tight, without the aid of solder; and to this end the invention consists in a joint or seam of the form set forth in the claims hereinafter.

Referring to the drawings, A represents the body of the vessel, and B is the sheet or plate of metal which is to form the top or bottom, as the case may be, the shape and size of which depend upon the shape and size of the vessel to be constructed. To prepare the body for the reception of the plate B, it is bent inward at a , so as to form a flange a' , and said flange is bent outward at a^2 , so as to form a flaring lip a^3 and a consequent undercut groove a^4 . To prepare the plate B for the body, it is bent at b , so as to form a marginal flange b' , the diameter of the plate after this flange is formed being a trifle less than the diameter of the vessel. The plate B is then placed upon the body, as shown in Fig. 2, the flange b' embracing the lip a^3 and extending nearly to the flange a' . The bend at b is then increased so as to force the flange b' into the groove a^4 , as shown in Fig. 3. Pressure in opposite directions is then applied to the interior of the flange a' and the exterior margin of the plate B, (see arrows

in Fig. 3,) so as to force the adjacent parts of B b' a' a^3 into parallelism, forming interlocking lips A' and B', (see Fig. 8,) and bending the flange a' at a^5 , so as to cause it to embrace the margin of the plate B, as shown in Fig. 4. The outer surface of the plate B may be brought flush with the extremity of the body, or even within said extremity, if desired, by making a sufficient bend at a^5 .

The invention is equally applicable to the tops or bottoms of vessels, and if applied to the tops the plate B may or may not be provided with a filling-orifice C and a cover D for closing it.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. As a new article of manufacture, a sheet-metal vessel having the continuous body A, the flange a' , projecting inward from the body and extending completely around it, the outturned lip A' on said flange, and the plate B, having the inturned lip B', said lips being interlocked and pressed tightly against each other and against the adjacent portions of the flange a' and plate B, forming a seam situated completely within the vessel, substantially as set forth.

2. As a new article of manufacture, the sheet-metal vessel having the continuous body A, the flange a' , projecting inward from the body and extending completely around it, the outturned lip A' on said flange, and the plate B, having the inturned lip B', said lips being interlocked with each other and parallel with the plate B, substantially as set forth.

3. As a new article of manufacture, a sheet-metal vessel having the continuous body A, the flange a' , situated within the periphery of the body and extending completely around it, the outturned lip A' on said flange, and the plate B, of less diameter than the body A, having the inturned lip B', the lips of the flange a' and plate B being interlocked with each other and parallel with the plate B, and the flange a' being bent at a^5 , so as to embrace the periphery of the plate, substantially as set forth.

WILLIAM W. FLINT.

Witnesses:

L. M. HOPKINS,
J. HALPENNY.