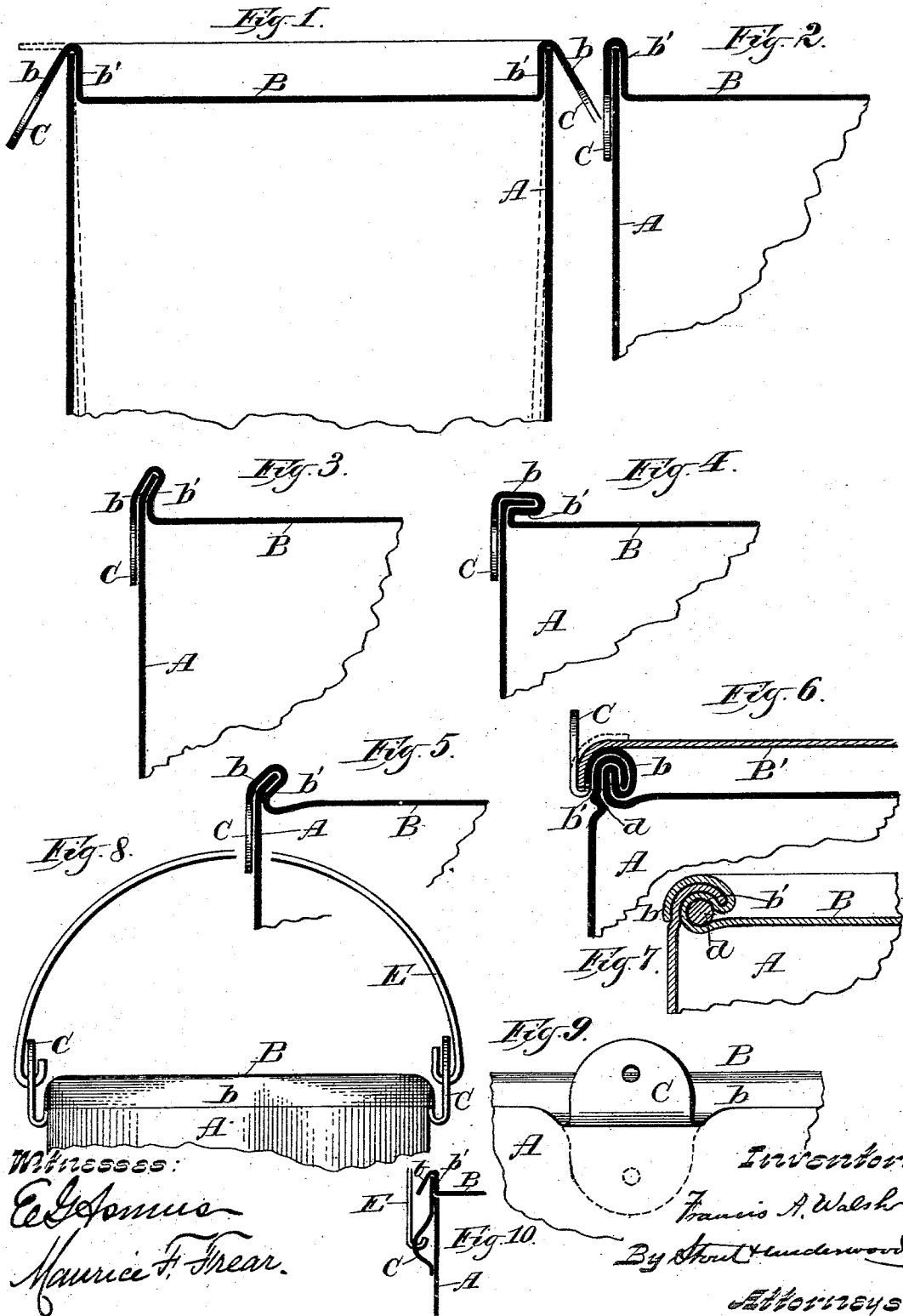


(No Model.)

F. A. WALSH.
SHEET METAL VESSEL.

No. 359,826.

Patented Mar. 22, 1887.



UNITED STATES PATENT OFFICE.

FRANCIS A. WALSH, OF MILWAUKEE, WISCONSIN.

SHEET-METAL VESSEL.

SPECIFICATION forming part of Letters Patent No. 359,826, dated March 22, 1887.

Application filed October 8, 1886. Serial No. 215,665. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS A. WALSH, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Sheet-Metal Vessels; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to sheet-metal vessels, and will be fully described hereinafter.

In the drawings, Figure 1 is a vertical section through a can embodying my invention, with the top loosely in place thereon. Figs. 2 to 6, inclusive, show various stages in the process of securing the top to the can-body. Fig. 7 is a section showing a modified form of seam, and Figs. 8 and 9 are elevations of portions of the closed vessel. Fig. 10 is a modification.

A is the can-body, which may be either straight or slightly tapered, and B is the top, which latter has flanges *b b'*, which, when the top is loosely in place, span the upper edge of the vessel. The top B is also formed with ears C, that project from the flange *b*, as shown.

When the top B is to be secured to a vessel, it is placed thereon as shown in Fig. 1, and then subjected to the action of a former, which first bends the flange *b* down into the position shown in Fig. 2, and then the rim of the vessel inclosed by the flanges of the top B is bent, as shown in Fig. 3, and from thence to the seam in Fig. 4—that is, an angular seam; or by proper adjustment and manipulation of the former or forming-rolls the bends may be made more on a curve, as shown in Fig. 5, and from that to the curved seam, Fig. 6, which seam may be supported by a bead, *d*, or, in lieu of a bead, by a wire, *d*, over which the metal is folded, as in Fig. 7.

The ears C, which depend from the flange *b*, while they do not interfere with the operation of seaming, can be readily turned out and up, as shown in Figs. 8 and 9, and their office is to receive the bail E, and thus do away with the necessity that has heretofore existed of soldering bail-supports to the vessel-body.

By means of my present device I am enabled to make several different seams, according to the uses which the vessel is to be put. For instance, I may simply clamp the rim of

the vessel between the flanges of the top, or make a tighter joint by a slight bend, or by substantially a right-angular bend, a curve, or a rolled seam, as shown in Figs. 2, 3, 4, 5, and 6, respectively, without departing from the spirit of this single invention; but in all of these the projecting portion of the seam is inside of the periphery of the vessel, so that a slip-cover may be used, as is common in this class of vessels.

My device is adapted for tapered as well as straight vessels and vessels having seamless collars, and in this latter case the ears C may form part of the collar, as shown in Fig. 10, and when bails are not used or needed, as on smaller vessels, these ears will still be useful in affording a hold by which the cover may be ripped from the vessel. They can also be utilized for securing the slip-cover B' on after cover B has been broken or cut away by bending the ears over onto the slip-cover, as shown in dotted lines, Fig. 6. If desired, a sealing-strip may be passed through the bail-openings when the bails are not in them.

I am aware that it is not new to unite the heads or ends with the body of metallic vessels by forming upon the head upright flanges at right angles, which are turned over the sides of the body of the can and bent inwardly upon the head, and such I do not claim, broadly.

The rim of the cover B in my device projects over the curve of the adjacent rim of the can-body, and serves to clamp and compress the rim of the body from the outside, thus adding materially to its strength and tightness and avoiding the necessity of soldering.

It is obvious that my device is as well adapted for securing one end of the can to the body as the other.

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

1. In a sheet-metal vessel, a seam consisting of flanges on the top of the vessel spanning the rim of the body, the three thicknesses of metal being folded inward, leaving the outer edge of the cover projecting over and clasping the curve of the adjacent rim of the body, whereby the necessity of soldering is avoided, substantially as described.

2. In a sheet-metal vessel, a seam consisting of flanges on the top of the vessel spanning the rim of the body, the three thicknesses of metal being folded inward, leaving the outer edge of the cover projecting over and clasping the curve of the adjacent rim of the body, in combination with a support for the seam, substantially as described.
3. In sheet-metal vessels wherein a portion of the top is allowed to remain fast to the vessel after opening, the top formed with ears for receiving a bail or handle, as set forth.

4. The combination, with the slip-cover, of ears forming part of the permanent cover and adapted for securing the slip-cover in place, as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

FRANCIS A. WALSH.

Witnesses:

STANLEY S. STOUT,
MAURICE F. FREAR.