

(No Model.)

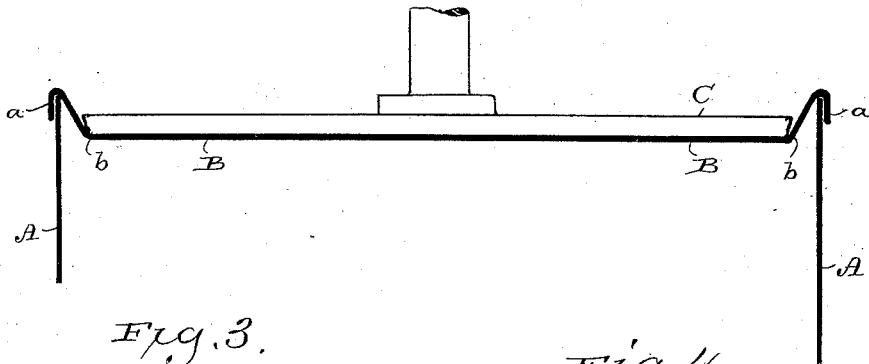
F. A. WALSH.

METHOD OF MANUFACTURING SHEET METAL VESSELS.

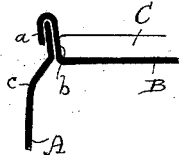
No. 423,295.

Patented Mar. 11, 1890.

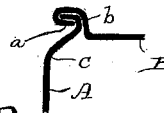
*Fig. 1.*



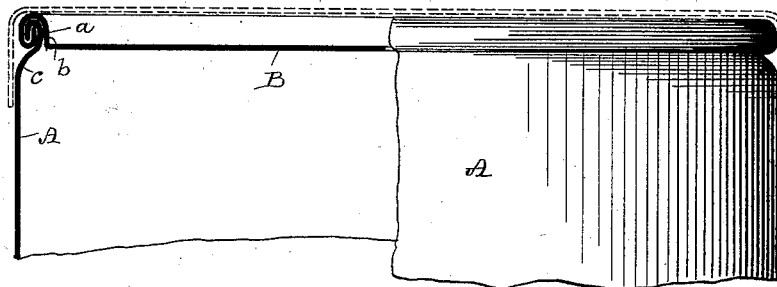
*Fig. 3.*



*Fig. 4.*



*Fig. 2.*



Witnesses  
Geo. W. Young  
Wm. H. Hugg

Inventor  
Francis A. Walsh  
By *Chas. H. Hugg*  
Attorneys

# UNITED STATES PATENT OFFICE.

FRANCIS A. WALSH, OF MILWAUKEE, WISCONSIN.

## METHOD OF MANUFACTURING SHEET-METAL VESSELS.

SPECIFICATION forming part of Letters Patent No. 423,295, dated March 11, 1890.

Application filed May 31, 1889. Serial No. 312,886. (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 the Method of Manufacturing Sheet-Metal Vessels; and I do hereby declare that the following is a full, clear, and exact description thereof.

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

In the drawings, which illustrate the steps of my method, Figure 1 is a section of a portion of a can-body with the top loosely in place thereon, and Fig. 2 is a broken section of the same with the top seamed on. Fig. 3 shows the first effect of the seaming-rolls, and Fig. 4 the second, in the operation of seaming the cover to the can.

The body A is formed with a straight rim, and the head or end B is countersunk and formed with an outer vertical flange *a*, that is joined to the flat portion or head or end proper by the wall *b* of the countersink, which is inclined, as shown.

The chuck C fits in the countersink in the head or end, and the flange *a* is supposed to fit snugly on the rim of the can, and upon the application of seaming-rollers the act of double seaming the flange *a* and wall *b* to the rim draws the rim in, as shown in Fig. 2, and brings the seam toward the chuck and inside of the circumference of the main portion of

the body, so that the seam will not interfere with the application of a slip-cover, as shown in dotted lines, Fig. 2, and when the top is cut out to give access to the contents of a filled can the seam and curve *c*, formed by the indrawing of the upper edge of the can, will form a brace for stiffening the rim of the can.

The end and can-body may be connected by either a double or single seam without departing from the spirit of my invention. In fact, for many purposes the can may be considered finished when seamed, as shown in Fig. 3.

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

The method herein described of heading vessels, consisting in forming the head or end with a countersink having an inclined wall and with a vertical flange joined to the main portion of the head or end by said wall, and flanging and infolding the rim of the vessel with the flange and wall of the head or end, and thereby reducing the diameter of the upper portion of the vessel in the act of seaming, 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:

S. S. STOUT,

WILLIAM KLUG.