

(No Model.)

L. STURGES.
METALLIC VESSEL.

No. 466,957.

Patented Jan. 12, 1892.

FIG. 1

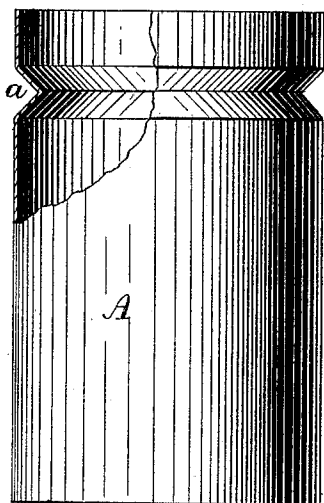
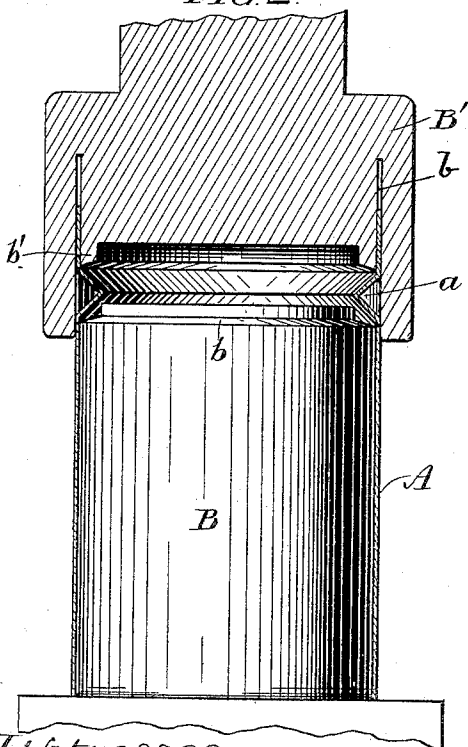


FIG. 2



Witnesses:
J. Halpenny
Rendell K. Burns.

FIG. 3

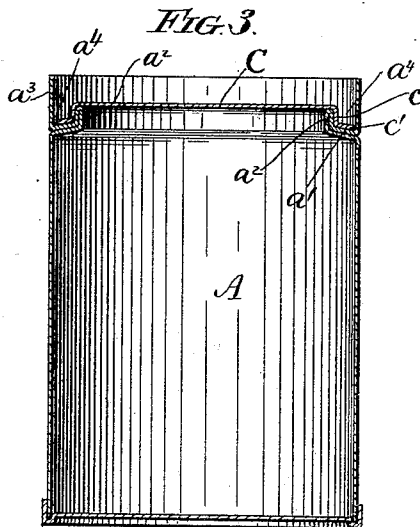


FIG. 4

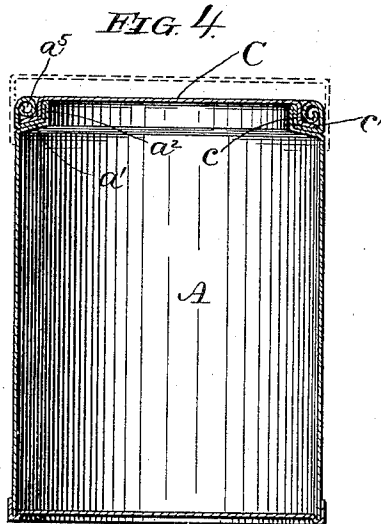
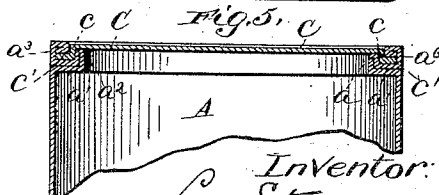


FIG. 5



Inventor:
Lee Sturges
By Gidley & Hopkins
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UNITED STATES PATENT OFFICE.

LEE STURGES, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE CHICAGO STAMPING COMPANY, OF SAME PLACE.

METALLIC VESSEL.

SPECIFICATION forming part of Letters Patent No. 466,957, dated January 12, 1892.

Application filed September 15, 1891. Serial No. 405,749. (No model.)

To all whom it may concern:

Be it known that I, LEE STURGES, 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—
Figure 1 is an elevation, a fragment being broken away, of the body of a sheet-metal can having near its top margin an external V-groove and a consequent internal shoulder of corresponding shape. Fig. 2 is an axial section of the same in place between a pair of dies, one of which is shown in elevation and the other in section. Figs. 3 and 4 are axial sections of the improved can, the former showing it before and the latter after the cover is secured in place. Fig. 5 is an axial section of a portion of a can embodying the invention under a slight modification.

The present invention relates to a can that is intended to have its cover secured in place by a seam that will prevent leakage without the aid of solder. In making such cans it has heretofore been the custom to form near the top of the body an internal flange or shoulder for supporting the cover and to provide the cover with an upturned marginal flange that is folded over one or more times with the cylindrical extension at the top of the can.

The object of the present invention is to provide a seam for securing the cover without the necessity of folding the cover itself; and to this end the invention consists in certain features of novelty that are particularly pointed out in the claims hereinafter.

In producing the improved seam the body A of the can is first subjected to the action of a crimper, which makes near the top margin a V-shaped external groove and a consequent internal shoulder of corresponding shape, as shown at *a* in Figs. 1 and 2. The shoulder *a* is then subjected to the action of a pair of dies B and B', having an annular groove *b* and an annular flange *b'*, respective-

ly, as clearly shown by Fig. 2, whereby it is transformed into an internal shoulder *a'*, consisting of a double thickness of the material of the body pressed close together. Preferably this shoulder is slightly inclined upward and has at its inner edge an annular flange *a''*, extending upward about parallel (preferably) with the cylindrical extension *a'''*, leaving between them an annular groove *a''''*.

The cover C (preferably of soft tin) is provided with a downturned annular flange *c*, of such diameter that it fits snugly around the flange *a''*, and with an outturned flange *c'*, that rests upon the shoulder *a'*. When the can is filled, the cover is put in place, as shown in Fig. 3, and the extension *a'''* is rolled or crimped inward, forming a round bead *a''''* that occupies the annular groove *a''''* and presses the flanges *c* and *c'* against the flange *a''* and shoulder *a'*, respectively.

I desire to have it understood that, if desired, the shoulder *a'* may be horizontal, and that the extension *a'''* may be folded so as to form a flat bead instead of a round one, as shown by Fig. 5.

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 metallic vessel having an internal shoulder *a'* and above it an extension *a'''*, said shoulder having an upturned annular flange *a''*, forming with the extension an annular groove *a''''*, a cover C, having a downturned flange *c* fitting in said groove and embracing the flange *a''*, and the bead *a''''*, formed on the extension *a'''* and occupying said groove, substantially as set forth.

2. As a new article of manufacture, a metallic vessel having an internal shoulder *a'* and an extension *a'''*, said shoulder having an upturned flange *a''*, forming with the extension an annular groove *a''''*, a cover C, having a downturned flange *c* and an outturned flange *c'*, and a bead *a''''*, formed on the extension and occupying the groove, substantially as set forth.

3. As a new article of manufacture, a me-

tallic vessel having the shoulder a' and
above it the extension a^3 , both formed of the
material of the body, said shoulder having
the upturned annular flange a^2 , the cover C,
5 having the downturned annular flange c , em-
bracing the flange a^2 , and the outturned
flange c' , resting upon the shoulder a' , and

the round bead a^5 , bearing against the cover,
said bead being formed by curling the exten-
sion a^3 inward, substantially as set forth.

LEE STURGES.

Witnesses:

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N. C. GRIDLEY.