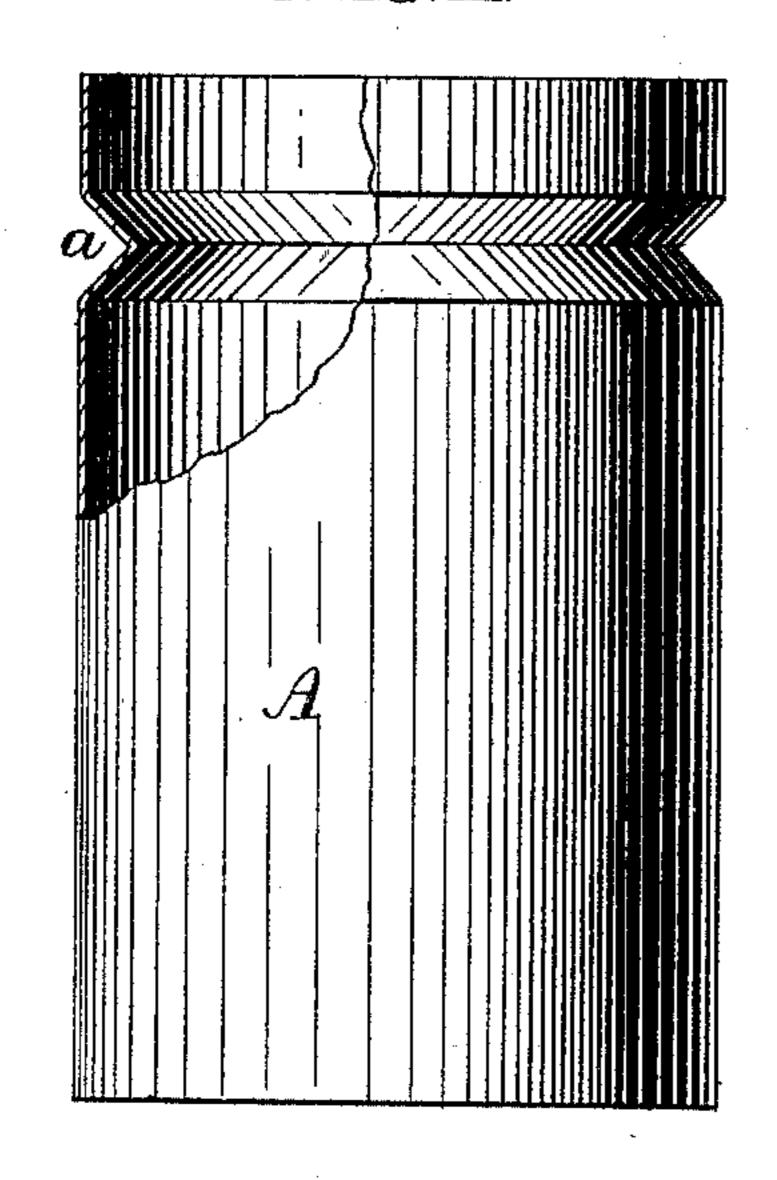
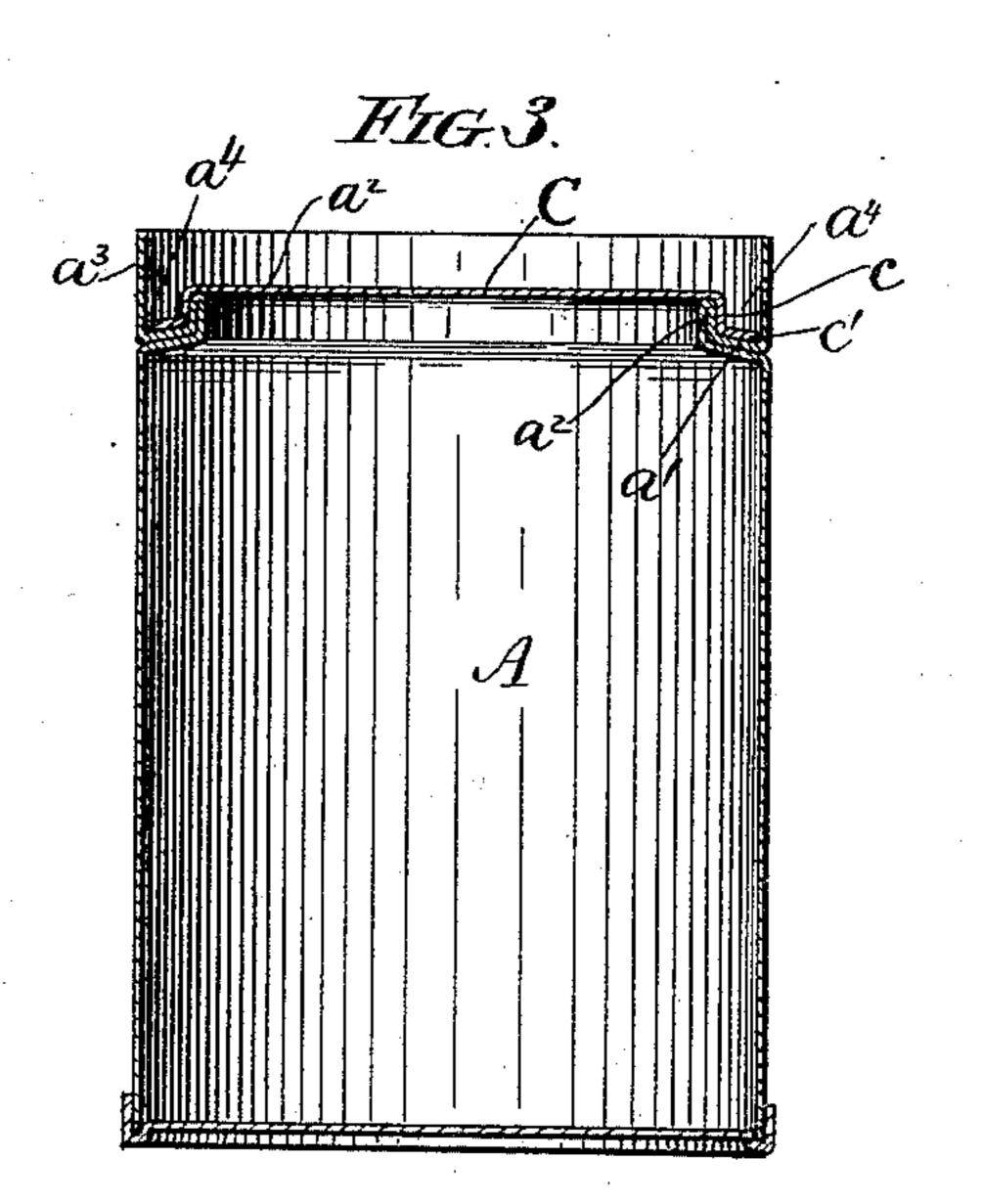
L. STURGES. METALLIC VESSEL.

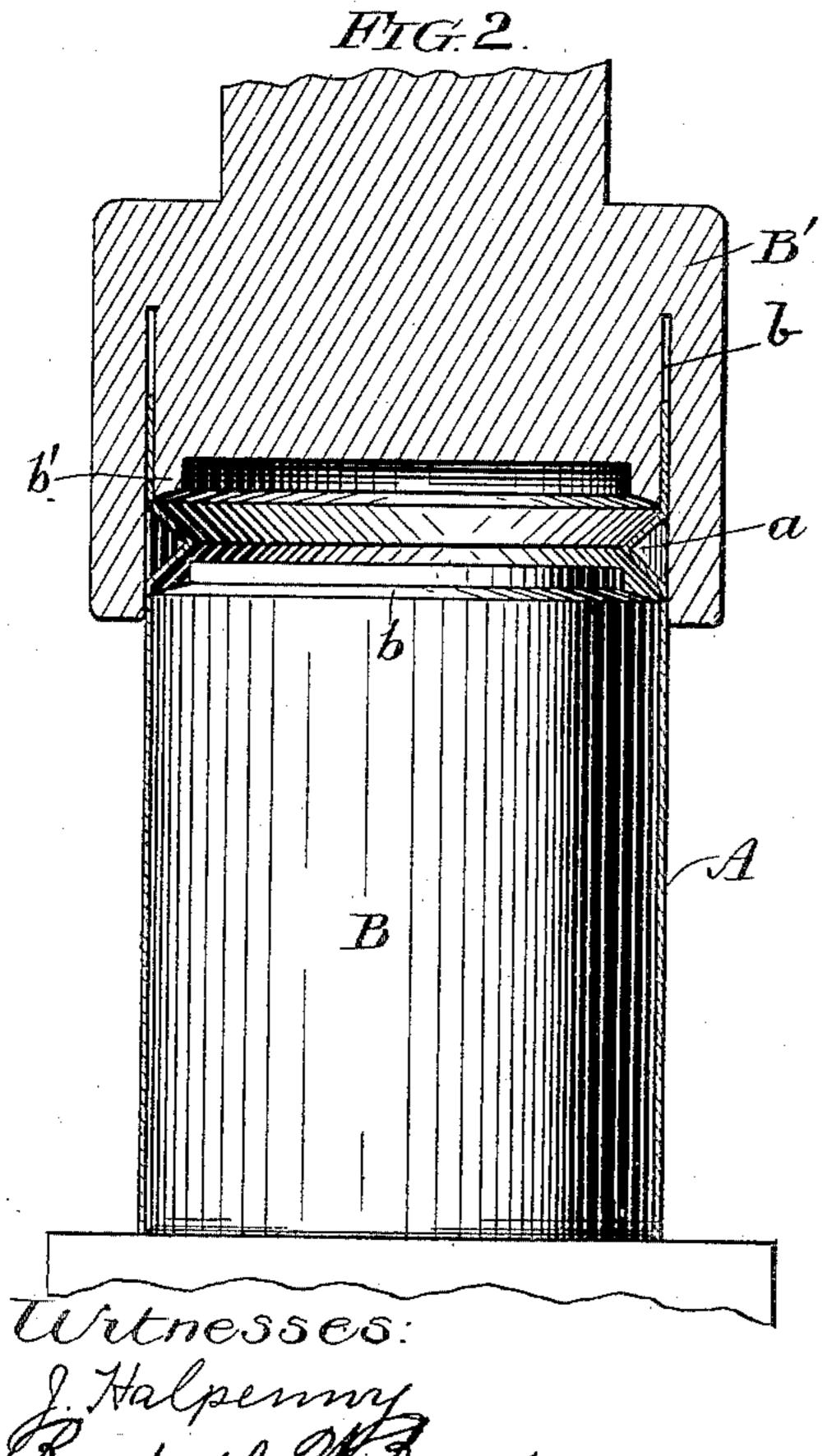
No. 466,957.

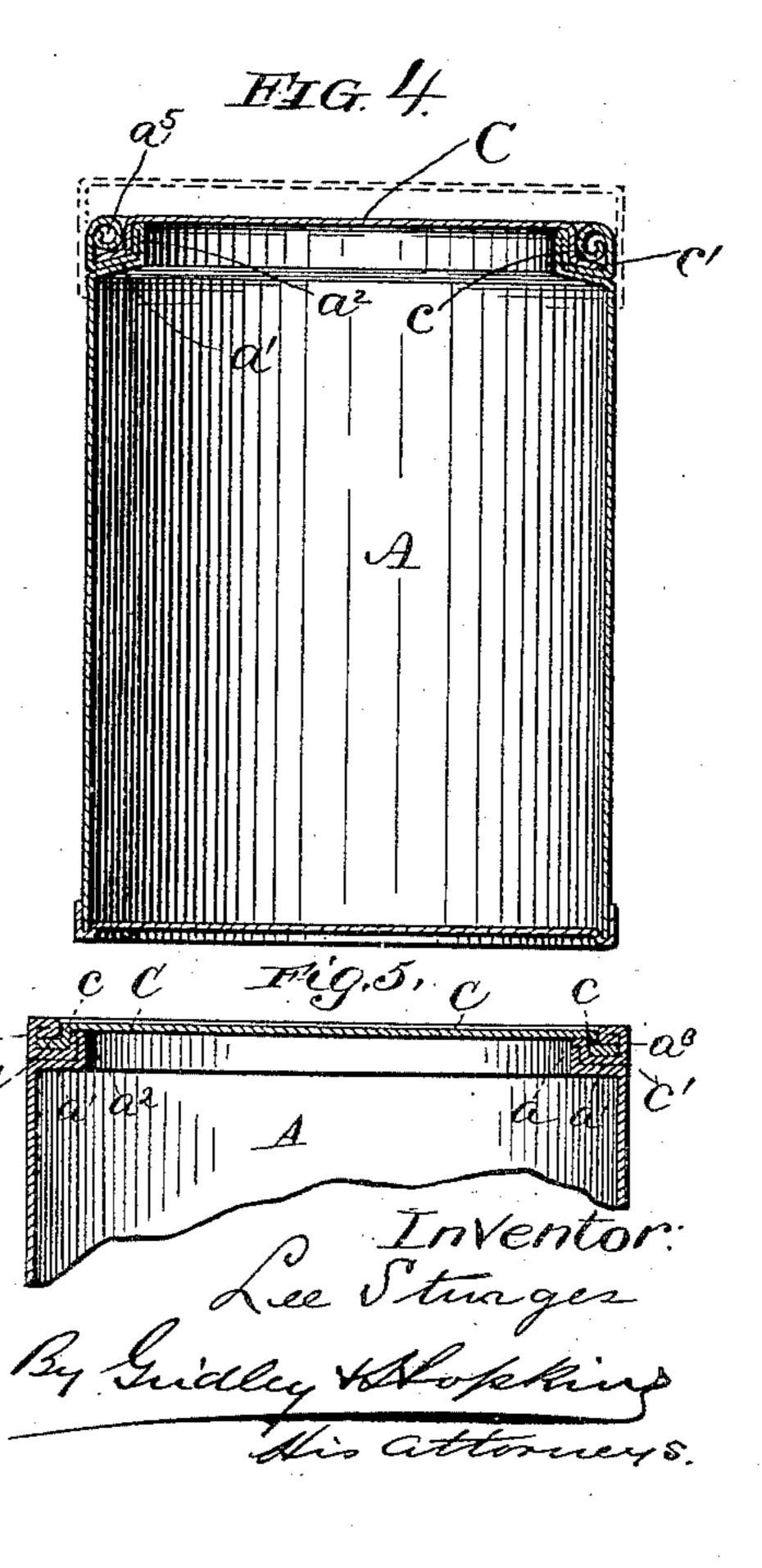
Patented Jan. 12, 1892.

HIG.1









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 5 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 sec-15 tion 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 20 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 25 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 pro-30 vide 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 35 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.

40 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 α 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', con- 50 sisting 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 a², extending upward about parallel (prefer- 55 ably) with the cylindrical extension a^3 , leaving between them an annular groove a^4 .

The cover C (preferably of soft tin) is provided with a downturned annular flange c, of such diameter that it fits snugly around 60 the flange a^2 , 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^3 is rolled or crimped inward, forming a round bead a^5 , 65 that occupies the annular groove a⁴ and presses the flanges c and c' against the flange a^2 and shoulder a', respectively.

I desire to have it understood that, if desired, the shoulder a' may be horizontal, and 75 that the extension a^3 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 75

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^3 , said shoulder having an upturned annular flange a^2 , form- 80 ing with the extension an annular groove a^4 , a cover C, having a downturned flange c fitting in said groove and embracing the flange a^2 , and the bead a^5 , formed on the extension a^3 and occupying said groove, substantially 85 as set forth.

2. As a new article of manufacture, a metallic vessel having an internal shoulder a'and an extension a^3 , said shoulder having an upturned flange a^2 , forming with the exten- ζ 0 sion an annular groove a^4 , a cover C, having a downturned flange c and an outturned flange c', and a bead a^5 , 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, having the downturned annular flange c, embracing 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 extension a^3 inward, substantially as set forth.

LEE STURGES.

Witnesses:

L. M. Hopkins, N. C. Gridley.