D. W. De FOREST.

SHEET-METAL CAN.

No. 172,559. Patented Jan. 25, 1876.

Fig. 1.

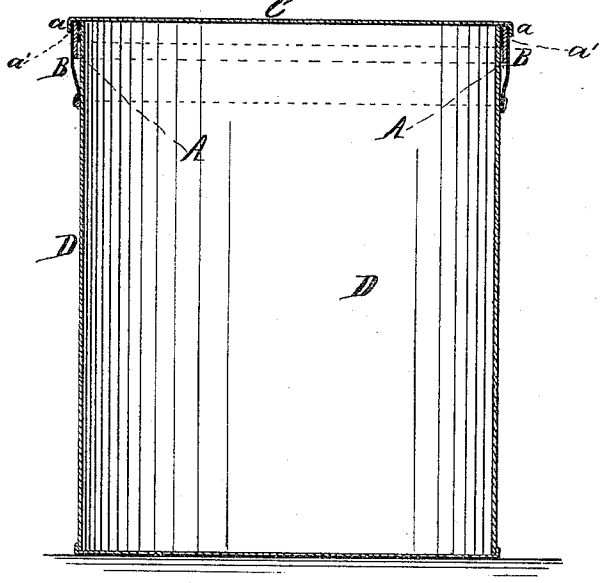
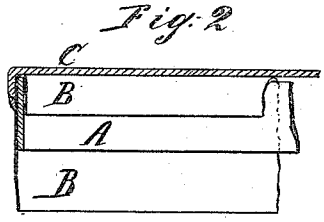


Fig. 2.



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UNITED STATES PATENT OFFICE.

DAVID W. DE FOREST, OF BROOKLYN, NEW YORK, ASSIGNOR TO LEONARD RICHARDSON, OF SAME PLACE.

IMPROVEMENT IN SHEET-METAL CANS.

Specification forming part of Letters Patent No. **172,559**, dated January 25, 1876; application filed September 2, 1875.

To all whom it may concern:

Be it known that I, DAVID W. DE FOREST, of Brooklyn, in the county of Kings and State of New York, have invented certain Improvements in Sheet-Metal Cans, of which the following is a specification:

This invention comprises a thin easily-frangible metallic leaf, folded upon or round the flange of a sheet-metal can-cover, and soldered to the flat top of said cover, whereby, without any extra soldered joint, and without detriment to the strength and stiffness of the flange, provision is made for the ready attachment, by a frangible joint, of the cover to the can, to hermetically seal the latter.

The invention further comprises an easily-frangible metallic leaf, folded upon a stiff strip, designed as the flange of the cover, and soldered at its lower edge to the body of a sheet-metal can, whereby said can is fitted for hermetic closure by simply soldering the flat top of the cover to the upper folded edge of the metallic leaf folded upon the strip, forming, after the soldering of the top in place, the flange of the cover, the can being then capable of being opened by the fracture of the leaf, in the same manner as when the cover is first made complete with the said leaf, and afterward soldered to the can.

Figure 1 is a central longitudinal sectional view of a can made according to my invention; and Fig. 2 is a sectional view, on an enlarged scale, of the cover detached.

A is a strip of tin or other sheet metal, of a thickness requisite to the flange of the cover, and of any suitable width. B is a strip of thin brass or other metal capable of being easily ruptured or torn by strain or stress therein. This strip is originally, say, three times as wide as the strip A, but has one edge folded or lapped over one edge of the strip A, so that while on one side of said strip A the leaf B extends a considerable distance beyond the opposite edge, on the other it laps to about its longitudinal center, all as will be readily understood by reference to the drawings.

The leaf B is folded upon the strip A by any suitable machinery, in a manner well understood by metal-workers, and the two form, as it were, a compound strip, which is then cut into blanks, each corresponding in length to the circumference of the can-cover in the construction of which it is to be used.

C is the top of the cover, and, when the latter is to be formed complete before attachment to the can, the blank comprising the strip A and leaf B is inserted within, and concentric with, the turned-down edge *a* of the cover, the folded edge of the blank—*i. e.*, that which incloses the strip A—being brought snug against the said turned-down edge *a*, and soldered thereto at *a'*.

It will be seen that the soldered joint at *a'* secures the leaf B to the top C, while the leaf, being folded firmly upon the strip A, as hereinbefore described, firmly affixes the said strip in position to act after the manner of the usual flange of a sheet-metal can-cover.

The cover being shut down upon the body D of the can, as represented in Fig. 1, the lower edge of the leaf B is soldered to the adjacent surface of the body D, the cover being thus firmly and hermetically attached to the said body.

In order to open the can the thin and easily-frangible metal of the leaf B is ruptured or torn by any suitable means, and may be readily stripped off externally below the downwardly-turned edge *a* of the top, thereby permitting the removal of the cover.

It will be seen that when the strip A and leaf B are attached to the top C, as hereinbefore described, the cover thus constituted may be made up in quantities, and sold for application to cans of corresponding sizes, designed for various uses.

It will also be seen that by first soldering the lower edge of the leaf B, folded upon the strip A, as described, direct to the body D, the can may be made up in quantities for filling, and afterward be closed by simply soldering the top C to the folded edge of the leaf B, the result, so far as concerns the closure and opening of the can, being the same as in the previously-named method of carrying the invention into practice.

What I claim as my invention is—

1. The thin easily-frangible metallic leaf B, folded upon the strip A, and soldered to the inwardly-turned edge *a* of the top C of the cover, substantially as and for the purpose set forth.

2. The thin easily-frangible metallic leaf B, folded upon the strip A, and soldered to the body D of the can, substantially as and for the purpose set forth.

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