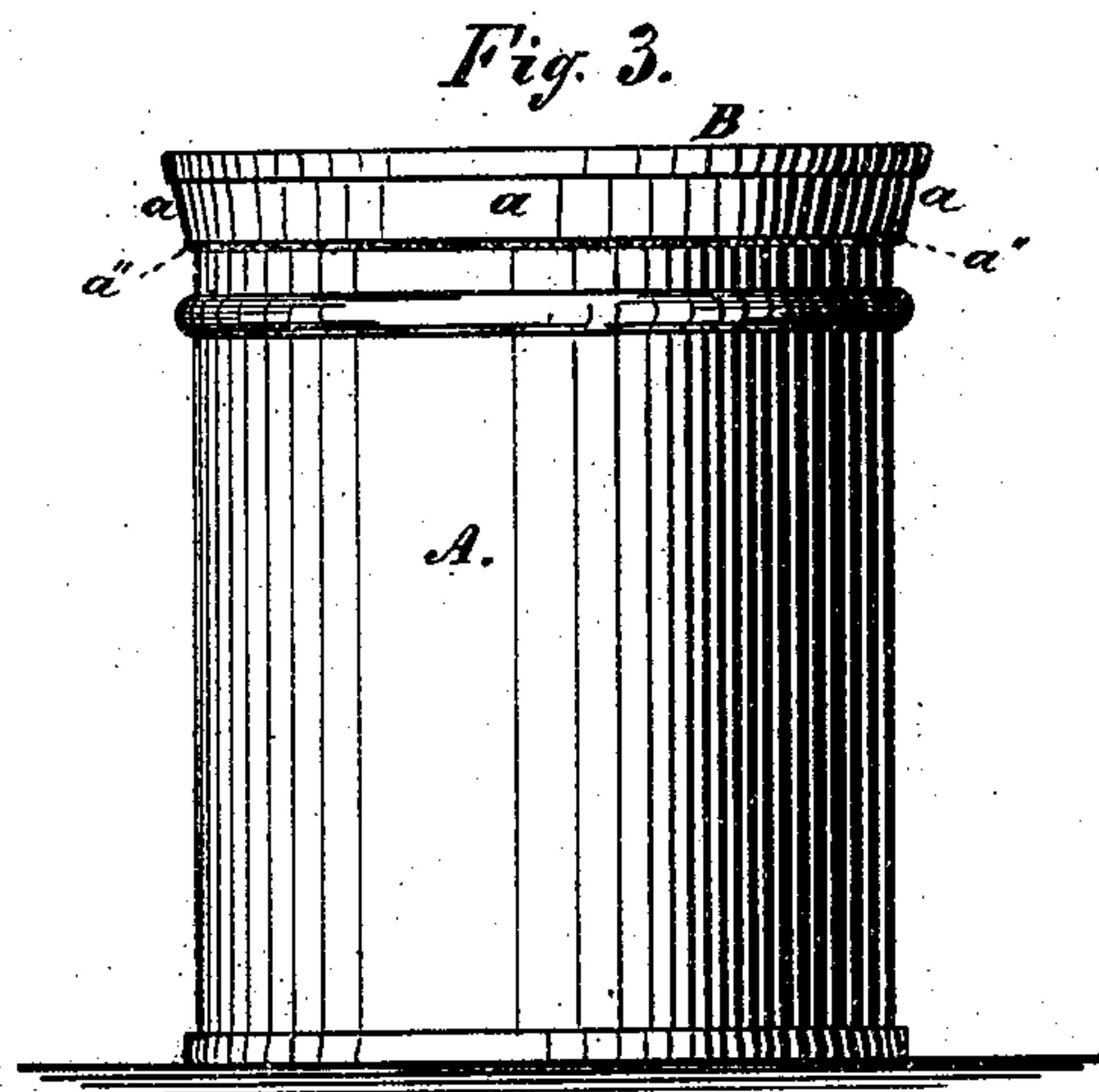
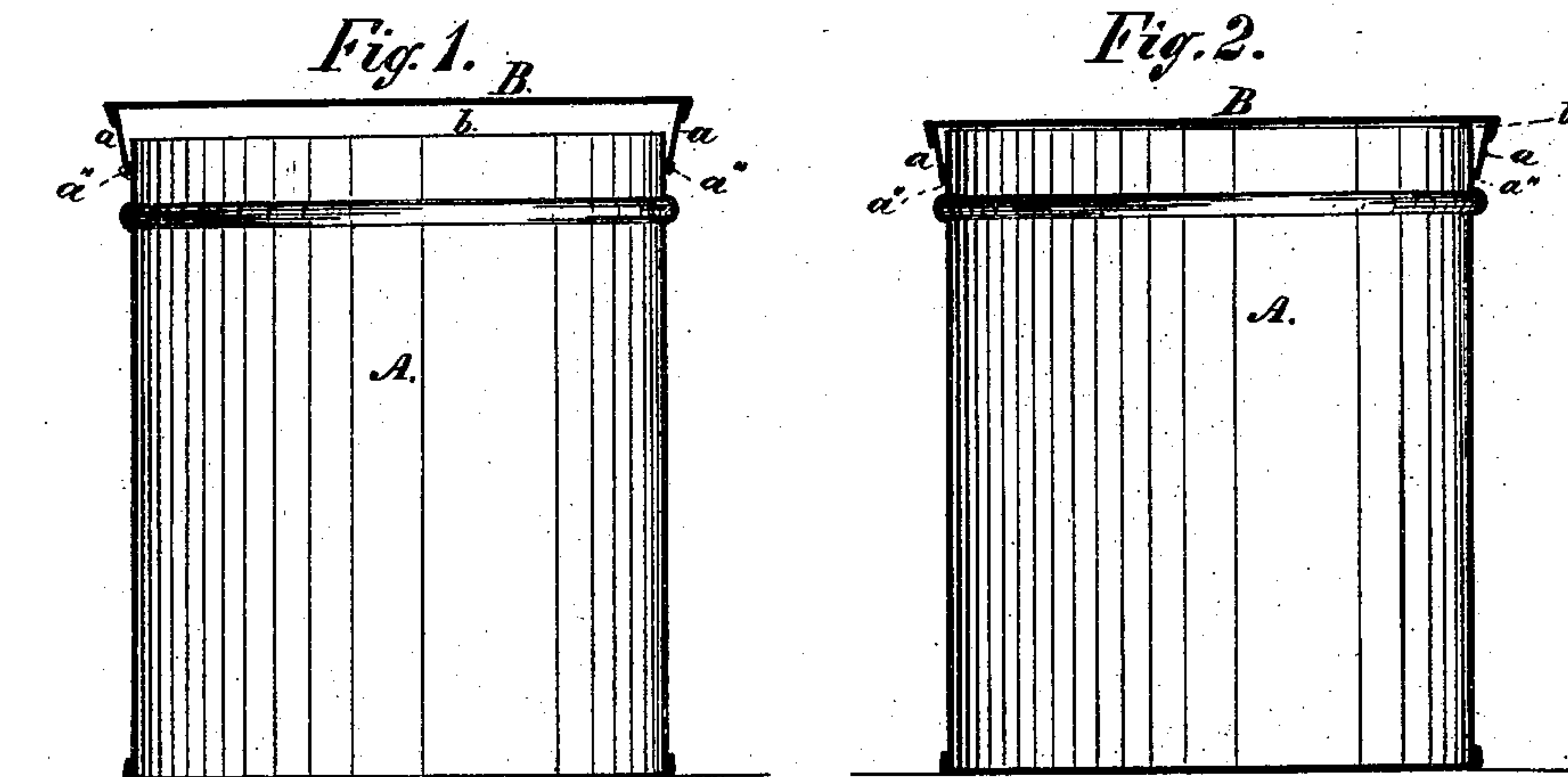


E. A. LELAND.
SHEET-METAL CANS.

No. 179,034.

Patented June 20, 1876.



Witnesses:

Henry Cichling.
H. Wells

Inventor:

Edwin A. Leland
per James A. Whitney
Atty.

UNITED STATES PATENT OFFICE.

EDWIN A. LELAND, OF NEW YORK, ASSIGNOR TO LEONARD RICHARDSON,
OF BROOKLYN, N. Y.

IMPROVEMENT IN SHEET-METAL CANS.

Specification forming part of Letters Patent No. **179,034**, dated June 20, 1876; application filed
April 15, 1876.

To all whom it may concern:

Be it known that I, EDWIN A. LELAND, of the city, county, and State of New York, have invented an Improvement in Sheet-Metal Cans, of which the following is a specification:

The invention relates to that class of hermetically-sealed sheet-metal cans, in which it is designed that the cover be removed from the body of the can in opening the latter by fracture of the line or seam of solder connecting the cover to the body by force directly applied to the cover to separate the said cover from the body. And the object of the invention is to provide for the more convenient and easy taking off of the cover after the seam is ruptured than is possible with the cans of this class hitherto contrived.

My invention comprises in a can of the class just specified a cover, the rim of which slopes inward on an angle to the straight sides of the body of the can in such manner as to obviate both the extended surfaces in contact experienced with the cover slipped upon the top in the ordinary manner, and the harsh and abrading contact of a sharp edge pressed against the sides of the body of the can, as is experienced when an inwardly-turned flange is provided upon the lower edge of the rim. It is to be understood, of course, that the lower edge of the rim is to be soldered to the side of the top of the can by any suitable solder or metallic cementing material which will provide a joint frangible under moderate violence designedly applied, but still capable of resisting that due to ordinary usage while the can is in use.

Although my herein-specified invention may be most advantageously used when the body of the can and the rim of its cover are made of two different materials—as, for example, galvanized iron and ordinary sheet-tin—yet my said invention may be advantageously employed when both body and top are made of the same material, provided always that care be taken to provide the requisite frangible joint.

Figure 1 is a central longitudinal sectional view of a sheet-metal can made according to my invention, showing the can as closed, as

when in use. Fig. 2 is a similar view of the same, showing the cover in the position occupied thereby after the fracture of the frangible joint, preliminary to the detachment of the cover, but previous to its entire removal from the can. Fig. 3 is a side view representing my said invention.

A is the body of the can, of the usual cylindric or any other suitable shape. B is the cover of the can, the circumferential contour of which is the same as that of the body A, but which is larger in circumference than the latter in order to permit the flange to be formed on an angle to the sides of the said body, as herein presently fully explained.

The said flange *a*, instead of being of the usual shape, is turned inward at an oblique angle, as clearly represented in the drawings, so that, while the top of the cover is wider than the body, the lower edge *a'* of the rim *a* will fit snugly around the latter, the edge of the rim being as it were in sloping contact with the aforesaid sides of the body A. Care is taken in placing the cover on the body that a space, *b*, be left between the top of the body and the top of the cover. The lower edge of the rim *a* is soldered to the sides of the body A, as shown at *a''*. The solder with which it is joined or seamed is of such a character as to be readily ruptured by violence suddenly and designedly applied thereto. It will be expressly kept in mind that the rim *a*, being turned inward at an oblique angle as hereinbefore fully described, is not in extended contact with the circumference of the body A, as is the case with an ordinary slip cover. Neither does it present a sharp edge pressed nearly or quite at right angles against the sides of the body A, as when an inwardly-turned flange is formed upon the rim *a*. As a consequence, any force—for example, the stroke of a hammer or heavy downward pressure applied to the cover B—acts more directly upon the soldered joint *a''* and insures the more ready and easy fracture of the same from force thus designedly applied; and, furthermore, the lower edge of the rim *a* being, as set forth, in what may be termed sloping contact with the surface of the body A, when the cover B is pressed downward suddenly or forcibly (which is the most con-

venient and easy way of opening the can) in order to start the cover from the position shown in Fig. 1 to that represented in Fig. 2, the soldered joint a'' is, of course, ruptured or broken around the entire periphery of the can. This sloping contact of the lower edge of the rim a permits the cover to be drawn off without that frictional resistance which would occur to hinder the removal of the cover with either of the other parts hereinbefore referred to.

I do not claim, broadly, a sheet-metal can in which the cover is made detachable from the body by force directly applied to the cover to rupture the soldered joint between the cover and the body; but

What I claim as my invention is—

In a sheet-metal can of the class herein described, the cover B, constructed with the rim a , arranged at an oblique angle to the sides of the can, the said rim being united to the said sides by a frangible seam or joint, and there being a space between the upper edge of the body and the under side of the top of the can, substantially in the manner herein described, for the purpose set forth.

EDWIN A. LELAND.

Witnesses:

EDWARD HOLLY,

H. WELLS, Jr.