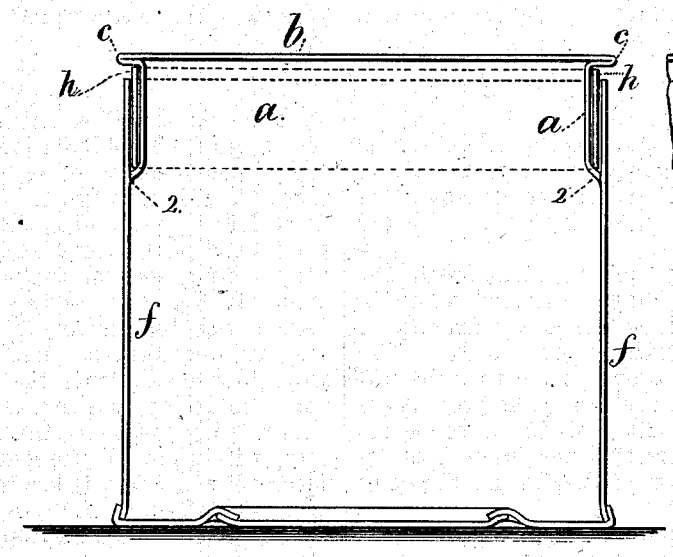
J. S. FIELD.

SHEET-METAL CAN.

No. 186,239. Patented Jan. 16, 1877.

Fig. 1.



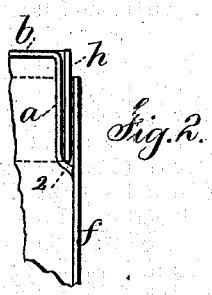


Fig. 2.

Fig. 3.

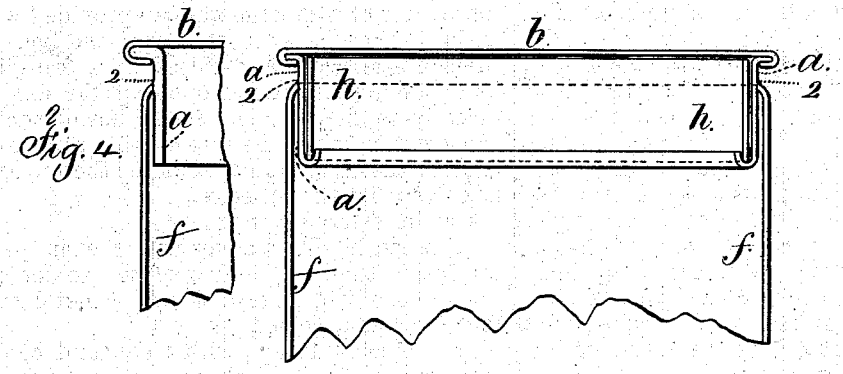


Fig. 4.

Witnesses

Chas. H. Smith

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UNITED STATES PATENT OFFICE.

JOSEPH S. FIELD, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN SHEET-METAL CANS.

Specification forming part of Letters Patent No. **186,239**, dated January 16, 1877; application filed December 18, 1876.

To all whom it may concern:

Be it known that I, JOSEPH S. FIELD, of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Sheet-Metal Cans, of which the following is a specification:

In an application for a patent dated December 8, 1876, I have described a can in which the cover is loosened by driving or forcing the same farther upon the can. The rim of the cover, however, came upon the outside of the body of the can. The present invention is a modification of an improvement upon the same, whereby I am enabled to introduce the rim of the cover within the body of the can.

In the drawing the metal is shown of unusual thickness for greater clearness.

Figure 1 is a section showing the rim *a* of the cover *b* in one piece, with the metal folded at *c* to form a flange. In the partial section, Fig. 2, the flange *c* is omitted. In the section, Fig. 3, the rim *a* is shown as in a separate piece from the cover *b*, and in the partial section, Fig. 4, the rim *a* is represented as made of thicker metal.

In all instances the rim *a* of the cover *b* is inserted within the body *f* of the can. The metal of the rim *a* and body *f* does not touch except at the edge of the rim, Figs. 1 and 2, or at the edge of the body, as in Figs. 3 and 4, the metal being bent at these places, so that the solder at 2 forms a narrow tight joint, and does not spread between the adjacent parallel surfaces; the object being to allow the soldered joint to be easily broken by pressure, as in the aforesaid application.

The soldered joint 2 is to be made before the can is filled, if the contents are liquid; but if they are solid the joint shown in Figs. 3 and 4 can be made after the can is filled. The joint 2 in Figs. 1 and 2 has to be soldered before the bottom is closed.

If the metal of the rim *a* is sufficiently thick, the soldered joint 2 can be broken by pressure upon the cover by hammering or otherwise, so as to loosen the cover, and allow of its removal in opening the can. If the metal of the rim *a* is not thick enough to insure the breaking of the soldered joint 2, then a strip, *h*, of sheet-iron or other cheap rigid material, may be employed. When used as indicated in Figs. 1 and 2, the strip *h* serves to aid in tearing the rim *a* away from the body *f*, by passing between the metal parts at the joint. In Fig. 3 this strip *h* is shown as connected with the rim by folding the edge of the rim inwardly, so that the rim will be strengthened to insure the breaking of the line of solder by pressure, as aforesaid.

In this improvement, the rim of the cover being within the can, the soldered joint, which necessarily is weak, is located where it is better protected than in those cases where the rim of the cover has been similarly attached outside the can. In the form shown in Figs. 1 and 2 the soldered joint is protected by being within the can, and in the form shown in Figs. 3 and 4 the joint is protected by the flange of the cover, or in consequence of being near the stiff edge of the cover.

I am not the original and first inventor or discoverer of a sheet-metal can provided with an interspace between the cover and body of the can, the two being united by a frangible joint, for the purpose of opening the can by directly-applied vertical force, nor of such a construction when the rim of the can turns against the body, and is soldered thereto only at or near its turned edge.

I claim as my invention—

1. A can having a cover with the rim passing inside the body, and with the solder applied to the bent edge of the sheet metal, substantially as specified.

2. The combination, with a can and cover, of a separate strip of sheet metal outside the rim of the cover, and within the body of the can, substantially as specified.

Signed by me this 15th day of December, A. D. 1876.

JOSEPH S. FIELD.

Witnesses:

GEO. T. PINCKNEY,

GEO. D. WALKER.