

A. N. LAPIERRE.
Sheet-Metal Can.

No. 209,060.

Patented Oct. 15, 1878.

Fig. 1.

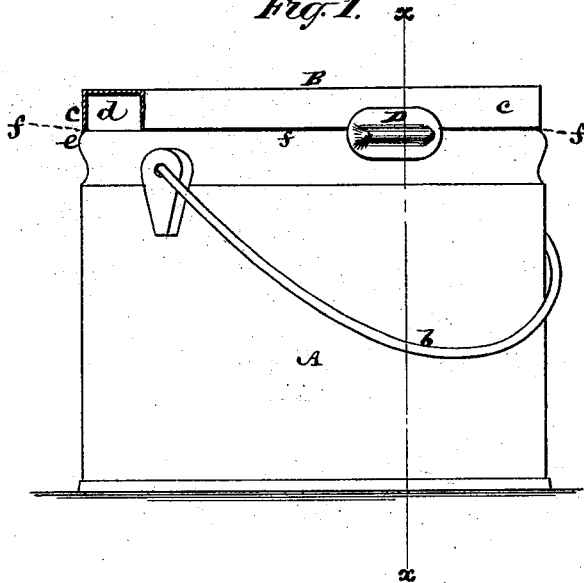


Fig. 2.

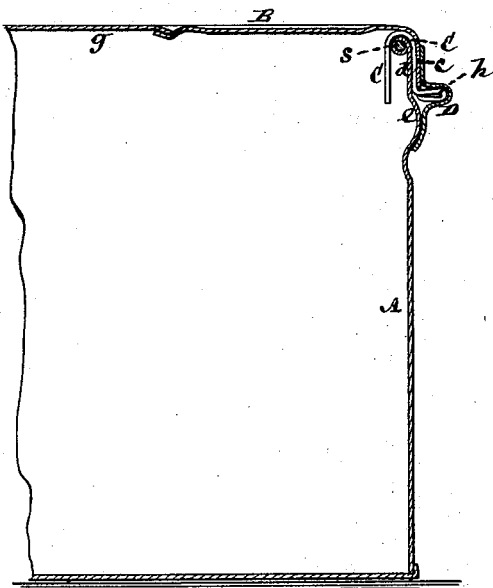
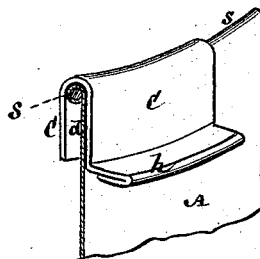


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

ALEXANDER N. LAPIERRE, OF NEW YORK, N. Y., ASSIGNOR TO CHRISTIAN
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IMPROVEMENT IN SHEET-METAL CANS.

Specification forming part of Letters Patent No. **209,060**, dated October 15, 1878; application filed
September 20, 1878.

To all whom it may concern:

Be it known that I, ALEXANDER NAPOLEON LAPIERRE, of the city and State of New York, have invented certain new and useful Improvements in Sheet-Metal Cans, of which the following is a description, reference being had to the accompanying drawing, forming part of this specification.

This invention is designed to be applied to sheet-metal cans for holding various solid, liquid, or partially-liquid substances from which air is to be excluded. It may be used to advantage in cans for exporting butter and lard, as my invention admits of the cover of the can being preserved intact and free from injury by its separation from the body of the can when opening the latter, whereby said cover, which previously had been soldered to the body of the can, may afterward be used as a close and readily-removable lid.

The invention more particularly relates to that description of said cans in which the lid of the can is closed by a frangible joint with the body thereof below the mouth-edge of the can, and in which an opener is combined with the can-body and its lid, and arranged so as to be capable of operation from the exterior of the can and around the same, to part the frangible joint which unites the lid with the body.

In carrying out my invention, I find it necessary or desirable to use a sheet-metal can-body having an inwardly-turned mouth-edge, as such a can-body, although not new in itself, has an important bearing both on the close fit of a slip-lid and on the support and free movement of the opener, by which the joint uniting the lid with the body is parted.

The invention consists in a combination, with a can-body having an inwardly-turned mouth-edge and with a slip-lid—that is, a lid having a depending flange, constructed to closely fit over the mouth-edge of the can-body, and forming a frangible joint with the latter—of a detached traveling joint opener or cutter interposed between the lid and the body, but accessible from the exterior of the closed can, and constructed to ride upon said inwardly-turned mouth-edge of the can for the purpose of parting the joint, as required.

The invention likewise consists in a special

construction of the cutter or opener used to part the frangible joint which unites the lid with the can-body; also, in a cap for closing the joint over the traveling cutter.

In the accompanying drawing, Figure 1 represents a side elevation of a sheet-metal can provided with a bail, and, when its lid or cover is removed, constituting a pail, the same having my invention applied. Fig. 2 is a vertical section on the line *x x*, and upon a larger scale, of said article; and Fig. 3, a view, in perspective, of a cover-opener constructed according to my invention, applied to the upper edge or mouth end of the body of the can.

A is the body of a sheet-metal can or pail, preferably of cylindrical form, and provided with a bail or handle, *b*. B is a slip-cover, constructed with a rim or depending flange, *c*, which forms a close or approximately close fit throughout its depth with the mouth end *d* of the body A. Said body A is or may be constructed with an exterior bead, *e*, which the lower edge of the cover B meets, or nearly so, and which forms a lower margin for the soldered joint *f*, that unites the cover to the exterior of the body of the can.

The cover B may or may not be provided with a central filling-opening, closed by a soldered disk or plate, *g*, for filling the can after the cover B has been soldered to its place.

Prior to fitting the cover B to its place on the mouth end *d* of the body of the can, an iron, steel, or other hard-metal traveling cutter, C, is interposed between the mouth portion of the body of the can and the cover B. This detached cutter is constructed to ride freely on the outer edge of the mouth end *d* of the can, and is here represented as being formed like a saddle, to straddle the same, and with the lower edge of its outer portion, which descends to the line of the soldered joint *f*, as bent outward to form a shoulder or lip, *h*. Said cutter C only extends a limited distance around the mouth of the can, and essentially differs from a band encircling the same, such as has before been used for breaking the soldered frangible joint of the cover by hammering on the latter direct or endwise of the can, and which not only mars the cover so as to destroy its future usefulness, but requires the

cover to be of such peculiar construction as to make it unfit, when removed, to be subsequently used as a lid, or is otherwise objectionable.

The interposed running cutter C, however, in my invention, has no such objections. It is simply fitted over the mouth end of the can so as to be capable of riding freely on and around the same, and the cover B does not require to be of any special construction, but may be an ordinary slip—one that, when applied, fits closely over the mouth end of the can, and has the cutter C within it, but accessible from the exterior of the can, so that, after the cover has been soldered to body A at the joint *f*, it is only necessary to apply a succession of hammer-taps to either end of the lip or shoulder of the cutter to cut the solder at the joint *f*, and so separate the cover from the body of the can, the cutter running or traveling on and around the mouth end of the can. In this way or by these means there is no battering of the cover B, which may subsequently be used as a close and readily-removable lid. Said detached cutter also essentially differs from a mere ripping-wire or wire-opener fast at its one end and operating by traction or tension on its other end, which is exterior to the can, to tear the frangible joint uniting the lid with the body.

To provide for the support and easy or free run of the cutter C on and around the mouth end of the can, as well as to stiffen the can and to provide for the use of a slip-cover on or over the mouth end of the can, it is desirable to construct said end *d* of the can with a rounded thickened edge, *s*, projecting inward, and which may either be formed by simply turning the mouth-edge portion of the body inward and over, or by, in addition, wiring such turned-over portion.

D is a thin sheet-metal cap, preferably made of taggers tin, and constructed to inclose the outer exposed portion of the cutter C. Said cap is secured by solder to make a close joint outside of the cutter, to prevent leakage where the cutter is interposed between the cover and the body of the can. This thin sheet-metal cap is readily broken when the hammer is applied through it to the end of the lip or shoulder *h* of the cutter to cut the soldered joint *f*. Said cap, after the cover has been lifted from the body of the can, may be subsequently removed, so as not to interfere with the free use of the cover as a lid.

I claim—

1. The combination, with a can-body having an inwardly-turned mouth-edge, and with a slip-lid constructed to closely fit over the mouth end of the can, and forming a frangible joint with the body of the can, of a detached joint-opening cutter interposed between the lid and body of the can, but accessible from the exterior of the latter, and arranged to ride upon said inwardly-turned mouth-edge, essentially as and for the purposes specified.

2. The sheet-metal cap D, in combination with the traveling cutter C, the slip-cover B, and the can-body A, substantially as specified.

3. The cutter C, constructed to straddle the edge of the mouth of the body of the can, and formed with an outwardly-projecting lip or shoulder, *h*, essentially as described.

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Witnesses:

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