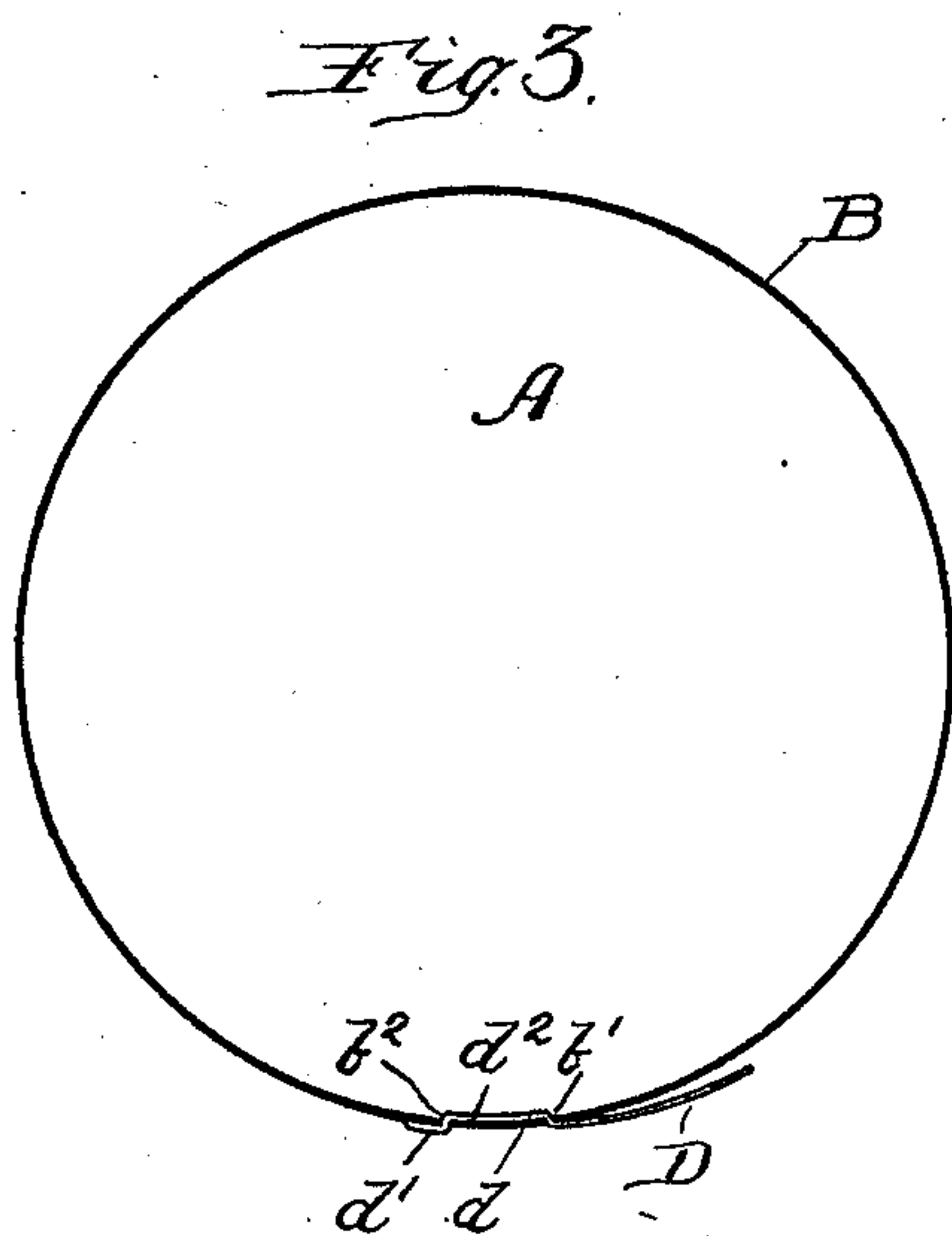
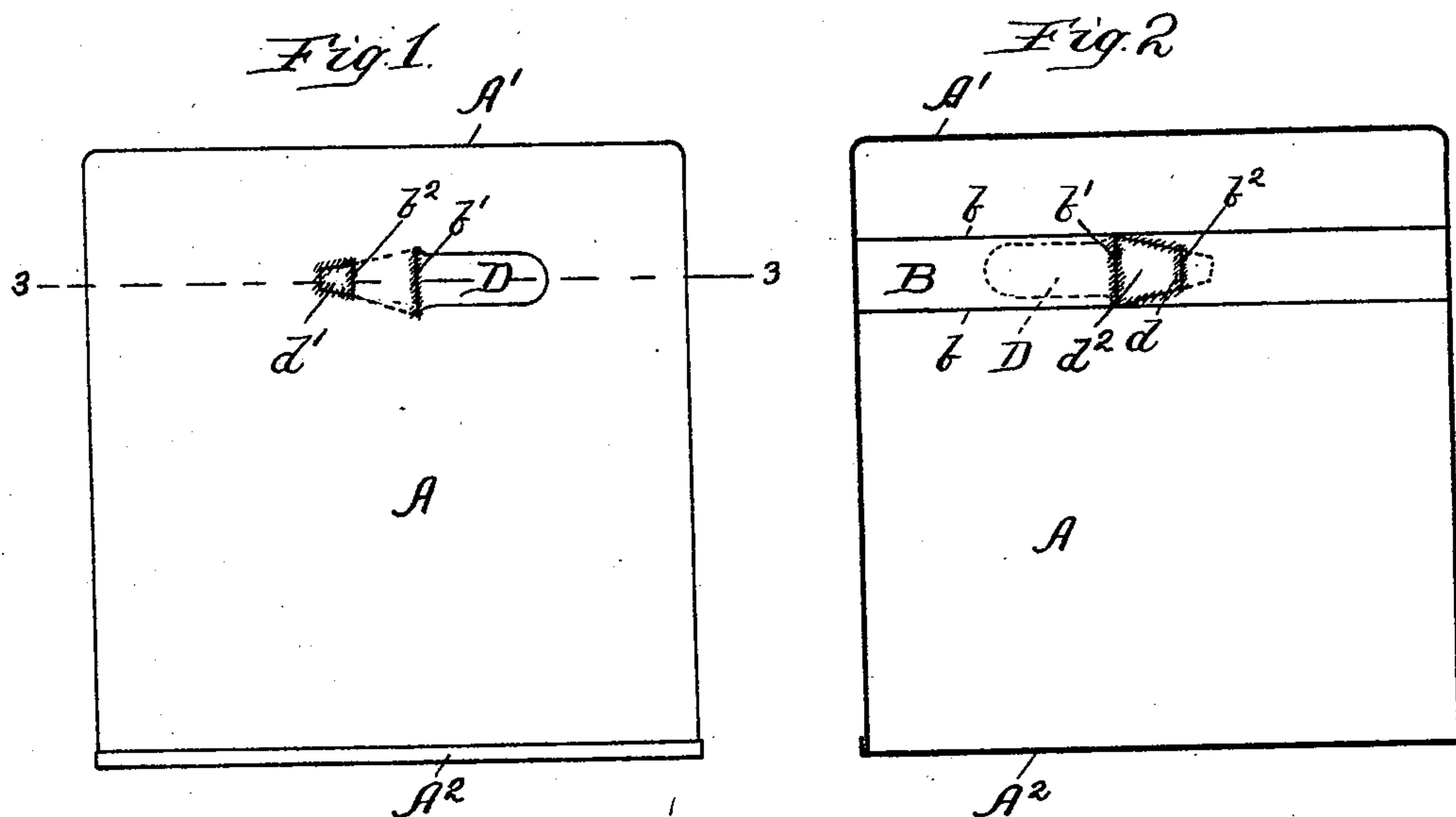


(No Model.)

E. NORTON.  
SEAMLESS SELF OPENING CAN.

No. 514,025.

Patented Feb. 6, 1894.



Witnesses:

Lew. C. Curtis  
H. M. Munday,

Inventor:  
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By Munday, Curtis & Adcock,  
His Attorneys.

# UNITED STATES PATENT OFFICE.

EDWIN NORTON, OF MAYWOOD, ASSIGNOR TO HIMSELF, AND OLIVER W. NORTON, OF CHICAGO, ILLINOIS.

## SEAMLESS SELF-OPENING CAN.

SPECIFICATION forming part of Letters Patent No. 514,025, dated February 6, 1894.

Application filed March 6, 1893. Serial No. 464,835. (No model.)

*To all whom it may concern:*

Be it known that I, EDWIN NORTON, a citizen of the United States, residing at Maywood, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Seamless Self-Opening Cans, of which the following is a specification.

My invention relates to seamless cans, and the object of my invention is to provide a seamless self opening can of a simple, practical and efficient construction.

My invention consists in a sheet metal can having a seamless body provided with a tearing strip integral with the body and marked off from the main portion of the body by parallel weakened lines, such weakened lines being preferably upon the interior surface of the can body, said tearing strip being furnished with a projecting lip to engage the winding key or opening device, said projecting lip being in a separate piece from the body and secured thereto by being inserted through slits in the body so that the two ends of the lip project on the outer surface of the body while the intermediate portion of the lip fits on the inside of the body, thus adapting the lip to be readily soldered in place from the outside of the can body and in such manner that there is no danger of its being ripped or torn off in the attempt to open the can by winding the free projecting end of the tip around the key or opening device.

My invention also consists in the novel devices and novel combinations of parts and devices herein shown and described and more particularly pointed out in the claims.

In the drawings forming a part of this specification, and in which similar letters of reference indicate like parts throughout the several views, Figure 1 is a side elevation of a seamless can embodying my invention. Fig. 2 is a longitudinal central section and Fig. 3 is a cross or horizontal section on line 3 3 of Fig. 1.

In said drawings A represents the seamless can body, the same being drawn up out of a single piece of metal. A' is one of the heads or ends of the can, this head being preferably integral with the body, and A<sup>2</sup> is the other or bottom head of the can. This head being

preferably made of a separate piece of metal and soldered to the body A in the usual manner. B is the tearing strip encircling the can body near one end and marked off or separated from the main portion of the body by weakened lines or scores *b b*. The tearing strip B is furnished with a projecting lip D made of a separate piece of metal, and secured to the strip B by passing one of its ends through vertical slits *b' b<sup>2</sup>* formed in the can body. The slit *b<sup>2</sup>* is made shorter than the slit *b'*, and the end *d* of the lip D which is inserted through the slits *b' b<sup>2</sup>* is made tapering, preferably about as indicated in Figs. 1 and 2, so that this tapering end of the lip D will fit snugly both of the slits or slots *b' b<sup>2</sup>*, and thus adapt the same to be readily soldered and making a secure and tight joint. The projecting tip *d'* of the tapered end *d* is preferably turned at an angle, as indicated in Fig. 3, as this turned tip *d'* thus locks or holds the lip D snugly in place preparatory to its being soldered, and also insures the proper soldering of the parts together. The tapered end *d* of the lip D also facilitates the insertion of the lip through the slits *b' b<sup>2</sup>*. As the intermediate part *d<sup>2</sup>* of the lip D fits inside the can body so that the portion of the tearing strip B between the slits *b' b<sup>2</sup>* is embraced by the intermediate part *d<sup>2</sup>* of the lip D, the act of winding the free projecting end of the lip D around the key or opening device will not tend to separate the lip from the tearing strip. The longer vertical slit *b'* extends the full width of the tearing strip B.

I claim—

1. A sheet metal can having a seamless body provided with a tearing strip integral therewith but separated or marked off by weakened lines and extending circumferentially around the body, said tearing strip being provided with a projecting lip made in a separate piece and secured to the body, the body having two slits transverse to the tearing strip through both of which one end of said projecting lip is inserted and soldered in place, said tearing strip being free from the head or heads of the can and soldered to no part excepting said projecting lip, and the can body having no side seam across said tearing strip,



whereby the tearing strip is adapted to be readily separated from the body at said weakened lines substantially as specified.

2. The seamless can body A, provided with  
5 integral tearing strip B, slits  $b'b^2$ , one longer than the other, and a separate projecting lip D having tapered end  $d$  inserted through said slits  $b'b^2$ , and soldered thereto, substantially as specified.

10 3. The seamless can body A, provided with integral tearing strip B, slits  $b'b^2$ , one longer than the other, and a separate projecting lip D having tapered end  $d$  inserted through said  
15 slits  $b'b^2$  and soldered thereto, said lip D having a projecting tip  $d'$  on the outside of the can body, substantially as specified.

4. The seamless can body A having integral tearing strip B separated or marked off from

the body A by weakened lines  $bb$  and extending circumferentially around the body, and a 20 separate projecting lip D secured to the tearing strip portion B of the can body, said tearing strip having a slit transversely across the same through which said projecting lip is inserted, said tearing strip being free from the 25 head or heads of the can and soldered to no part excepting said projecting lip, and the can body having no side seam across said tearing strip, whereby the tearing strip is adapted to be readily separated from the body at said 30 weakened lines substantially as specified.

EDWIN NORTON.

Witnesses:

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