

No. 616,865.

Patented Dec. 27, 1898.

E. BARRATH.  
SHEET METAL CAN.

(Application filed Dec. 30, 1892.)

(No Model.)

Fig-1

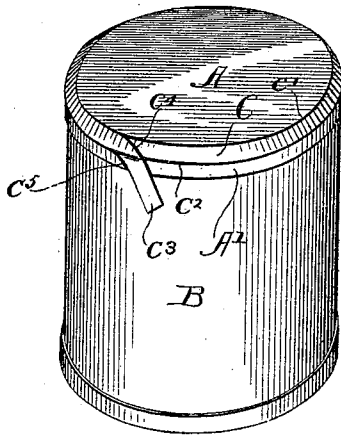
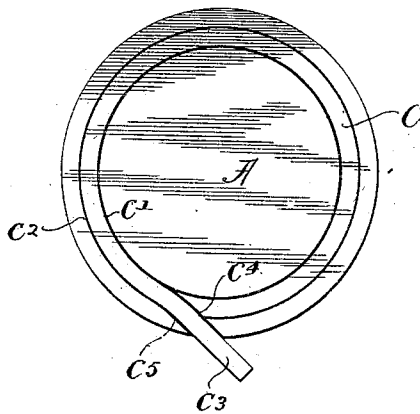


Fig-2



Witnesses

Harold S. Bennett,

R. Luther Vivian,

Inventor  
Edward Barrath

by  
Poole & Brown  
his Attys

# UNITED STATES PATENT OFFICE.

EDWARD BARRATH, OF CHICAGO, ILLINOIS.

## SHEET-METAL CAN.

SPECIFICATION forming part of Letters Patent No. 616,865, dated December 27, 1898.

Application filed December 30, 1892. Serial No. 456,836. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD BARRATH, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Sheet-Metal Cans, (Case No. 3,) of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to improvements in key-opening cans of that class in which an annular strip, which forms part of the end of the can, is torn out to give access to the contents. The object of the invention is to provide a practical construction in which a continuous detachable strip in the can end, cover, or head has a tongue which is integral with the remainder of the strip and which projects beyond said flange, so that it may be left free after soldering the cover to the body and therefore available to be seized by a suitable implement for drawing the strip from the cover.

In the accompanying drawings, which illustrate one form of my invention, Figure 1 is a perspective view of a can having a cover provided with my improvements. Fig. 2 is a plan view of the cover removed from the can-body before the flange has been turned thereon.

In said drawings, A designates the can head or cover, and B the body of the can to which the cover is to be applied. Said cover is provided with a marginal flange A', turned at right angles thereto, so as to fit over the can-body B.

C is a detachable strip which forms part of the cover A and which has a free tongue or projecting portion  $c^3$  integral therewith, which extends beyond the edge of the flange A'. The strip C is made detachable from the cover by means of any suitable form or construction of weakened lines  $c' c^2$ . Said lines are both deflected outwardly from their general circular course into line with the side edges of the tongue, the outer line  $c^2$  being connected with the outer edge of the tongue by means of an oblique weakened line  $c^5$  and the inner circular line being joined to the inner edge of the tongue by means of a second oblique weakened line  $c^4$ . The outer one  $c^2$

of said lines will preferably not cross said tongue, since to do so would render the strip liable to tear apart at such traversing line. To make the strip C entirely detachable and the central part of the cover entirely removable, the outer weakened line  $c^2$  will be extended entirely around the cover from one side to the other of the deflected part of the detachable strip, while the inner weakened line  $c'$  is continuous, as shown. The detachable strip C, which lies between the weakened lines  $c' c^2$ , is herein shown as arranged on an inclination, thereby forming an annular oblique or chamfered surface around the outer edge of the cover, but may be arranged in the same plane with the central portion of the cover.

The location of the detachable strip will preferably be such that the outer weakened line  $c^2$  is in or substantially in the angle of the flange of the cover with the body of the latter. In this construction the can, after the lid has been removed, is left without an inwardly-projecting portion of the cover and is therefore free to discharge the solids, as well as the liquids, and to wholly discharge its contents of whatever kind.

When the can-cover is secured to the can-body, the free tongue or projecting portion  $c^3$  of the strip lies flat against the side of the can. When it is desired to remove the cover, said tongue will be grasped by means of a key or other suitable implement and given an outward pull, so that the inclined part of the strip C may be torn from the flange A' along the weakened lines  $c^4 c^5$ , the hand holding the key then being given a circumferential motion to detach the strip from the cover along the lines  $c' c^2$ , thus removing from the cover said strip C and permitting the removal of the body of the cover A. The flange A' of the cover, which is secured to the can-body by soldering, will remain thereon.

I claim as my invention—

1. A sheet-metal can, box or receptacle cover, provided with a continuous detachable strip defined by weakened lines deflected to the outer edge of the cover-sheet without crossing the strip or its projecting tongue.

2. A sheet-metal can having a flanged sheet-metal cover provided with an annular transversely-inclined detachable strip situated ad-

jaacent to the cover-flange, said strip being deflected outwardly and across the angle of the flange and terminating in a free tongue which projects beyond the edge of the flange.

5 3. In a sheet-metal can, the combination with the body portion thereof of a cover provided with a rim, the lip  $c^3$  projecting obliquely from the edge of said rim, a line of reduced strength  $c^1$  extending around the  
10 cover, a line of reduced strength  $c^4$  extending obliquely across said rim and connecting the line of reduced strength  $c^1$  with the upper edge of said lip, a line of reduced strength,  $c^2$ , extending around said cover parallel to  
15 said line  $c^1$ , and a line of reduced strength,  $c^5$ , extending obliquely across said rim and connecting said line  $c^2$  with the lower edge of said lip  $c^3$ ; whereby the cover may be removed without breaking the solder securing  
20 the cover to the body of the can.

4. In a sheet-metal can, the combination of

a body portion thereof, of a cover provided with a rim, said cover carrying two lines of reduced strength extending circumferentially about the same, a lip projecting obliquely  
25 from the edge of said rim and formed integral therewith, the upper edge of said lip being joined with the upper line of reduced strength by a line of reduced strength extending obliquely across said rim, the lower edge of said  
30 lip being joined with the lower end of reduced strength by a line of reduced strength extending obliquely across said rim; whereby the cover may be removed without breaking the solder securing the cover to the body  
35 of the can.

In witness whereof I hereunto subscribe my name this 27th day of December, A. D. 1892.

EDWARD BARRATH.

Witnesses:

CHARLES A. BROWN,  
GEORGE L. CRAGG.