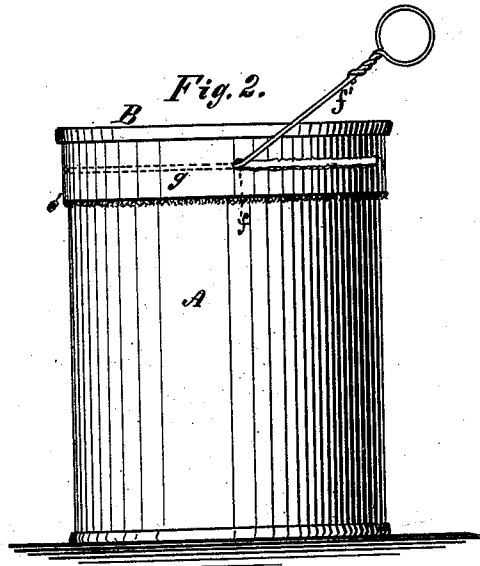
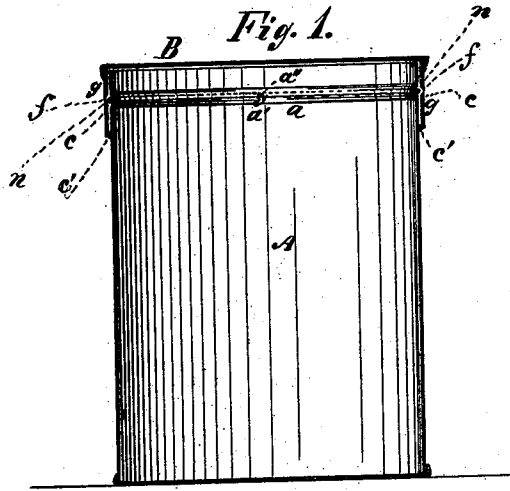


G. H. CHINNOCK.
SHEET-METAL CANS.

No. 178,996.

Patented June 20, 1876.



Witnesses:

Henry Eichling.
H. Wellfr

Inventor:

George H. Chinnoek
per James A. Whitney
Att'y.

UNITED STATES PATENT OFFICE

GEORGE H. CHINNOCK, OF BROOKLYN, NEW YORK, ASSIGNOR TO LEONARD RICHARDSON, OF SAME PLACE.

IMPROVEMENT IN SHEET-METAL CANS.

Specification forming part of Letters Patent No. **178,996**, dated June 20, 1876; application filed April 15, 1876.

To all whom it may concern:

Be it known that I, GEORGE H. CHINNOCK, 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:

This invention relates to that class of self-opening cans, so termed, which are provided with a wire arranged underneath the rim of the cover, one end of the wire projecting outside of said cover in such manner that by exerting a radial strain upon the wire it may be caused to rip through and around the rim, thereby detaching the cover from the body of the can.

It is found, in practice with this class of cans, that unless the sheet metal of which the rim is formed is very thin, and consequently very weak, a very considerable force is required to thus sever the cover from the body, and there is great liability of breaking the wire before the object is accomplished.

This invention is designed to provide a can of the class mentioned, in which the strength of the rim or cover shall not be materially diminished, but which shall at the same time be capable of being cut with the same facility as those made of thin weak metal. To this end my invention comprises the combination, in a self-opening tin can (or box) of the class mentioned, of a cutting or severing wire, provided in any usual or suitable relation with the body of the can, and a cover, the rim or top of which is thinned or grooved circumferentially in a plane coincident with the wire, said rim being soldered at the lower edge of the body of the can in the ordinary manner, by which means the rim is rendered capable of easy rupture by the radial strain exerted upon the wire in opening the can, without in anywise affecting in practice the strength of said rim in retaining the cover in place during storage, transportation, &c.

Figure 1 is a central longitudinal section, and Fig. 2 a side view, of a sheet-metal can made according to my invention.

A is the body of the can, of any ordinary or suitable shape or contour, provided with an internal bead, *a*, at a proper distance from its upper edge, whereby is provided an external

groove, *c*, in which is placed the wire *f*, as more fully shown in Fig. 1. One end, *a'*, of this wire is made fast, preferably, by being passed through and hooked in a small hole or perforation, *a''*, provided in the body A. The wire being thus placed in position the cover B is shut down upon the top of the can, its rim *g* shutting around the circumference thereof, and closing the wire within the groove. The lower edge of the rim *g* is soldered to the body A, as represented at *c'*. The free end of the wire *f* is extended out through a hole or opening through the rim *g* in such manner that it may be readily grasped by the fingers, or wound upon a suitable key for drawing the same in a direction radial to the axis of the can. The rim *g* of the cover B is internally grooved around its circumference, as indicated at *n*, in Fig. 1, this groove being made by cutting into the sheet metal of which the rim is made, by any suitable means. The shape of this groove is not important, as it may, if desired, comprise simply a cut made to the requisite depth, or it may have more or less width, or be more or less clearly defined, as may be preferred, the object being simply to render the rim *g* practically thin in a line or plane coincident with the wire *f*, in order that the metal at that particular part shall afford less resistance to the ripping or tearing action of the wire in opening the can, as hereinafter more fully explained. Neither is my invention limited to the arrangement of said groove in the rim *g*, inasmuch as the arrangement of said groove in the same relation with the ripping-wire in the top of the cover B, or to any other portion of the can, would be but an equivalent of my herein-described construction of the can.

In order to open the can it is only necessary to seize the outwardly-projecting end *f'* of the wire *f*, and to exert a strain thereon in a direction more or less radial to the axis of the can, or tangential to the cylindric surface of the can, whereupon the thin portion of the metal caused by the grooving or thinning hereinbefore described, and coincident with the position of the wire, yields readily to the ripping, tearing, or rupturing action of the said wire, and the cover or top of the can is readily de-

tached, the ripping extending either entirely around the can, or for the greater part of the circumference of the said can, as may be preferred or found necessary.

I am aware that ripping-wires have been attached in various ways to self-opening cans, so termed. Such, therefore, I do not claim.

I do not in this present application claim, broadly, a cover grooved or thinned, to provide a line of rupture in the opening of the can, inasmuch as I have made such claim in a former application for a patent filed April 11, 1876; but—

What I do here claim as my invention is—

In combination with the ripping-wire, provided to the body A, the cover B, grooved or thinned in a line coincident with the position of the ripping-wire *f*, whereby the rupturing action of the ripping-wire in opening the can is greatly facilitated without in any wise practically affecting the strength of the cover by the strength of its connection between the cover and the body of the can, substantially as set forth.

GEO. H. CHINNOCK.

Witnesses:

EDWARD HODY,
H. WELLS, Jr.