(No Model.)

A. H. YOUNG & R. BELDEN.

SHEET METAL CAN.

No. 416,536. Patented Dec. 3, 1889.

Fig. 1.

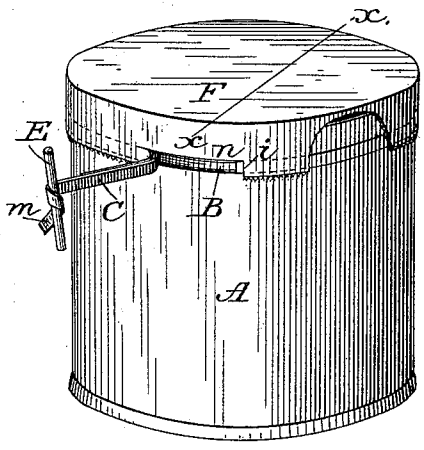


Fig. 2.

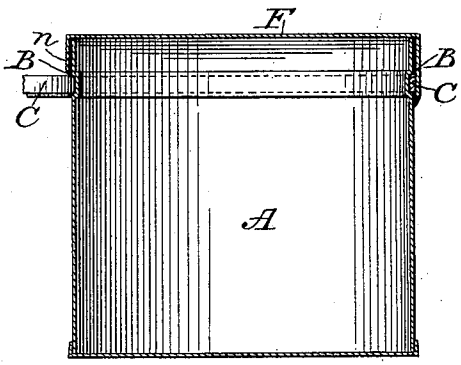
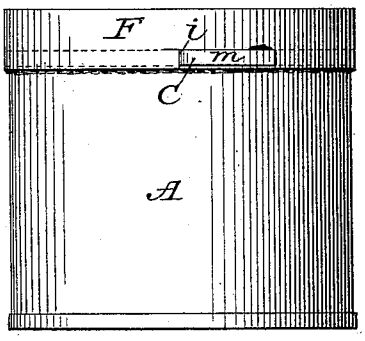


Fig. 3.



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UNITED STATES PATENT OFFICE.

AUGUSTIN H. YOUNG AND ROBERT BELDEN, OF BROOKLYN, NEW YORK.

SHEET-METAL CAN.

SPECIFICATION forming part of Letters Patent No. 416,536, dated December 3, 1889.

Application filed October 3, 1889. Serial No. 325,854. (No model.)

To all whom it may concern:

Be it known that we, AUGUSTIN H. YOUNG and ROBERT BELDEN, both of Brooklyn, in the county of Kings, State of New York, have invented a new and useful Improvement in Self-Opening Covers for Hermetically-Sealed Cans; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

This invention relates to that class of hermetically-sealed cans for paints and other materials in which the can is opened by severing the rim of the cover above its sealed edge.

The object of said invention is to provide, without material increase of cost, a simple effective opening device, whereby an ordinary plain cover fitted upon a can of ordinary form, and which is soldered along its edge to the can to seal it hermetically, may be readily opened without destroying the cover or preventing its subsequent use upon the can, and to avoid wholly the objections which lie to the formation of outwardly-projecting angles or angular ribs, or of lines of reduced thickness or least resistance in the flange of the cover.

It consists in the combination, with the ordinary flanged cover to be soldered upon the can in the usual manner, of a narrow strip of sheet metal having a clean, sharp, straight edge, and which is interposed between the cover and can with its faces parallel with the periphery thereof in a circumferential recess formed in the latter, so that it shall completely encircle the can, a free end being left to extend out therefrom through a slit in the rim of the cover, of sufficient length to enable it to be firmly caught and held for the purpose of opening the cover.

In the accompanying drawings, Figure 1 is an elevation of a can fitted with our improved cover, with a portion of the rim of the cover broken away, and the severing-strip in action. Fig. 2 is a longitudinal section in line *x x* of Fig. 1, and Fig. 3 an elevation of the sealed can before it is opened.

A represents the body of the can. The upper end of the body is completely encircled by a recess B, formed in its outer face, preferably far enough below its rim as to bring the lower edge of the recess slightly above the edge of the cover which is fitted upon the can. This recess is of suitable width and of a depth corresponding substantially to the thickness of a strip C of sheet metal to be placed therein flatwise with its faces parallel with the sides of the can. This sheet-metal strip C is formed with parallel straight clean-cut edges of a length to completely encircle the body of the can, and yet leave a free projecting end *m*, of a length sufficient to permit a firm hold to be obtained thereon, either by a grasp of the fingers or by coiling it around a pin or rod E, as shown in Fig. 1.

The cover F to be fitted upon the can is formed with a plain flange or rim of thin sheet metal adapted to fit closely upon the can in the customary manner; but the rim is slitted at one point, as at *i*, far enough to allow the free end *m* of the cutting-strip C placed in the recess B to be passed outwardly through it. After the cover F has thus been secured upon the can over the cutting-strip C, so that the latter is loosely inclosed flatwise between the two in the smallest possible space, it is sealed in the customary manner by soldering its edge to the can, the free end *m* of the cutting-strip, which is left extending out through the slit *i* in the edge of the cover, being simply tacked at its extremity to the cover, as shown in Fig. 3. In order to open the can thus sealed, it is only necessary to take firm hold of the free end *m* of the cutting-strip C, which may be done by wrapping it about a rod E, (see Fig. 1,) and then drawing it outward in a direction more or less radial to the axis of the can and with a downward pull. This will cause the sharp upper edge of the strip to act as a knife to sever the superimposed rim of the cover around its entire circumference with a clean shearing cut produced by the outward twist of the upper edge as it is turned from its vertical to a horizontal position simultaneously with the direct outward pull exerted thereon at a tangent to its periphery. The upper portion of the cover is thus left free to be readily removed and with a sufficient portion of the rim still remaining thereto (see at *n*, Figs. 1 and 2) to

allow it to be used as a serviceable slip-cover.

By inserting the concentric cutting-strip flatwise between the can and cover so that its faces are parallel with the sides of the can the necessity and expense are avoided of forming a projecting circumferential angle in the flange of the cover and of securing a handle to the strip, or of employing beveled edged or angular or serrated cutters, and the ready severance of the flange is greatly facilitated, since by our invention the cutting-edge of the strip is made to act upon the metal with a shearing cut resulting from the twist naturally imparted to the strip in turning it from its normal vertical position on the can to a horizontal position in the act of tearing it out.

The use of the flat strip of sheet metal, disposed as set forth, in place of an iron wire, for severing the cover, avoids the annoyance due to a possible failure of the wire to act because of its corrosion by the acid and solder used in sealing the cover, which is apt to so impair its strength as that it will break off without cutting.

We claim as our invention—

The combination, with the body and sheet-metal cover of a can, of a loose flat encircling strip of sheet metal interposed flatwise between the can and cover, with its faces parallel with the periphery thereof, and having a free continuous end extending outwardly through a slit in the cover, substantially in the manner and for the purpose herein set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

AUGUSTIN H. YOUNG.
ROBERT BELDEN.

Witnesses:
A. N. JESBERA,
E. M. WATSON.