G. H. CHINNOCK.

Improvement in Metal Cans for Paint, &c.

No. 133,203.

Patented Nov. 19, 1872.

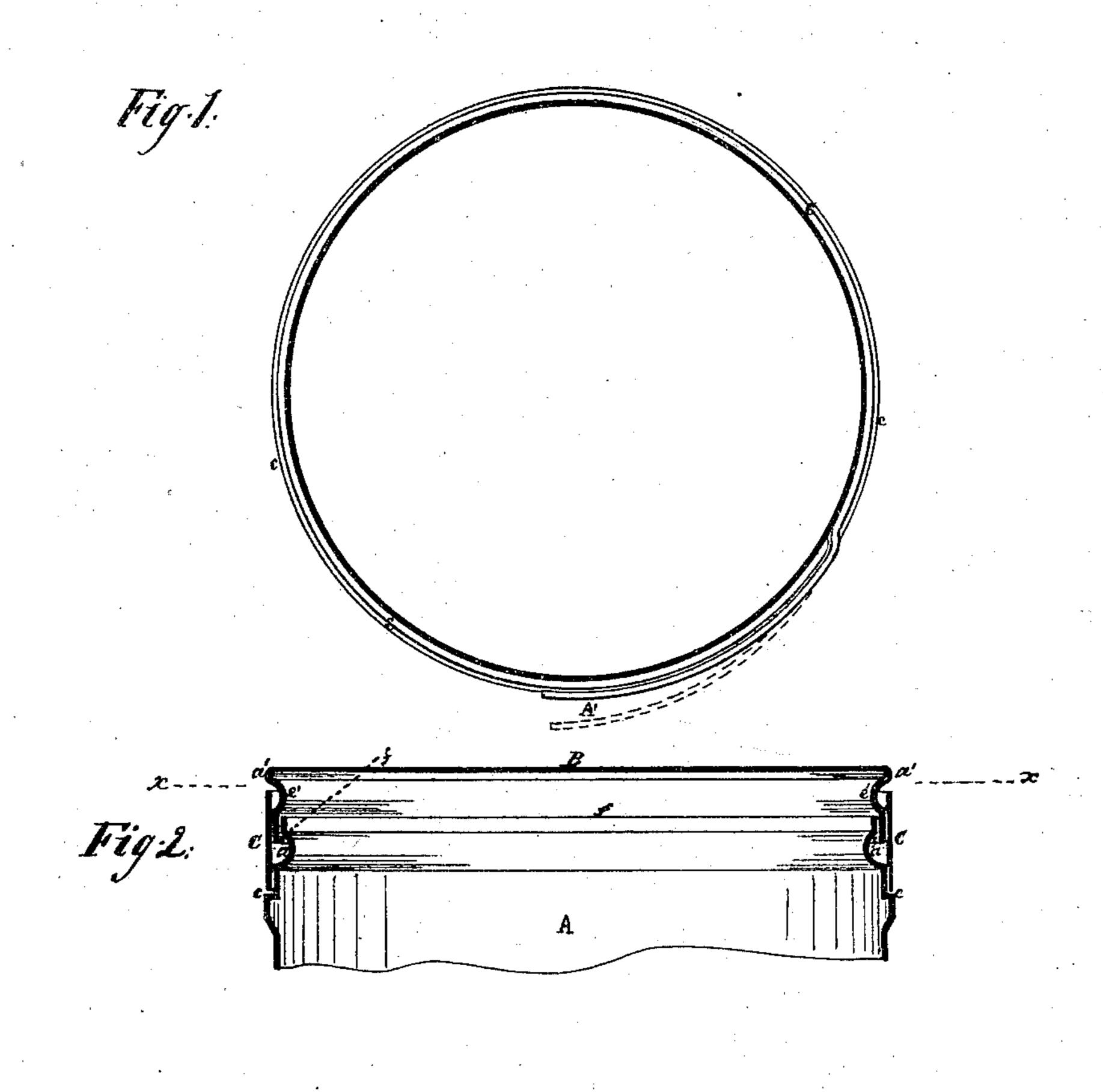


Fig.3:

Witnesses James Al Whitney, Lauri IV. Price Seo do Chimodo

United States Patent Office

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

IMPROVEMENT IN METAL CANS FOR PAINT, &c.

Specification forming part of Letters Patent No. 133,203, dated November 19, 1872.

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 certain Improvements in Sheet-Metal Cans, of which the fol-

lowing is a specification:

This invention relates to that class of cans made, preferably, of sheet-tin, and used for holding, hermetically sealed, paint, preserved fruits, condensed milk, and other substances. Its object is to provide a can, of any suitable or required configuration, that may be readily opened, when desired, without trouble, and without the disfigurement incident to opening the ordinary metal-topped cans by the use of a cutting instrument, and also to enable the cover to be temporarily employed for covering the can after the same has been opened, and to permit the reattachment of the cover by soldering, when desired. The invention consists in a sheet-metal strip soldered to an annular flanch formed upon the cover and to the upper or circumferential edge of the can, and furnished with a loose flap or extension in such manner as to firmly and closely attach the cover to the can, and at the same time permit the removal, when required, of the said cover by tearing loose the strip from the solder holding it in place. The invention also embraces certain novel means whereby the operation of soldering the strip in place in the attachment of the cover is very greatly facilitated, and whereby the cover is fitted for reuse after having been removed from the can.

Figure 1 is a horizontal sectional view of a can made according to my invention taken in the line x x of Fig. 2. Fig. 2 is a central vertical sectional view of the upper part of the said can. Fig. 3 is a side view of the same.

The can A, of sheet-tin or equivalent material, may be of the ordinary cylindrical form, with a bottom attached in any appropriate manner. The top or upper edge has provided immediately below it an annular or circumferential groove, a, semicircular in its cross-section, and having below it, formed in the contiguous metal of the side of the can, a circumferential rabbet, c, about equal in depth to the thickness of the metal of which the can is made. The upper edge of the can is coincident with the sides thereof—in other words,

extends outward the same distance from the center. The cover B is also of sheet metal and formed with the downwardly-extending flanch f at its periphery. At the upper edge of the flanch f is formed the annular rib a', immediately below which the flanch has provided in it a groove or annular depression e'. The width of the flanch is such that when the cover is applied to the can the lower edge of the said flanch will be about midway across the groove a. The cover being thus put in its place, a strip, C, of sheet metal, of such width that one of its edges will lie nearly across the groove e' of the flanch and the other lie in the rabbet c, is placed around the flanch and the adjacent portion of the can. The strip C is of such length as to pass somewhat more than once around the can, so that when the strip is soldered or attached in place the extra length or extension A'—say of one inch—will be left free, for the purpose hereinafter specified. The strip C being placed in position, as set forth, soft solder is applied, and, by the appropriate use of a soldering-iron, is swept along both edges of the strip and solders the same fast, one to the flanch f of the cover, and the other to the upper part of the can A, the annular rib a' preventing the overflow at the one edge of the metal solder and the groove e' under the same edge permitting its passage about such edge, to secure a more efficient action of the solder. The overflow of the solder at the opposite edge of the strip is prevented by the relatively raised portion formed contiguous thereto from the placing of the aforesaid edge in the rabbet c. This soldering, it must be observed, secures the strip firmly to the flanch and to the can around their entire circumference, thus hermetically fixing the one to the other, but does not extend to the extra length or extension A', which lies loose therefrom, but in close contact with the adjacent surface of the can.

It will be seen that the strip C, soldered as aforesaid, securely attaches the cover to the can. Also, that by seizing the extension A' of the strip with any appropriate implement, or even, if such extension be of sufficient length, with the hand, and applying force, the strip may be readily stripped or pulled from its place, the soft solder yielding to

a moderate force thus exerted. Also, that the groove a prevents any spreading of the solder underneath the strip from the edge of the can to the edge of the flanch, which might otherwise occur and produce the injurious and undesired result of soldering directly the said edges. Also, that the flanch, being arranged to overlap the upper edge of the can, the cover may be applied for the temporary covering of the same after the opening of the can by the removal of the strip; and, furthermore, may be reused in the same manner as before by simply soldering in place the same or another strip. Also, that a smooth edge being left at the top of the can when opened, the ragged edge formed by cutting open an ordinary metal-topped can, which, in paint cans, is liable to injure the painter's brush, is wholly avoided, as is also the liability of cutting one's self and of smearing the contents of the can upon the exterior of the same, incident to opening such cans in the ordinary manner with a cutting instrument.

What I claim as my invention is—

1. The strip C, soldered to the lower edge of the flanch f and to the upper edge of the can, and furnished with the extension A', substantially as and for the purpose specified.

2. The arrangement, with reference to the flanch f, of the cover B and the circumferential edge of the can, of the groove e' and rabbet c, provided, respectively, upon the said flange and edge, substantially as and for the

purpose specified.

3. The circumferential groove a, provided at the edge of the can and in relation to the flanch of the cover, and the overlying soldered strip C, substantially as and for the purpose herein set forth.

GEO. H. CHINNOCK.

Witnesses:

EDWARD TYRNES, LEONARD RICHARDSON.