

(No Model.)

O. S. FELLOWS.
SEALED PACKAGE.

No. 575,060.

Patented Jan. 12, 1897.

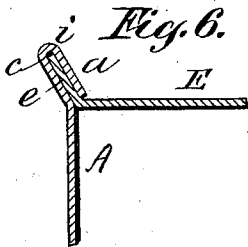
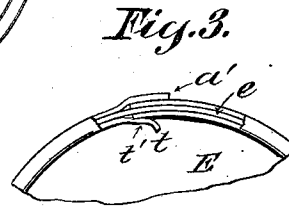
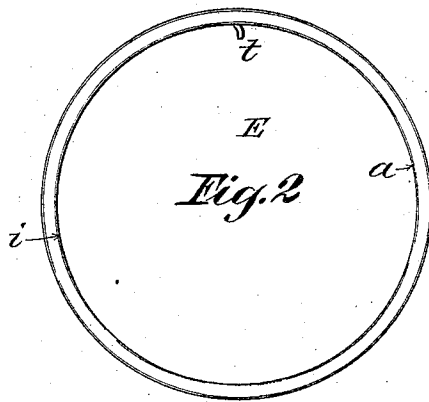
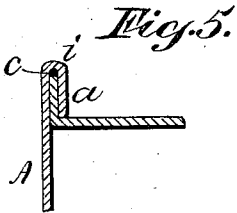
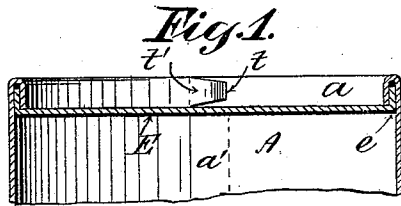
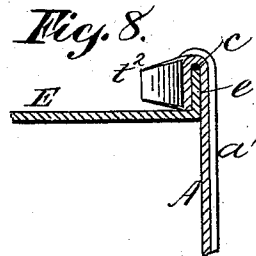
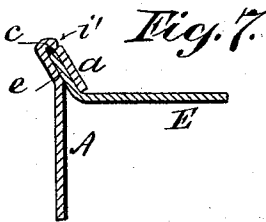
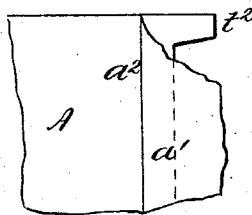


Fig. 4.



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UNITED STATES PATENT OFFICE.

OLIN S. FELLOWS, OF MIDDLETOWN, NEW YORK.

SEALED PACKAGE.

SPECIFICATION forming part of Letters Patent No. 575,060, dated January 12, 1897.

Application filed May 3, 1895. Serial No. 548,037. (No model.)

To all whom it may concern:

Be it known that I, OLIN S. FELLOWS, a citizen of the United States, residing at Middletown, in the county of Orange and State of New York, have invented certain new and useful Improvements in Sealed Packages, of which the following is a specification sufficient to enable others skilled in the art to which the invention appertains to make and use the same.

My improvements relate to sheet-metal cans designed to be opened by the removal of a stripping section or zone, thereby releasing the end plate from the can-body.

The object of the invention is to attain a concave stripping portion consisting of the edge of the can-body instead of a portion of the end plate; and the invention consists, primarily, in folding the edge of the can-body over the concave surface of an outwardly-projecting flange of an end plate, to which flange the fold is soldered and constitutes a concave stripping portion for removal from the concave surface of the flange by means of a strip-winding key, and, secondarily, in making the fold of the edge of the can-body wider than the end-plate flange to which it is soldered, so that contact of the edge of the fold of the can-body with the outer surface of the end plate gages and limits the projection of the flange beneath the fold and leaves the angle or bend of the fold free and inaccessible to solder, which will not pass beyond the surfaces opposed to each other which are in contact.

I am aware that heretofore provision has been made for opening sheet-metal cans by stripping off interior flanges from end plates and zones from the edges and other portions of can-bodies; also of zones from an end plate beyond the soldered joint, as in my concurrent application, Serial No. 546,885, filed April 23, 1895; but I am not aware that an edge of a can-body has ever been folded over the concave surface of an outwardly-projecting flange on an end plate, to be soldered thereto and to constitute a stripping-zone, which special feature of construction is the gist of my present invention, by which I attain several practical benefits not previously appertaining to the removal of stripping-zones forming a part of the can-body, such, for instance, as

the advantages of inside or concave stripping as compared with exterior or convex stripping, the formation of a stripping-tongue in one piece with the folded strip in a simple and effective manner, and the formation of a solder-limiting space without specially beading or otherwise forming the structure. This latter feature I believe to be new in so far as the special construction by which I attain the desired result is concerned, although I am aware that the flow of solder has been limited by various other expedients, but never in so simple and inexpensive a manner.

In the accompanying drawings, Figure 1 is a vertical section of a can made according to my invention; Fig. 2, a top view of the same. Fig. 3 is a top view of a portion of the can, showing portions of the can-body adjoining the body of lap broken away to illustrate the formation of the stripping-tongue by the bending outward of the lapped edge of the can-body. Fig. 4 represents adjoining portions of the can-body as lapped longitudinally, the edge being formed with a projecting stripping-tongue, which, when the edges of the can-body are lapped, constitutes a continuation of the stripping-zone. Figs. 5 to 7, inclusive, illustrate several ways of forming my improved soldering and stripping joint. Fig. 8 is a sectional detail of the structure shown in Fig. 4, taken through the end plate and can-body in front of the body-lap and looking toward the stripping-tongue.

I form the end plate E with an outwardly-projecting flange *e*, the angle which the flange forms with relation to the end plate being of secondary importance provided it is sufficient to render the inner surface of the flange decidedly convex to attain the advantages incident to concave stripping around the strip-winding key, the rectangular form shown in Figs. 1, 2, 3, 5, and 8 being preferable, though not absolutely essential. Slight variations therefrom, as shown in Figs. 6 and 7, will be practical.

The can-body A is of usual construction, excepting that its edge *a* is folded inward over the concave surface of the flange *e* of the end plate E, being soldered thereto in any convenient or well-known manner. I make the flange *e* of less width than the fold *a*, so that when the edge of the fold *a* abuts against

the outer surface of the end plate proper, E, a space *c* will be created between the outer end of the flange *e* on the end plate and the inner surface of the can-body A. This space *c* effectually limits the flow of solder to the superposed surfaces between the fold *a* and flange *e*, so that when the fold *a* is stripped off the end plate E its flange *e* will be positively released from the can-body.

10 The folding of the edge of the can-body A will, where certain thicknesses of metal are used, be sufficient to cause the fold *a'* to strip along the line formed by the angle *i* of the fold; and the metal may be further weakened 15 along this angular line by pinching or crimping or otherwise reducing the thickness of the metal, or a positive incision *i'* may be made, as in Fig. 7.

It is obvious that where the line of the longitudinal seam *a* occurs a double thickness 20 of the edge of the can-body will be turned over, the parts of such double fold being soldered together and forming a joint independent of that between the fold *a* and the flange *e*. I am thus enabled to form the tongue *t* 25 by bending back a portion of the fold *a* where it laps over at the seam *a'*, still leaving a portion *t'* of the lap-seam *a'* and the seal unimpaired. The ordinary strip-winding key or 30 equivalent device is applied to the stripping-tongue *t* and the stripping accomplished in any of the ways heretofore known in the art.

If a stripping-tongue *t* of more ample pro-

portion is desirable in certain cases, the outer fold *a''* of the can-body may be formed with 35 a projection *t''*, as in Fig. 4, which, when the edge of the can-body is folded in over the flange *e*, will project as a stripping-tongue beyond the fold *a'*, as illustrated in Fig. 8.

It is obvious that in lieu of forming a stripping-tongue *t* in one piece with the can-body, 40 as above set forth, the stripping-tongue may be otherwise applied to the strip *a*, as by insertion between the lap-joint *a'* where folded over and between the flange *e* of the end plate, 45 or by riveting or otherwise.

What I claim as my invention, and desire to secure by Letters Patent, is—

A sheet-metal can having an end plate formed with an outwardly-projecting flange, 50 and a can-body the edge of which is folded over said outwardly-projecting flange of the end cap to form a concave stripping portion soldered to the concave surface of the said end-plate flange, said fold of the can-body 55 being made of greater width than that of the flange of the end plate to which it is soldered so as to form a space between the edge of the end-plate flange and the can-body where the latter is turned over, substantially in the man- 60 ner and for the purpose described.

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