

(No Model.)

O. S. FELLOWS.
SEALED PACKAGE.

No. 545,466.

Patented Sept. 3, 1895.

Fig. 1.

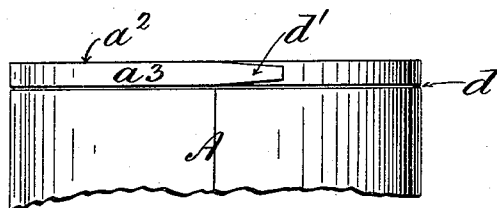
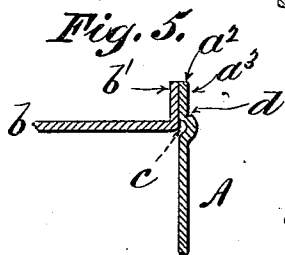
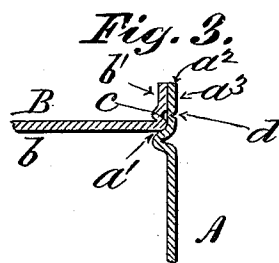
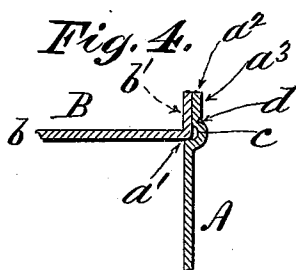
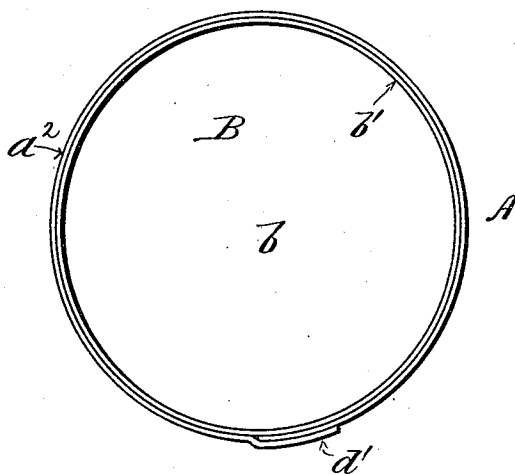


Fig. 2.



Witnesses:
D. W. Gardner
A. V. Bourke

Inventor:
Olin S. Fellows,
By his Attorney,
George William Smith

UNITED STATES PATENT OFFICE.

OLIN STEPHEN FELLOWS, OF MIDDLETOWN, NEW YORK.

SEALED PACKAGE.

SPECIFICATION forming part of Letters Patent No. 545,466, dated September 3, 1895.

Application filed October 29, 1894. Serial No. 527,254. (No model.)

To all whom it may concern:

Be it known that I, OLIN STEPHEN 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 which are designed to be opened by stripping off a portion of the can-body from an end plate; and the invention consists in a can having an end plate formed with an outwardly-projecting flange, by which it is soldered to the inner surface of the can-body, a stripping portion provided with a stripping-tongue for engagement with a strip-winding key, said stripping portion being a part of the can-body and coinciding with the soldered joint by which the flange of the end plate and the edge of the can-body are held together, a circuitous incision or other reduction in thickness formed in the can-body at or immediately adjoining the plane of the end plate, and a circuitous space formed between the inner surface of the can-body and the opposed surface of the outwardly-projecting flange of the end plate and coinciding with the circuitous reduction in thickness.

Incidentally my invention also includes, in combination with the features above enumerated, a bead or shoulder upon the can-body for limiting and defining the position of the end plate with relation to the circuitous space and incision or reduction in thickness. By my improved construction the end plate occupies such position with relation to the circuitous reduction in thickness or line of severance that in its plane it acts as a stiffener to the adjoining portion of the can-body against the power applied during the stripping operation, thereby preventing distortion and facilitating the operation, as well as insuring an even uniform edge to the can after the strip has been removed. The shoulder or bead also contributes to this result, as well as performing the function of a stop or gage when the end plate is inserted in the can-body during manufacture, thereby expediting and simplifying the labor involved and

insuring an accurate relation in position between the end plate, the circuitous space, and the circuitous reduction in thickness or line of severance. The circuitous space is of importance in restricting the flow of solder and preventing the passing beyond the line of severance and to the shoulder upon the can-body.

In the accompanying drawings, Figure 1 is an elevation of one extremity of a can constructed according to my invention; Fig. 2, a plan of the same, showing the stripping-tongue forming a part of the can-body. Figs. 3, 4, and 5 are sectional details showing the essential features of construction.

The body of the can A is for convenience of illustration shown as cylindrical, although it may be made of any other preferred form in cross-section. The cap B is formed with the end plate *b* and with the outwardly-projecting flange *b'*, the exterior surface of which fits the interior surface of the can-body A. In order, however, to prevent the end plate *b* and flange *b'* entering too far into the can-body A and in order to gage the position of the end plate *b* with relation to the circumscribing reduction in thickness *d* in the can-body A, I prefer to make the end plate of greater diameter than the lesser internal diameter of the can-body A. Thus in Figs. 3 and 4 a shoulder *a'* is formed in the can-body, against which the inner surface of the end plate *b* rests.

The circumscribing reduction in thickness *d* may be formed in any convenient or well-known manner, either on the exterior or interior of the can-body, and should be formed adjoining the end plate *b*, preferably below the latter, although where the circumscribing space or chamber *c* is formed as in Figs. 3, 4, and 5 its location may be slightly above the plane of the end plate *b*. It will be seen, however, that the plane of the end plate approximates the line of severance sufficiently to render the end plate *b* a rigid reinforcing medium against the force applied during the stripping operation, so as to prevent distortion and distributing the strain evenly. This circumscribing space or chamber *c* may be formed by making a groove or bead either in the cap or in the can-body, so that when the parts are fitted together a space *c* will be

created between the flange b' and the can-body above the inner surface of the plate b , which space will prevent the flow of solder beyond the circumscribing reduction in thickness d .

Another object in corrugating or beading the can-body transversely at or near the circumscribing reduction in thickness d is to strengthen and reinforce that portion of the can-body against the strain to which it is subjected during the stripping off of the zone a^3 between the edge a^2 of the can-body and the circumscribing reduction in thickness d from the flange b' of the end plate b .

The stripping-tongue d' is formed of a continuation of the zone a^3 , or the tongue d' may be stamped out separately and inserted between the lap or otherwise formed and attached, as may be most convenient.

In my concurrent application, Serial No. 527,255, filed October 29, 1894, I show and describe the combination of certain features herein shown in connection with an end plate having an inwardly-projecting flange fitting inside the can-body, and I do not herein seek to cover that specific construction, confining myself herein to an end cap having an outwardly-projecting flange.

In my concurrent application, Serial No. 527,100, filed October 29, 1894, I show an end plate having an outward flange, by which it is soldered to the inner side of the can-body; but in that case the said flange and the portion of the can-body to which it is soldered are both stripped from the can without destroying the soldered joint, whereas in the present case I confine myself to a stripping portion which is removed from the flange of the end plate, the soldered joint being forced open.

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

1. A sheet metal can having an end plate, with a flange by which the end plate is soldered to the inner side of the can body, a stripping portion on the can body coinciding with said soldered joint by which the end plate and can body are secured together and

provided with a stripping tongue for engagement with a strip-winding key, a circuitous reduction in thickness in the can body adjoining the plane of the end plate and a circuitous space formed between the inner surface of the can body and the opposed surface of the flange on the end plate for the purpose of preventing the flow of solder beyond the line of severance, substantially in the manner and for the purpose described.

2. A sheet metal can having an end plate with an outward flange by which the end plate is soldered to the inner side of the can body, a stripping portion on the can body coinciding with said soldered joint by which the end plate and can body are secured together and provided with a stripping tongue for engagement with a strip-winding key, a circuitous reduction in thickness in the can body adjoining the plane of the end plate, and a circuitous space formed between the inner surface of the can body and the opposed surface of the outward flange on the end plate for the purpose of preventing the flow of solder beyond the line of severance, substantially in the manner and for the purpose described.

3. A sheet metal can having an end plate with an outward flange by which the end plate is soldered to the inner side of the can body, a stripping portion on the can body coinciding with said soldered joint by which the end plate and can body are secured together and provided with a strip-winding key, a circuitous reduction in thickness in the can body adjoining the plane of the end plate, a circuitous space formed between the inner surface of the can body and the opposed surface of the outward flange on the end plate for the purpose of limiting the flow of solder, and a circuitous shoulder formed upon the can body to determine the position of the end plate substantially in the manner and for the purpose described.

OLIN STEPHEN FELLOWS.

Witnesses:

D. W. GARDNER,
GEORGE WILLIAM MIATT.