

(No Model.)

W. DUNN.
SELF SEALING CAN.

No. 548,301.

Patented Oct. 22, 1895.

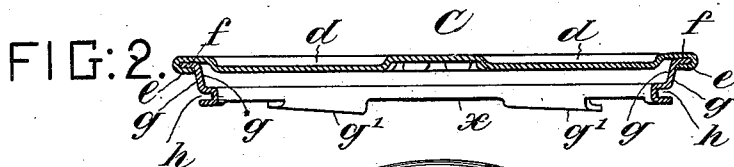
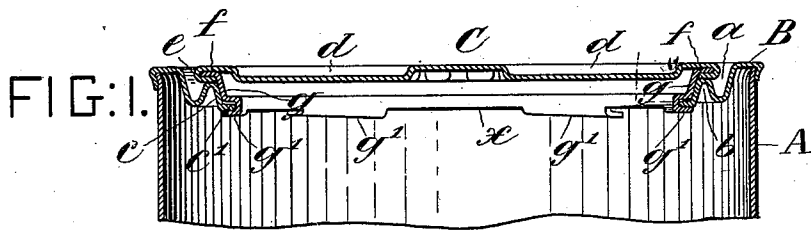


FIG. 3.

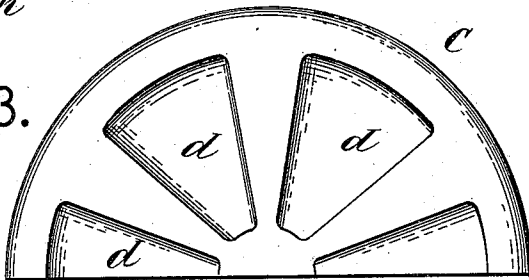


FIG. 4.

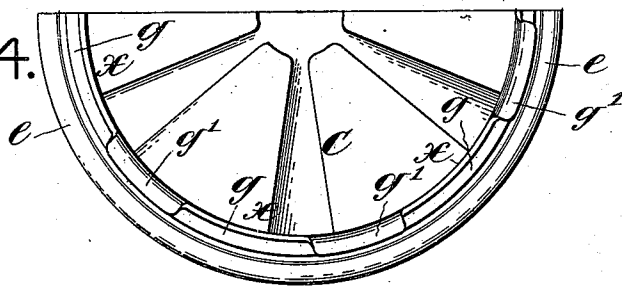


FIG. 5.

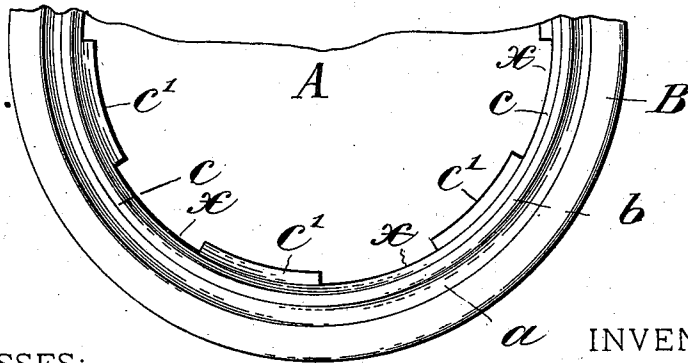


FIG. 6.



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SELF-SEALING CAN.

SPECIFICATION forming part of Letters Patent No. 548,301, dated October 22, 1895.

Application filed February 7, 1895. Serial No. 537,556. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM DUNN, a subject of the Queen of Great Britain, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Self-Sealing Cans, of which the following is a specification.

My invention relates to the class of self-sealing sheet-metal cans such as are used for varnishes, oils, mixed paints, &c.; and the object is to provide a can which may be constructed cheaply, which will have no parts of the cover or fastenings projecting above the can-top, which will have a perfectly tight and reliable closure, and which may be quickly and readily closed and opened.

The invention will be fully described hereinafter, and its novel features carefully defined in the claim.

In the drawings which serve to illustrate the invention, Figure 1 is a transverse vertical mid-section of the upper part of a can embodying my invention, the view showing the cover in place. Fig. 2 is a transverse mid-section of the cover detached. Fig. 3 is a plan view of one-half of the cover, and Fig. 4 is an under side view of one-half of the same. Fig. 5 is a plan view of about one-half of the top of the can. Fig. 6 illustrates a detail which will be hereinafter described.

A represents the body of the can.

B is the can-top, and C the cover as a whole.

The can-top, which, as hereshown, is merely a narrow ring, has formed in it an annular depression *a* and a raised annular bead *b*. The inner wall *c* of this bead is inclined and forms a conical surface about the opening in the can-top. At the lower edge of the wall *c* are inwardly-projecting spaced locking-lips *c'*. The cover C consists, first, of the top plate, which has in it depressions *d*, and at its margin an inturned clamping-flange *e*, and, second, a pendent rim, which has at its upper edge an outwardly-turned flange *f*, clamped by the flange *e* on the top plate, a conical wall *g*, which is adapted to fit tightly to the conical surface of the wall *c* on the can-top when the cover is in place, an annular exterior recess *h* to receive the locking-lips *c'*, and spaced locking-lips *g'*, which, when the cover is placed or dropped into place and then turned,

take under the lips *c'* on the can-top and hold the cover down firmly in place.

The locking-lips on the respective can top and cover will have spaces *x* between them which exceed in width the length of the engaging-lip, so that in placing the cover the lips thereon will pass down freely between those on the can-top and depend slightly below them, so that when the cover is turned the lips on the latter will pass under the lips on the can-top. In order that this rotatory movement of the cover may draw down the conical wall *g* of the cover into the conical mouth of the can and thus effect a hermetic closure, the locking-lips *c'* and *g'* are slightly inclined in a longitudinal direction, so that one acts on the other as a screw or wedge. The formation of the lips to produce this effect may be satisfactorily done where the material is thin sheet metal, as indicated in Fig. 6, which is an edge view of two of the locking-lips partly engaged. This view shows the lip *c'* as inclined or bent downward slightly at one corner and upward at the other and the lip *g'* as level or horizontal.

The formation of the annular corrugation or depression *a* and bead *b* in the can-top imparts some elasticity and expansive quality to the conical wall *c*, whereby it fits the more snugly to the conical plug formed on the cover, and this plug also has a contractile elastic yielding quality, due to the fact that it is hollow and open at its lower or inner part, as clearly seen in Fig. 2.

The radial recesses or depressions *d* in the top plate of the cover serve a double purpose. They stiffen the plate and serve for the introduction of a tool or implement for rotating the cover to disengage the locking-lips when the cover is to be removed.

My construction enables the cover to be brought down flush with the top of the can and eliminates all extraneous fastening devices. It provides a can and cover composed of two simple parts, and at the same time avoids the risk of the cover on the filled can from coming off in transit, a trouble incident to cans when a conical sheet-metal cover is forced into the conical mouth and held only by friction. The construction also enables the can-cover to be made very large, propor-

tionately to the can, which is a great desideratum. The cover and the aperture to receive it must be circular; but the can-body may be square or of any shape.

5 I am aware that it is not new to provide a sheet-metal can with a stiff conical sheet-metal cover held in place by friction, and this I do not claim, and I am also aware that, broadly speaking, it is not new to employ in
10 closing devices overlapping screw-like locking-lugs. These I do not broadly claim; but

What I do claim is—

The combination with a can having a depressed, yielding, conical wall, *c*, about the
15 opening or mouth in its top, and locking-lips,

c', projecting inwardly from the lower edge of said wall, of a cover, comprising a yielding, conical rim *g*, adapted to fit into the conical mouth of the can, said rim having a recess *h*, to receive the locking-lips on the can-top, and
20 locking-lips *g'* to take under the said lips on the can-top when the cover is seated and rotated, as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing
25 witnesses.

WILLIAM DUNN.

Witnesses:

HENRY CONNETT,
PETER A. ROSS.