

F. WESTERBECK.
SHEET METAL CAN.
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1,002,546.

Patented Sept. 5, 1911.

Fig. I.

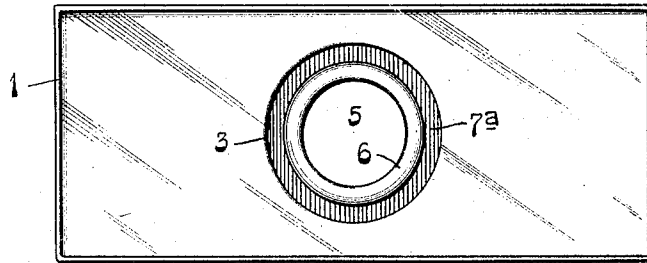


Fig. II.

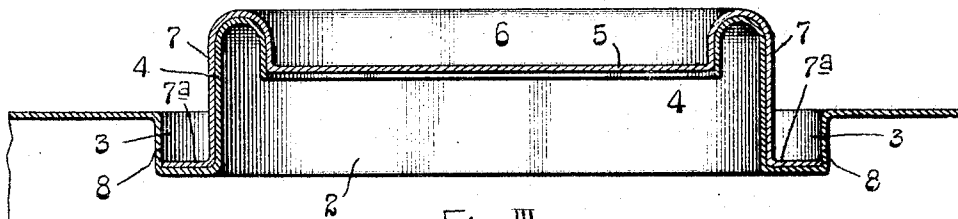
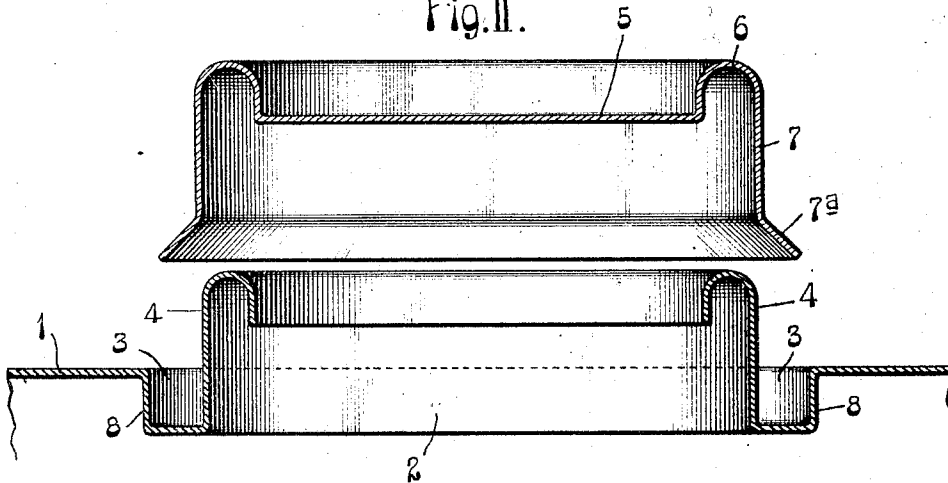


Fig. III.

Attest
a. g. m. c. a. l. e. y
E. B. K. i. n. e.

Inventor:
F. Westerbeck
by E. S. Knight
Att'y.

UNITED STATES PATENT OFFICE.

FREDERICK WESTERBECK, OF ST. LOUIS, MISSOURI.

SHEET-METAL CAN.

1,002,546.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FREDERICK WESTERBECK, a citizen of the United States of America, residing in the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in Sheet-Metal Cans, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a sheet metal can, and it has for its object the provision in a can of this description of a closure that may be quickly applied to a can body by pressing it thereinto and which, when introduced into the body becomes permanently locked therein in such manner as to prevent its removal.

What are commonly known as "friction top" or "friction closure" sheet metal cans have heretofore been commonly manufactured, and inasmuch as the closures of cans of this type may be very quickly and inexpensively applied to the can bodies, cans having them incorporated therein have become very general in use. There has, however, been a very serious objection to "friction closures" of this kind founded on the fact that the closures not infrequently become dislodged from their seats by reason of jars to which the cans are subjected, such as those resultant from shock to the cans when they are dropped from any appreciable height, as, for instance, in setting them down suddenly on a solid object, or sudden deposit of shipping cases containing the cans.

My improvement contemplates a can closure that may be termed a "friction closure," and which by reason of its structure and the structure of the can body is caused to be permanently locked to the can body when it is introduced thereinto, thereby eliminating all possibility of dislodgment of the closure, either accidentally or otherwise, and necessitating destruction of the closure when it is desired to gain access to the contents of the can.

Figure I is a top plan view of a can provided with my improved closure. Fig. II is an enlarged vertical section, showing the closure and a portion of the can. Fig. III is a view similar to Fig. II showing the closure permanently locked in the can.

In the accompanying drawings: 1 designates the body of my can provided with an opening 2 around which is an annular re-

cess or depression 3. The recess 3 is located between a closure receiving neck 4 curved inwardly and downwardly at its upper end within which the opening 2 is present, and an outer wall 8 concentric with said neck and connected thereto by a web at the bottom of the recess. The recess 3 is adapted to receive certain parts of the closure of the can for the purpose of so locating such parts as to prevent access thereto that would make it possible to secure the engagement of any instrument with the closure for the purpose of extracting it from the can body.

My can closure is in the nature of a cap comprising a central web 5 surrounded by an upwardly extending bead 6 and a depending annular skirt 7, the outer face of said skirt being uninterrupted by any unevenness that would permit of the placing thereagainst of an implement for the purpose of separating the closure from the can body. The bead 6 conforms to the shape of and closely fits the upper end of the closure receiving neck 4 and it is adapted to seat upon the upper end of said neck when the closure is properly fitted to the can. The skirt of the closure closely fits the neck 4 and terminates in an outwardly flaring flange 7^a, (see Fig. II), which is slightly wider than the width of the space between the closure receiving neck 4 and the outer wall 8 of the recess 3, and the length of the skirt 7 with its flaring flange 7^a is greater than the depth of the recess 3. It should be noted, however, that inasmuch as the flange 7^a is of flaring shape when originally produced, it is capable of passing freely into the recess 3 when the closure is applied to the can body. Between the skirt 7 and the flaring flange 7^a is a folding crease.

In applying my closure to the can, the flaring flange 7^a of the closure is introduced into the recess 3 and lowered, together with the skirt carrying it, into said recess until the flange touches the web at the bottom of the recess. Continued downward movement of the closure then causes the flaring flange 7^a to be bent on its folding crease outwardly so that it will approach a position parallel to the web at the bottom of the recess and the free edge of the flaring flange will move toward the outer wall 8 of the recess while the skirt of the closure moves downwardly parallel with the closure receiving neck 4. The movement of the closure is continued until the flaring flange 7^a is parallel with

the bottom of the recess and at a right angle, or substantially a right angle, to the neck 4 and wall 8, at which time the edge of the flaring flange has become firmly jammed 5 against and engaged with the outer wall 8 and the flaring flange is securely wedged in the recess 3 at or adjacent to its bottom. The flaring flange of the closure is, therefore, so positioned as to be firmly locked 10 to the can body and so located as to be inaccessible to any implement that may be used for the purpose of extracting the closure. Inasmuch as the exposed portions of the closure are of plain external contour, 15 there is no opportunity for such engagement of the closure as would be necessary to extract it and gain access to the contents of the can, and it would be absolutely necessary to either cut the closure or the body of the can, thus rendering the can unfit for re-use, as is 20 highly desirable, to prevent commercial re-use of the can.

I claim:

The combination with a sheet metal can

body, provided with a neck and an outer 25 wall surrounding said neck, connected by a bottom web and producing an annular recess within the body around said neck; of a closure having an annular closely fitting skirt provided with a flaring flange of 30 slightly greater width than the normal width of the annular recess and a folding crease between the skirt and the flaring flange, the combined length of the closely fitting skirt and its flaring flange being 35 greater than the depth of said annular recess, whereby when the closure is applied to the can body the flaring flange of the closely fitting skirt is caused to ride outwardly upon said bottom web and to abut edgewise 40 against the outer wall of the annular recess and to be jammed between the neck and said outer wall so as to permanently lock the closure to said can body.

FREDERICK WESTERBECK.

In the presence of—

GEORGE E. RYDER,

MARY CUDDY.