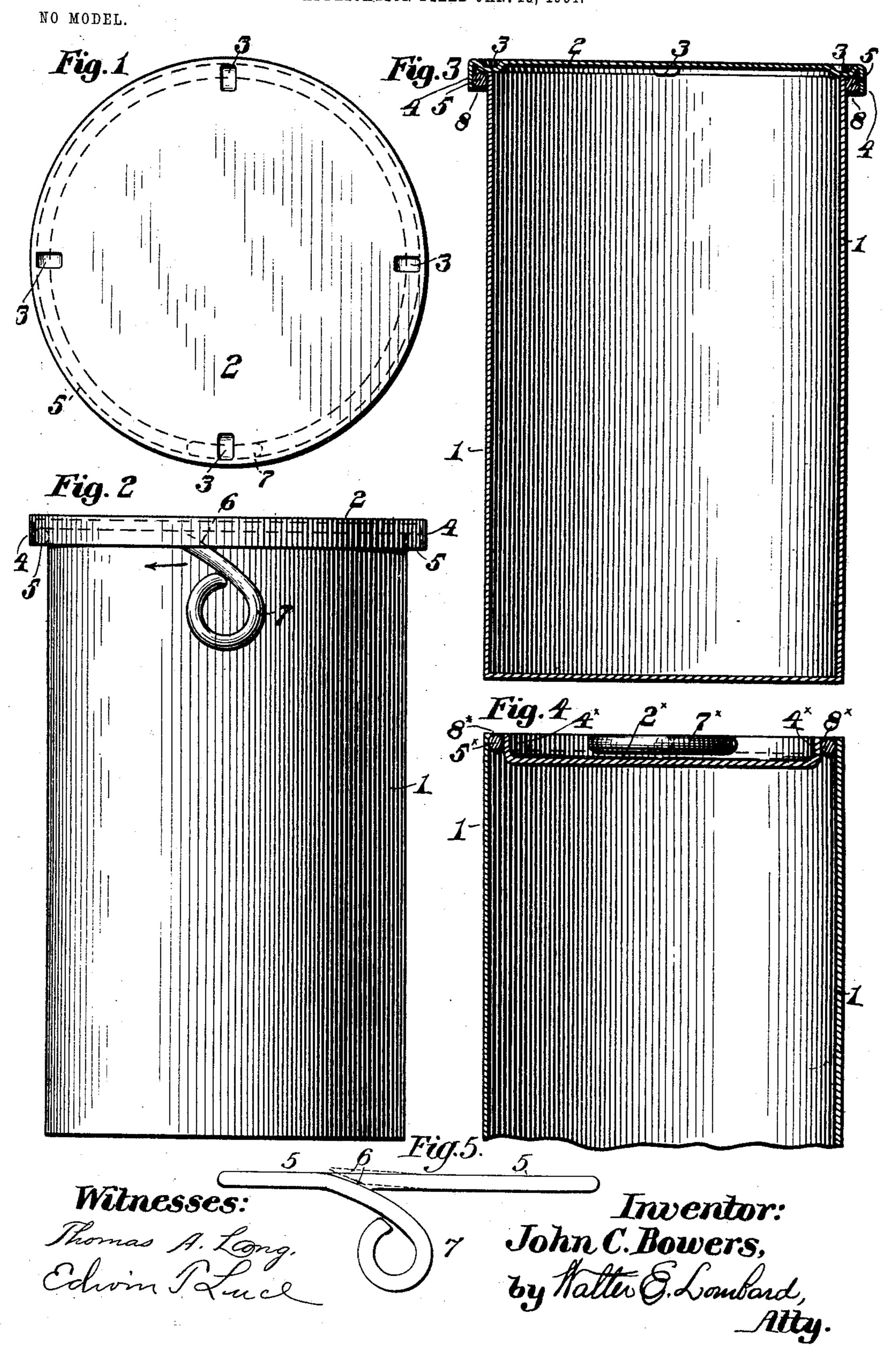
J. C. BOWERS. CLOSURE FOR METALLIC RECEPTACLES. APPLICATION FILED JAN. 13, 1904.



United States Patent Office.

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CLOSURE FOR METALLIC RECEPTACLES.

SPECIFICATION forming part of Letter: Patent No. 771,228, dated October 4, 1904. Application filed January 13, 1904. Serial No. 188,853. (No model.)

To all whom it may concern:

Be it known that I, John C. Bowers, a citizen of the United States of America, and a resident of Boston, in the county of Suffolk and 5 State of Massachusetts, have invented certain new and useful Improvements in Closures for Metallic Receptacles, of which the following is a specification.

This invention relates to closures for me-10 tallic receptacles, and has for its object the production of a closure by which metallic receptacles may be readily and cheaply sealed hermetically and which may be readily disconnected therefrom without the use of a key 15 or other instrument when it is desired to use

the contents of said receptacle.

It consists in certain novel features of construction and arrangement of parts, which will be readily understood by reference to the de-20 scription of the drawings and to the claims to

be hereinafter given.

Of the drawings, Figure 1 represents a plan view of a closure embodying the features of this invention. Fig. 2 represents an eleva-25 tion of the same. Fig. 3 represents a vertical transverse section of same. Fig. 4 represents a vertical section of a modification of the closure, and Fig. 5 represents a detail showing the tapered end of the filling-wire 3° and its connection to itself near its free end.

Similar characters designate like parts throughout the several figures of the draw-

ings.

In the drawings, 1 represents a metallic re-35 ceptacle provided with a cover 2 to close the open end thereof. The cover 2 is provided with a series of depressed portions 3, which bear upon the ends of said receptacle at various points, thereby preventing the main 4° portion of the cover 2 from coming in contact with the end of the receptacle. The cover 2 is provided with a downwardly-projecting flange or lip 4, the interior diameter | this kind a can may be hermetically sealed of which is slightly in excess of the diameter 45 of the receptacle 1. When the cover 2 is placed in position upon the receptacle 1, the downwardly-projecting lip 4 is parallel to the sides of said receptacle and the space between said lip and said sides is filled with

a metallic strip or wire 5 somewhat greater 50 in length than the circumference of the flange or lip 4. One end of this wire 5 is tapered, as at 6, while the other end is bent downward and is provided with an eye, as at 7. The purpose of this eye is to provide a ready 55 means of securing a firm hold of said metallic strip or wire when it is desired to remove the same from the space between the flange 4 and receptacle 1, as will be the case when it is required that the cover 2 should 60 be removed to secure access to the contents. of the receptacle. The wire 5 having been placed in position between said lip or flange 4 and said receptacle, said wire is soldered or in other manner fused in position, as indi- 65 cated at 8, to thoroughly connect the same with both the downwardly-projecting lip 4 and the receptacle itself, thereby hermetically sealing the cover to said receptacle, the tapered end 6 being fused to said wire at a 70 point near its free end.

Whenever it is desired to use the contents of the receptacle, the user seizes the eye 7 and pulls upon it in the direction indicated by the arrow in Fig. 2, thereby removing the metallic 75 strip entirely from the space between the downwardly-projecting lip 4 and the sides of the receptacle, and thus breaking all connection between the cover and the receptacle itself, there being no contact between the same ex- 80 cept where the depressed portions 3 rest upon the ends of the receptacle. These depressed portions 3 form an important part of this invention inasmuch as they prevent a greater portion of the cover from coming in contact 85 with the ends of the receptacle, and thereby preventing the cover when the receptacle is filled with certain material from corroding to the ends thereof and interfering with its ready removal, as is often the case.

It is obvious that by means of a device of without a chance for the solder or other fusible metal getting into the contents, and by means of the eye 7 the connection between the cover 95

without the use of a key or other instrument. A modification is shown in Fig. 4, in which

and said receptacle may be readily broken

a cover 2* is made somewhat smaller in diameter than the can or receptacle 1, and a wire 5* is interposed between the wall of the receptacle and the flange 4" of the cover and is fused 5 to both, as at 8*. The wire 5* is provided with an eye 7", by which the connection may be readily broken. While this modification embodies some of the features of this invention, it is not a preferred form, as there would 10 be many objectionable features thereto, the preferred form being that shown in Figs. 1, 2, 3, and 5 and described in this specification, in which the cover extends over the open end of the receptacle, and when disconnected there-15 from there is no opportunity for it to fall into the contents of the receptacle, as would be the case in the modification shown in Fig. 4.

Having thus described my invention, I claim—

20 1. In a closure for metallic receptacles, the combination of a cover provided with a series of depressed portions adapted to rest upon the end of the receptacle, and an annular flange of a diameter slightly exceeding the diameter of the receptacle, and a metallic strip adapted to fill the space between said annular flange and said receptacle and fused to both.

2. In a closure for metallic receptacles, the combination of a cover provided with a series of depressed portions adapted to rest upon the end of the receptacle, an annular flange of a diameter slightly exceeding the diameter of the receptacle, a metallic strip adapted to fill the space between said annular flange and said receptacle and fused to both, said strip being provided with an end disconnected from said receptacle and cover.

3. In a closure for metallic receptacles having straight side walls, a cover having a down-

wardly-extending lip and provided with a 40 plurality of depressed portions in its top surface adapted to rest upon the end of the receptacle at various points, means for fusing said lip to said receptacle, and a device located between said lip and said receptacle for 45 severing said fusing means.

4. In a closure for metallic receptacles having straight side walls, a cover having a downwardly - extending lip and provided with a plurality of depressed portions in its top surface adapted to rest upon the end of the receptacle at various points, a wire interposed between said lip and said receptacle the bottom of which is slightly above the bottom of said lip, and means for fusing said wire to 55

both said lip and said receptacle.

5. In a closure for metallic receptacles having straight side walls, a cover provided with a plurality of depressed portions in its top surface adapted to rest upon the end of the re- 60 ceptacle at various points and having a downwardly-extending lip parallel with the sides and at a slight distance therefrom, a wire filling the spaces between said lip and said receptacle and contacting with said depressed 65 portions, and a fusible material filling the space between said receptacle, said lip and said wire and extending to the bottom of said lip thereby firmly uniting said cover and receptacle but providing a means of breaking 7° the connection between said cover and receptacle by the removal of said wire.

Signed by me at Boston, Massachusetts,

this 30th day of October, 1903.

JOHN C. BOWERS.

Witnesses:

WALTER E. LOMBARD, WM. O. WAPPAN.