D. B. TAMAGNO.

CAN CLOSURE.

APPLICATION FILED DEC. 14, 1912.

1,164,144.

Patented Dec. 14, 1915.

Fig. 1.

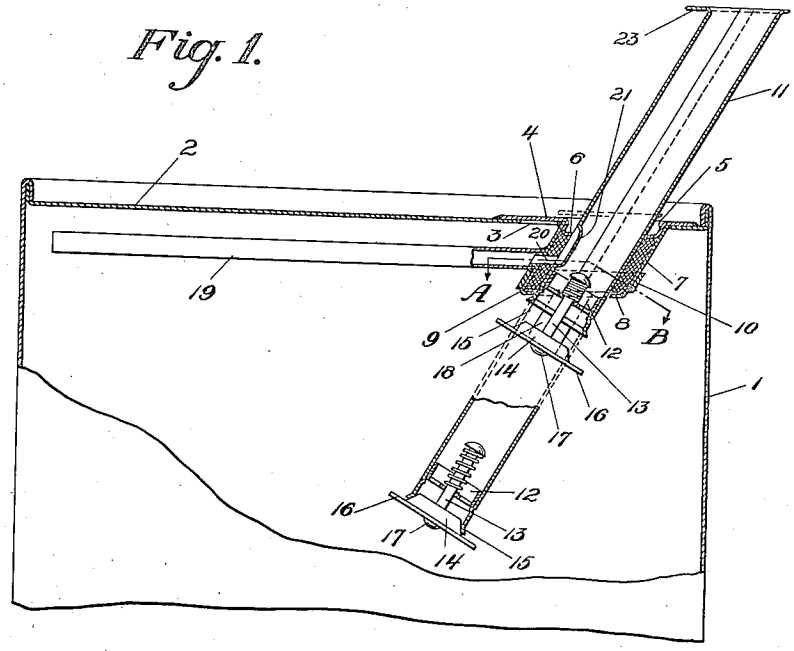


Fig. 3.

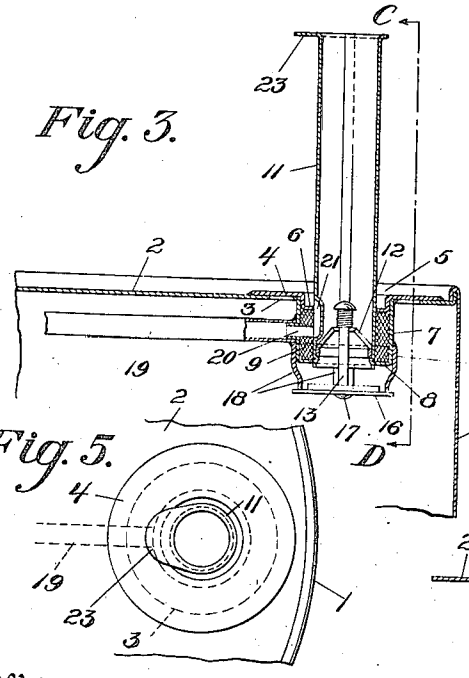


Fig. 2.

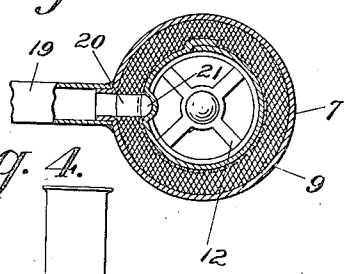


Fig. 4.

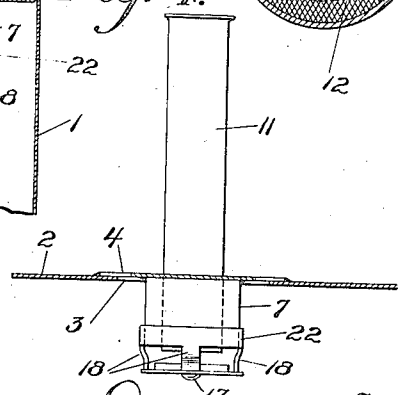


Fig. 5.

Witnesses:
L. F. Browning
M. L. Smith

Inventor
Daniel B. Tamagno
By his Attorney
Edward C. Davidson

UNITED STATES PATENT OFFICE.

DANIEL B. TAMAGNO, OF NEW YORK, N. Y., ASSIGNOR TO LYDIE TAMAGNO, OF NEW YORK, N. Y.

CAN-CLOSURE.

1,164,144. Specification of Letters Patent. Patented Dec. 14, 1915.

Application filed December 14, 1912. Serial No. 736,681.

To all whom it may concern:

Be it known that I, DANIEL B. TAMAGNO, a citizen of the United States of America, residing in the borough of Manhattan, city, county, and State of New York, have invented a certain new and useful Improvement in Can-Closures, of which the following is a specification.

The object of this invention is to provide a can closure that may be separately manufactured of ordinary sheet metal of which the can is composed and sold, assembled, to can manufacturers to be applied by them.

In the accompanying drawing: Figure 1 is a front elevation of a can broken away showing the closure and pouring device in section; Fig. 2, a cross section on the line A, B, of Fig. 1; Fig. 3, a view similar to Fig. 1 but showing a somewhat different arrangement; Fig. 4, a sectional elevation on the line C, D, of Fig. 3; and Fig. 5, a detail plan view of what is shown in Fig. 3.

1 is the wall of an ordinary can and 2 the top plate or cover appropriately secured thereto and having an opening 3 in it over which is applied the closure plate 4 to be soldered thereto. The closure plate has an opening, the edge of which is crimped downwardly as at 5 and is then formed with an inwardly extending flange 6. To the back or outer face of this part 5 is soldered or otherwise secured a tube or sleeve 7 whose lower end has an inturned flange 8, there being thereby formed an annular space filled with packing 9. For greater rigidity or strength, the sleeve 7 may have secured to it near its lower end an enveloping reinforcing ring 10. Closely fitting within the packing is the sliding spout or tube 11 which, at its lower end contains within it a cup-shaped spider 12 in which there is fitted a valve spindle 13. Between the head of the spindle and the spider is interposed a coiled reaction spring that draws the valve 14 closely against its seat 15 that is formed by flaring the lower edge of the tube 11. The valve has a circular flange at its base formed by a circular plate 16 that is secured to the bottom of the valve in any appropriate way as, for instance, by the valve spindle, of which 17 is the lower headed end. Depending from the sleeve 7 or reinforcing ring 10 are a plurality of downwardly extending tongues. The valve is normally closed by the reaction of its spring but when the pouring tube is drawn upward, the tongues 18 strike against the face of the flange 16 and open the valve. The friction of the tube against the packing 9 retains it in elevated position against the reaction of its valve spring. When, therefore, the pouring tube is extended as in Figs. 1 and 2, the valve is open and contents of the can may be discharged. When the tube is pushed down, however, the valve automatically closes.

19 is a vent pipe, the open end of which is adjacent the angle formed by the cover plate and side wall of the can. It is connected to the sleeve 7 and the vent opening extends through that sleeve and the packing as at 20. In the side of the spout, opposite the vent opening 20, there is formed a depression 21 that, when the spout is elevated, as in Figs. 1 and 2, makes a connection from the atmosphere by way of the recess 21 to the vent opening 20. Such a closure device, as seen in Fig. 1, can be very cheaply constructed as all of the parts except the valve and spindle may be made of common sheet metal such as is employed in the manufacture of cans, and be entirely assembled for application to an opening in the top of any can, the closure plate 4 being soldered around the opening in the can top. Fig. 3 contains a substantially identical arrangement with the exception that the spout is mounted to slide vertically instead of at an angle to the axis of the can as in Fig. 1. The corresponding parts are similarly lettered. The tongues 18 extend downwardly from a sheet metal ring 22 applied around and soldered to sleeve 7, as appears in Figs. 1, 3 and 4. On the outer end of the sliding discharge tube there is a lateral flange or finger piece 23 to facilitate its being drawn outwardly.

I claim:

1. A can closure comprising a plate having an annular holder extending downwardly therefrom, packing therein, a pouring tube sliding in the packing and equipped at its lower end with a valve normally closed by a reaction spring and means carried by the packing holder whereby when the tube is drawn outwardly for pouring the valve is automatically opened.

2. A can closure comprising a closure plate carrying a downwardly extending annular packing holder, packing therein, a pouring tube fitting and sliding within said

packing, and equipped with a valve normally closed by a reaction spring, means carried by the packing holder whereby when the tube is drawn outward the valve is automatically opened, a vent tube opening through said packing holder and packing to the outer wall of the sliding tube, a recess in said wall near the lower end of said tube whereby when the tube is in elevated position the vent passage is opened through said recess to the atmosphere.

3. A can closure comprising a closure plate having an opening the edge of which is extended downwardly and inwardly, a downwardly extending tube surrounding and secured to said edge and formed at its lower edge with an inwardly projecting flange, packing in said tube, a sliding pouring tube fitting and sliding in the packing, a sheet metal ring surrounding the packing tube and having downwardly extending lugs, a valve in the lower end of the tube normally closed by a reaction spring and a flange on the valve whereby when the tube is drawn outward for pouring, the lugs act upon the valve flange to automatically open the valve.

In testimony whereof, I have hereunto subscribed my name.

DANIEL B. TAMAGNO.

Witnesses:
M. L. SMITH,
HELEN DE MOYA.