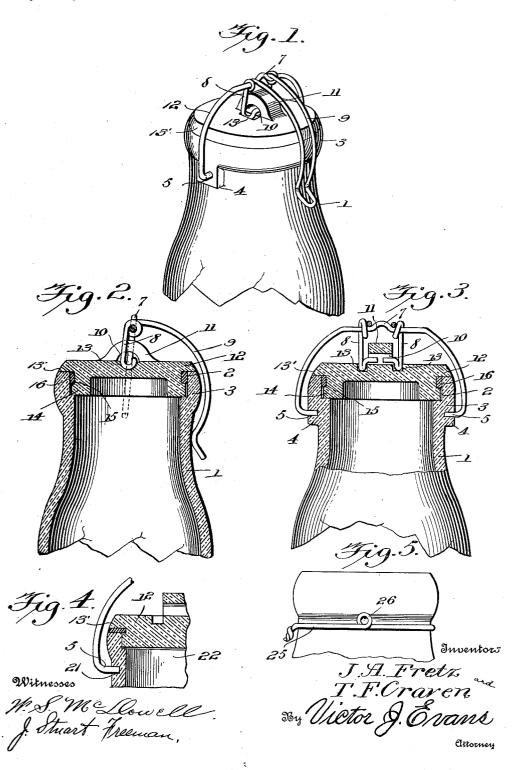
J. A. FRETZ & T. F. GRAVEN. BOTTLE CLOSURE. APPLICATION FILED MAR. 31, 1914.

1,133,950.

Patented Mar. 30, 1915.



UNITED STATES PATENT OFFICE.

JOHN A. FRETZ AND THOMAS F. CRAVEN, OF PHILADELPHIA, PENNSYLVANIA.

BOTTLE-CLOSURE.

1,133,950.

Specification of Letters Patent.

Patented Mar. 30, 1915.

Application filed March 31, 1914. Serial No. 828,554.

To all whom it may concern:

Be it known that we, John A. Fretz and THOMAS F. CRAVEN, citizens of the United States of America, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Bottle-Closures, of which the following is a specification.

This invention relates to bottle closures 10 and particularly to that type commonly ap-

plied to jars and milk bottles.

The object is to provide a closure adapted to effectively seal the opening of the vessel while in operative position and when not in use to be moved out of alinement, with the said opening, yet remaining secured to the vessel.

Another object of the invention is to provide an improved operating mechanism for

20 the removable closure of a bottle.

Further objects and advantages are fully brought out in the following specification, when read in conjunction with the accom-

panying drawing, in which -

Figure 1 is a perspective view of the preferred embodiment of the invention; Fig. 2 is a vertical diametrical section of the same; Fig. 3 is a similar section in a plane perpendicular to that represented by Fig. 2; Fig. 30 4 is a fragmentary view of a modified form of mounting for the operating mechanism; and Fig. 5 is a side elevation of a sec-

ond modified form of mounting.

Referring to the drawing, and particu-35 larly to Figs. 1, 2 and 3, a milk bottle, having a neck portion 1 and opening 2 is, provided upon its outer side adjacent to the top reinforcing rim 3 with integral projections 4, in which are journaled the oppo-40 site ends 5 of a wire member 6. Said member passes normally over the top of the bottle and is provided with a curved section 7 to prevent the lateral movement thereon of a second wire member 8. Said last member 45 is looped as shown in Fig. 1 about the member 6, the intermediate portion of said member 8 being looped at 9 to form a lever for manually operating the device, while the opposite ends of the member 8 are curved 50 downwardly and reversely, and terminating within the aperture 10 in an upwardly projecting portion 11 integral with the closure 12, said upwardly projecting portions being of an arch-like configuration. The closure 15 12 is also provided with recesses 13 into which the portions of the member 8 adja-

cent to the ends thereof are adapted to enter, to press said closure into operative position in the opening of the vessel. The top of the closure is extended to a point 13' flush with the edge of the bottle neck and has a reduced, downwardly extending portion 14 recessed at 15, to receive an annular gasket 16, which operates to make the sealing of the bottle opening air-tight.

In the modified form of the device shown in Fig. 4, the ends 5 of the member 6 are journaled in recesses 21 in the side wall 22 of the neck of the bottle, while the air-tight gasket lies between the top of the bottle neck 70 and the under side of the extension 13' of the closure, 12. By referring to the modification shown in Fig. 5, a form of support for the closure operating mechanism is seen to comprise a wire member 25, encircling 75 the neck of the bottle and provided with loops 26 to receive the ends 5 of the member 6.

These are but three of the several forms which the present invention can assume and 80 it is desired to anticipate all constructions falling within the spirit of the invention and within the scope of the appended claim. We claim:-

In combination with a jar, a plurality of 85 diametrically opposed depending projections formed on the jar adjacent its mouth, a seat formed within the jar, a cover body for disposition on the jar to close the mouth, said cover having a portion bearing against 90 said seat and another portion projecting across the top of the jar at the mouth thereof, an upwardly projecting centrally arranged arch-like member on the cover body and provided with a transverse opening, 95 said cover body having a plurality of depressions in its top on both sides of the arch-like member and at the ends of the transverse opening in the arch-like member, a wire member having its extremities seat- 100 ed in the projections on the jar, said wire member passing upwardly over the cover body and having its central portion curved upwardly, a second wire member providing a handle and looped around the first wire 105 member adjacent the upwardly curved portion thereof, and an operating portion formed by bending the inner ends of the second wire member downwardly to pass into the transverse opening in the arch-like 110 projection on the cover body, portions of said operating portion being bent to extend

into the depressions in the top of the cover body prior to bending the extremities of the operating portion to extend into the opening in the arch-like member, said handle being adapted to bear against the side of the jar to lock the cover body against movement thereon.

In testimony whereof we affix our signatures in presence of two witnesses. JOHN A. FRETZ. THOMAS F. CRAVEN.

Witnesses: Helen G. Daley, Norman J. Smith.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents.

Washington, D. C."