June 19, 1923. 1,459,558

A. STARK

JAR CLOSURE

Filed June 6, 1922

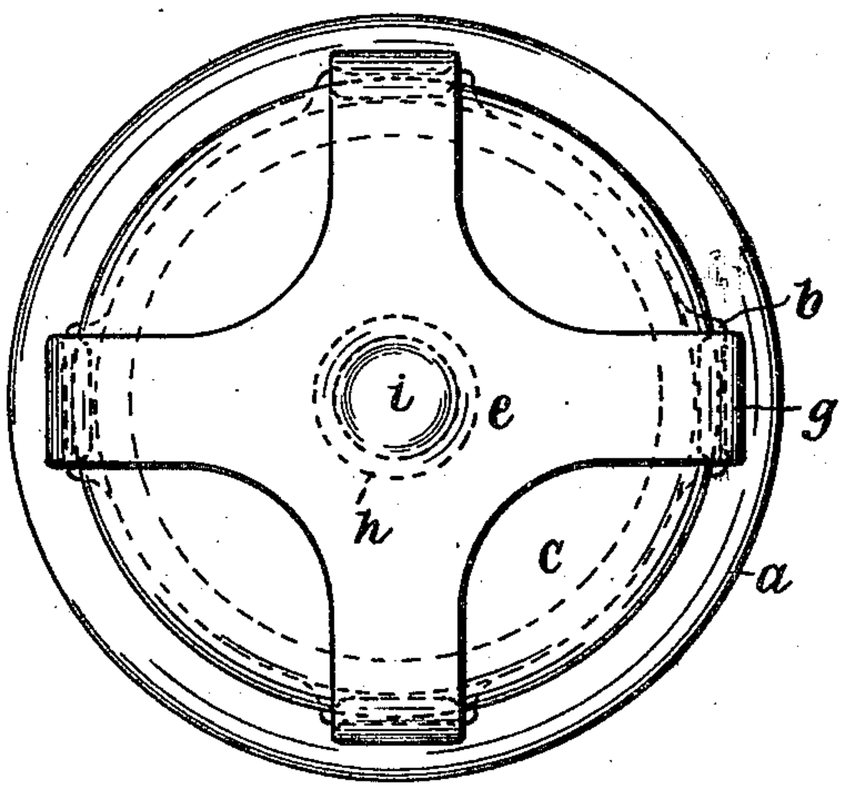

Fig. 1.

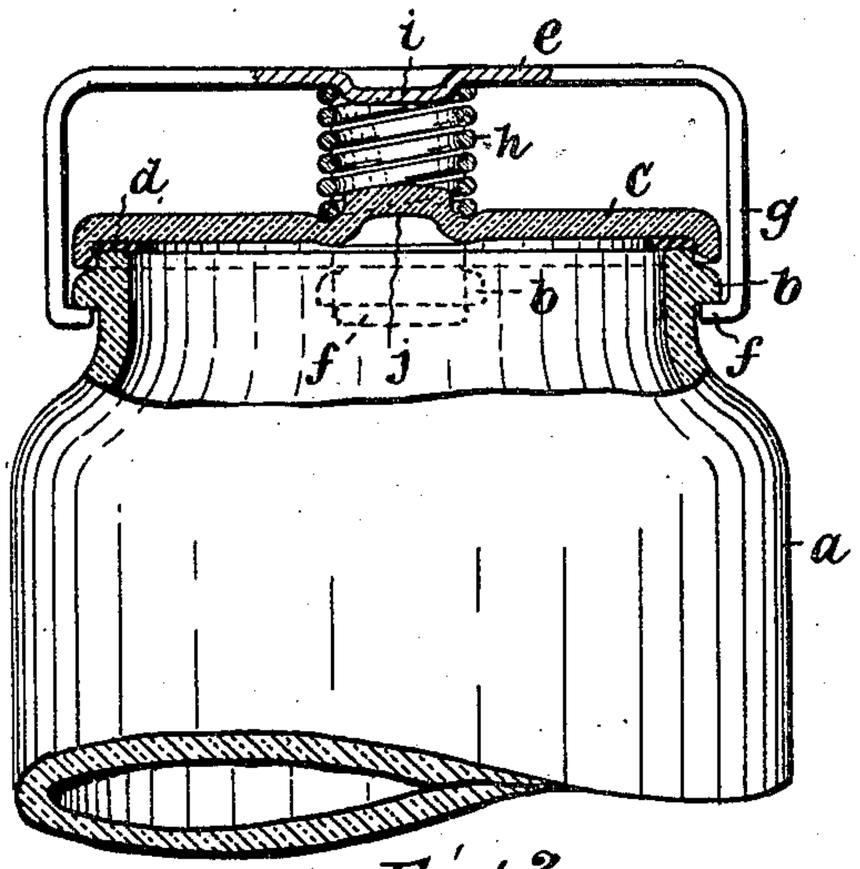

Fig. 2.

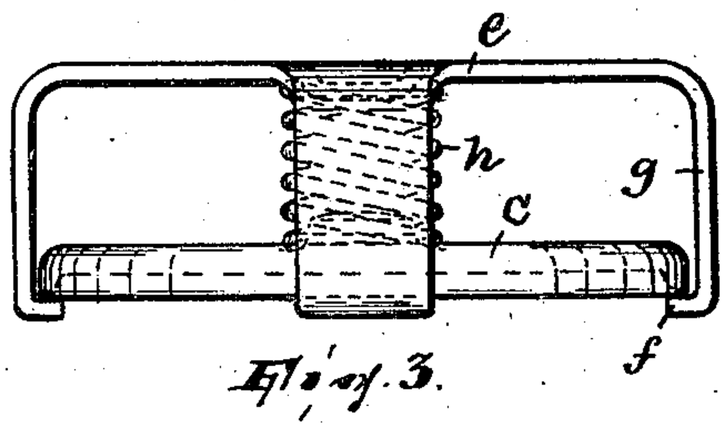

Fig. 3.

WITNESS

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Patented June 19, 1923. 1,459,558

UNITED STATES PATENT OFFICE.

ALBERT STARK, OF PATERSON, NEW JERSEY, ASSIGNOR OF ONE-HALF TO HARRY STARK, OF PATERSON, NEW JERSEY.

JAR CLOSURE.

Application filed June 6, 1922. Serial No. 566,296.

To all whom it may concern:

Be it known that I, ALBERT STARK, a citizen of the United States, residing at Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Jar Closures, of which the following is a specification.

This invention relates to closures for jars and other containers of kindred nature. The principal object of the invention is to provide a closure adapted to maintain a perfectly hermetic seal and yet be readily applied to or removed from the receptacle without resort to any implement, and which will further be simple in construction, inexpensive to manufacture and form a unitary structure when removed from the receptacle.

In the drawing,

Fig. 1 is a plan view, showing the closure or closure device in place on a jar;

Fig. 2 is a side elevation, partly in section, of what is shown in Fig. 1; and

Fig. 3 is a side elevation of the closure device, removed from the jar.

a designates the container, here shown as a jar, the same having equidistantly spaced lateral projections *b* at its mouth.

c is the cap or closure proper. It is preferably made of glass or the like, as usual, and when in sealing relation to the mouth of the jar rests on a rubber or other yielding ring *d*. The diameter of the cap is approximately equal to the over-all diameter of the jar in the horizontal plane of its projections *b*.

e is a cross-sectionally arched member in which the cap is contained. This member is in the present case of skeleton form, presenting a four-armed cross in plan, and may be stamped out of sheet metal of suitable thickness. It has at its lower portion inward lugs *f* which in the present example are formed at the lower ends of the legs *g* of said member being equidistantly spaced; they may be formed, as shown, by inbending the extremities of said legs. In any diameter of said member in a vertical plane cutting two of the lugs the latter are spaced apart a distance which is less than the diameter of the cap *c*, so that when said member and the cap are assembled, as shown, the latter obtains a seat on the four lugs; since the cap approximates the over-all diameter of the jar in the horizontal plane of its projections *b*, as stated, it follows that when member *e* is made to straddle the mouth of the jaw it can only pass the projections when its lugs do not coincide therewith.

h is a spiral spring which is interposed between the cap member and arched member. Its vertical dimension when expanded is at least as great as substantially the distance between the top of member *e* and the cap *c* when the latter is seated on the lugs of the former as shown in Fig. 3. In view of the stated distance between the diametrically opposite lugs of member *e* and the diameter of the cap member it therefore follows that the spring acts to retain the structure *c*, *e* and *h* asembled as shown in Fig. 3 when it is out of use, and by giving the cap member a diameter, as shown, such that when it is seated on the lugs and at one side it laterally abuts the arched member it will not clear the lug or lugs at the relatively opposite side thereof the closure device may be shipped and otherwise handled without coming apart although the parts may be readily assembled or disassembled. In actual practice I prefer to form the spring of somewhat greater vertical dimension when expanded than the distance between the cap and the top of member *e*, so that when the parts are assembled as shown in Fig. 3 the spring will actually be under some stress and so hold the cap pressing against the lugs *f*, so that there will be no looseness or rattling possible.

The members *c* and *e* preferably have means to interlock with the spring to hold it centered. In the present case such means is formed by indenting the member *e* centrally to form an underneath boss *i* and casting member *c* with a central upstanding boss *j*, which are received by and more or less snugly fit in the ends of the spring.

It will be understood that the device is put into service on the container by bringing the cap *c* to rest on the sealing ring *d* with the legs of the member *e* out of registry with the projections *b* on the container, then pressing down on member *e* until the lugs *f* stand below the plane of said projections, and then turning said member until the lugs *f* underlie the projections; the member *e* being now locked to the container the spring maintains the required sealing pressure on the cap. The device is removed by turning

the member *e* until the lugs *f* thereof clear projections *b*.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. In a closure device for a container having spaced lateral projections around its mouth, the combination of an arched member having inward lugs to engage under said projections, a cap member contained in said arched member and seated on the lugs, and a spring interposed, and having its vertical dimension when expanded at least as great as substantially the distance, between the cap member and the top of the arched member.

2. In a closure device for a container having spaced lateral projections around its mouth, the combination of an arched member having inward lugs to engage under said projections, a cap member contained in said arched member and seated on the lugs, and a spring interposed between the cap member and the top of the arched member and holding the former so seated.

3. In a closure device for a container having spaced lateral projections around its mouth, the combination of an arched member having inward lugs to engage under said projections, a cap member contained in said arched member and seated on the lugs, and an upright spiral spring interposed, and having its vertical dimension when expanded at least as great as substantially the distance, between the cap member and the top of the arched member, said members and the spring having interlocking portions holding the latter against lateral displacement.

4. In a closure device for a container having spaced lateral projections around its mouth, the combination of an arched member having more than two approximately equidistantly spaced lugs to engage under said projections, a cap member contained in said arched member and seated on the lugs, the diameter of said cap member being such that when it is so seated and at one side it laterally abuts the arched member it overlies the lug or lugs at the relatively opposite side thereof, and a spring interposed, and having its vertical dimension when expanded at least as great as substantially the distance, between the cap member and the top of the arched member.

In testimony whereof I affix my signature.

ALBERT STARK.