

C. L. DEMERS.
CONTAINER FASTENER.
APPLICATION FILED MAR. 1, 1920.

1,366,638.

Patented Jan. 25, 1921.

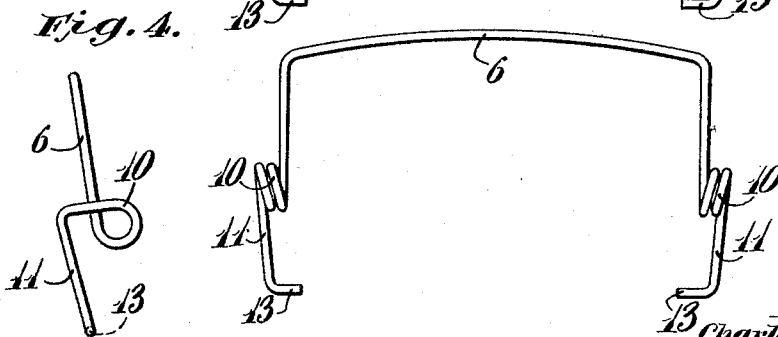
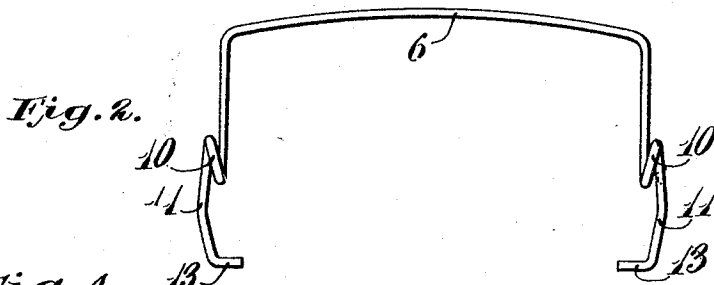
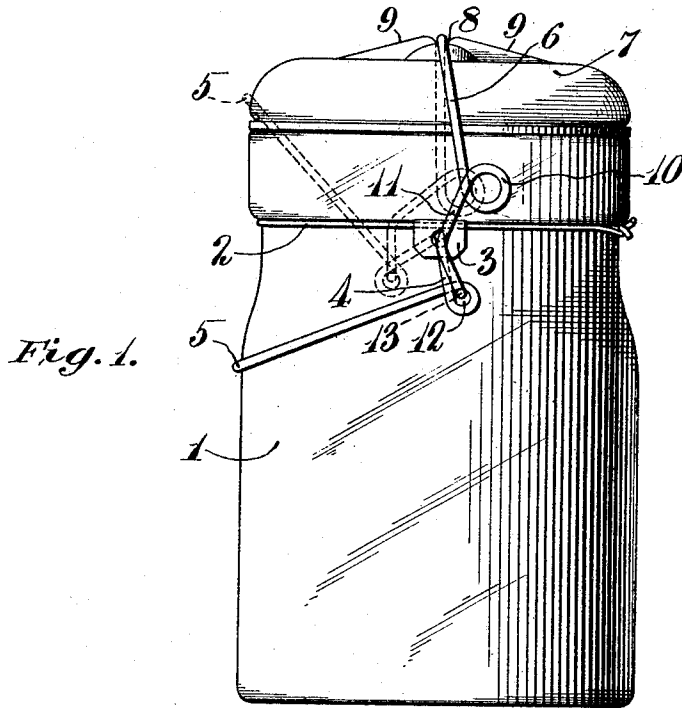


Fig. 3.

Inventor:
Charles L. Demers,
by
Trace L. Demers,
Att'y.

UNITED STATES PATENT OFFICE.

CHARLES L. DEMERS, OF CLAREMONT, NEW HAMPSHIRE.

CONTAINER-FASTENER.

1,366,638.

Specification of Letters Patent.

Patented Jan. 25, 1921.

Application filed March 1, 1920. Serial No. 362,267.

To all whom it may concern:

Be it known that I, CHARLES L. DEMERS, a citizen of the United States, residing at Claremont, in the county of Sullivan and State of New Hampshire, have invented certain new and useful Improvements in Container-Fasteners, of which the following is a full, clear, and exact specification.

My invention relates to container fasteners.

It has for its object to provide an improved container fastener whereby the closure of a container may be securely held in place. A further object of my invention is to provide an improved fastener which is especially adapted to retain its effectiveness over a long period of use, and which, at the same time, may be readily released when desired. A still further object of my invention is to provide an improved, inexpensive and readily manufactured clamping or locking bail for containers, which is adapted to be readily applied to and to cooperate with a fastener of standard construction, and to increase the effectiveness and life of the fastener to which it is applied. These and other objects and advantages of my improved construction will, however, herein-after more fully appear.

In the accompanying drawings, I have shown, for purposes of illustration, several embodiments which my invention may assume in practice.

In these drawings,—

Figure 1 is a side elevation of a jar equipped with my improved fastener, the latter being shown in different positions in full and dotted lines.

Fig. 2 is a front elevation of the clamping member shown in Fig. 1.

Fig. 3 is a front elevation of a modified form of clamping member.

Fig. 4 is a partial end elevation of a further modified form of clamping member.

In this illustrative construction I have shown my invention applied to a suitable container 1, herein in the shape of a jar, equipped with a standard form of band 2 carrying depending lugs 3 on its opposite sides, and having pivoted in these lugs laterally extending ends 4 of a bell crank form of releasing bail 5, with which, in this improved construction, my improved clamping or locking bail 6 cooperates.

This improved clamping or locking bail 6 is herein disposable across the closure 7 of

the container 1 and adapted to be seated in a usual seat 8 on the top thereof, herein formed between adjacent inclined surfaces 9. Further, it will be observed that the bail 6 is herein provided with a spring 10 in each of its arms; the same in the construction shown in Fig. 2 each including a single coil, while in the construction shown in Fig. 3 a double coil is used. These spring coils are in turn herein also connected with the releasing bail through lever-like cooperating spring locking arms 11 of suitable form, the same herein forming extensions from the outer sides of the coils and having their lower ends seated in sockets or eyes 12 formed by bending the releasing bail 5 to form the arms 4 on that bail. These arms 11 may be disposed with respect to the spring coils in various relations and assume various forms. As shown they are disposed vertically relative to the body of the bail 6 and in substantial parallelism with the spring coils, and are in the form of bell cranks, the same, in the form shown in Figs. 1 and 2, extending laterally and downwardly from the springs and then being bent reversely laterally and downwardly; while in the form shown in Figs. 3 and 4, they are bent more directly laterally and then more directly downwardly. Each of these arms is herein also provided with an inwardly extended end 13 received in a socket or eye 12, in such a manner as to enable movement of the releasing bail to move the arms 11 and thereby clamp or release the bail 6 at will.

In considering the clamping operation of my improved construction, let us assume that the parts are in the released or dotted line position shown in Fig. 1, with the bail 5 raised and freely movable about its pivot in the lugs 3. In this position, it will be observed that the upper ends of the arms 11 are above the pivots of the releasing bail, that the lower ends of the arms 11 are raised, and that the springs 10 are drawn laterally to the left so that the bail 6 may be readily moved backward to the left about its pivot in the eyes 12, thus permitting free removal of the cover 7. When, however, the bail 5 is depressed, it will be observed that as its arms 4 move about their pivots in the lugs 2, the lower ends of the bell crank arms 11 on the bail 6 are swung downward and to the right to points on the

opposite side of the pivots of the arms 4, and that the coils 10 are likewise forced to the right and placed under tension, the disposition of the parts in the locking position thus assumed being such that the pivots of the arms 11 in the eyes 12 are also substantially directly beneath the spring coils and the points of contact of the upper part of the then tensioned bail upon the shoulders of the cover 7, a very powerful clamping action thus being produced. When it is desired to release the closure, however, it will be observed that all that it is necessary to do is to swing up the releasing bail to cause the parts again to assume the position shown in dotted lines in Fig. 1.

As a result of my improved construction including the spring connected arms, it will be observed that the bail 6 is caused to press upon the top 7 with a very considerable force capable of maintaining an effective hermetic seal whenever desired. Through the provision of the cooperating springs 10 and 11, the desired elasticity of the bail 6 is also maintained to such an extent that, while an ordinary straight bail after but short use will become fatigued and useless without rebending, my improved bail may be used and re-used almost indefinitely without any attention whatsoever. Attention is also directed to the fact that, when in inoperative position, my improved bail may yet be readily removed whenever desired by simply pressing one of its ends out of the eyes 12, thereby enabling it to be removed from a broken jar or bottle and placed upon another when desired.

While I have in this application specifically described several embodiments of my invention, it will of course be understood that the same may be modified and embodied in other forms, as for instance through the use of modified forms of lever connections or springs, without departing from the spirit of my invention or from the scope of the appended claims.

What I claim as new and desire to secure by Letters Patent is:

1. A closure clamping member comprising a bail having in each end thereof a relatively vertically disposed bell crank portion and a cooperating spring coil, said coil

being disposed in substantial parallelism with said portion and between the upper arm thereof and the body of the bail.

2. A closure clamping member comprising a bail having on each end thereof a relatively vertically disposed bell crank portion and a cooperating spring coil disposed in substantial parallelism with said portion and between the upper arm thereof and the body of the bail, said portion forming an extension of the outer side of each coil.

3. In a container closure, a container, a closure, a releasing bail pivoted on the former, and a clamping bail having in each side portion thereof a spring coil and a bell crank disposed in substantial parallelism, the lower end of the latter being pivotally connected to said releasing bail at a point adjacent the pivot thereof and movable laterally with said bail to clamping and releasing positions on opposite sides of the pivot thereof.

4. In a container closure, a container, a closure, a releasing bail pivoted on said container, and a clamping bail having in each side portion thereof a spring coil and a bell crank disposed in substantial parallelism therewith and forming an extension thereof, the upper end of said bell crank being disposed above the pivot of said releasing bail and connected to said spring coil and the lower end being pivotally connected to said releasing bail at a point adjacent its pivot.

5. In combination, a container, a closure, a releasing bail having laterally extending portions pivoted on said container at their ends and presenting eyes at their junction with the releasing bail, and a clamping bail disposed over said closure having a spring coil in each side thereof and a bell crank lying in substantial parallelism with said coil and forming an extension thereof, each of said bell cranks having its upper end disposed above the pivot of said releasing bail and connected to said spring coil and its lower end pivoted in an eye in said releasing bail and movable with said bail to opposite sides of the pivot thereof.

In testimony whereof I affix my signature.

CHARLES L. DEMERS.