

No. 658,343.

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J. S. CLARK.
CLOSURE FOR RECEPTACLES.

(Application filed Dec. 14, 1899.)

(No Model.)

Fig. 1.

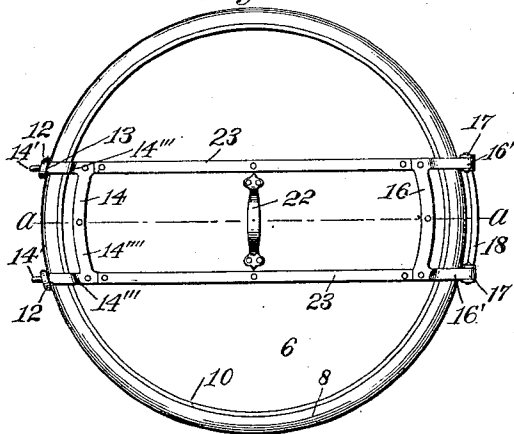


Fig. 4.

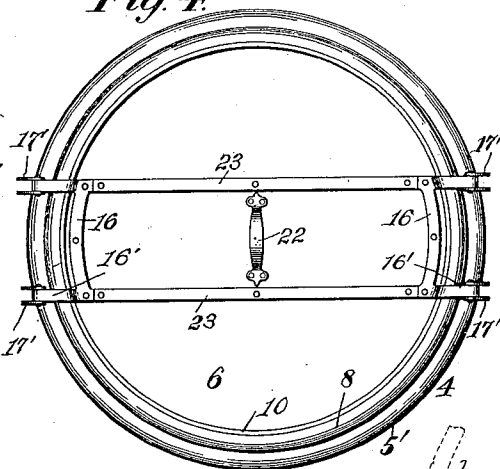


Fig. 2.

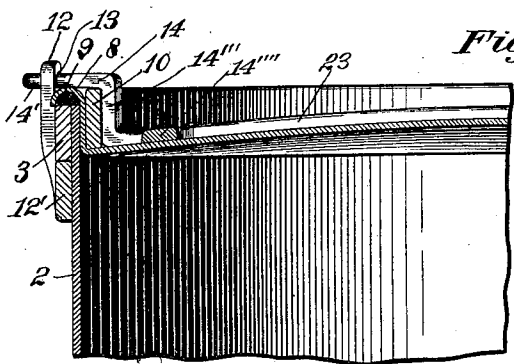
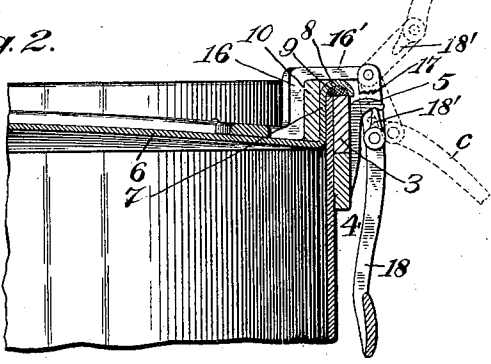
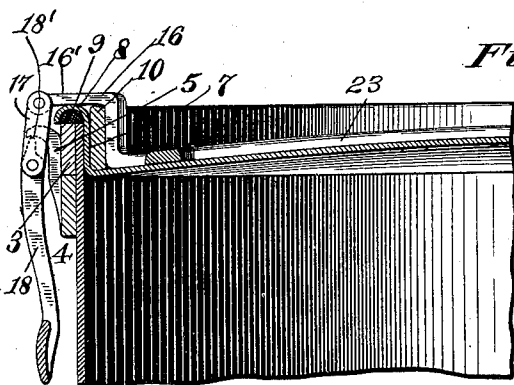
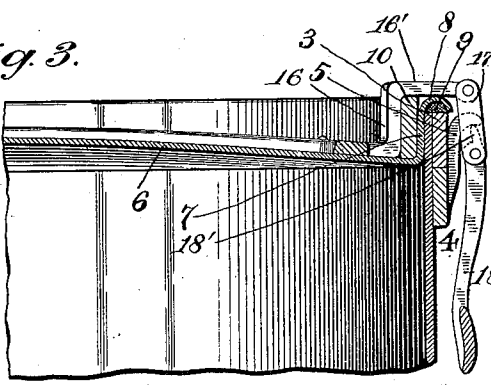
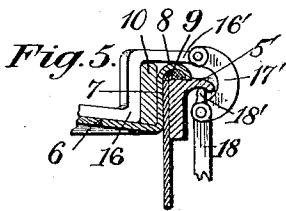


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN S. CLARK, OF NEW YORK, N. Y., ASSIGNOR TO THE IRON CLAD MANUFACTURING COMPANY, OF SAME PLACE.

CLOSURE FOR RECEPTACLES.

SPECIFICATION forming part of Letters Patent No. 658,343, dated September 25, 1900.

Application filed December 14, 1899. Serial No. 740,260. (No model.)

To all whom it may concern.

Be it known that I, JOHN S. CLARK, a citizen of the United States, residing in New York, (Brooklyn,) in the county of Kings and State of New York, have invented certain new and useful Improvements in Closures for Receptacles, of which the following is a specification.

This invention relates to receptacles, and more particularly to the closures or covers thereof; and one object of the invention is to provide an improved receptacle in which the closure may be firmly secured in position against other than manual removal.

A further object of the invention is to provide an improved closure having means cooperating with means carried on the body of the receptacle, whereby such closure can be readily and quickly placed in position and removed and when assembled with the can-body firmly secured in position in such manner that the receptacle is fluid-tight, whereby such receptacle can be used as an ammunition-can, such as a powder-can, for which it is particularly adapted.

A further object of the invention is to provide an improved receptacle so constructed that the closure thereof can be placed and locked in position at any desired point relatively to the mouth of the receptacle, thereby facilitating the insertion and locking of the closure in position without the necessity of being obliged to fit such closure in a particular position each time.

In the drawings accompanying and forming part of this specification, Figure 1 is a top view of one form of this improved receptacle. Fig. 2 is a sectional view thereof, taken in line *aa*, Fig. 1, the clamping or locking means being shown in dotted lines in different positions. Fig. 3 is another form of this improved receptacle, in which the closure is shown provided with a plurality of clamping or locking means. Fig. 4 is a top view of another form of this improved receptacle; and Fig. 5 is a detail enlarged sectional view of one portion of the receptacle and its closure, showing the form of locking means disclosed in Fig. 4.

Similar characters of reference designate like parts in all the figures of the drawings.

In one form thereof this improved receptacle comprises a receptacle-body 2 of any

suitable construction and shape, usually cylindrical, such receptacle being provided at its mouth with an exterior band or hoop 3. Secured to the body in one form thereof below the hoop 3 and in another form thereof constituting such hoop is one part of the closure clamping or locking means, (designated in a general way by 4.) In the form thereof shown in Figs. 1 and 2 this part 4 of the clamping means comprises a pair of lugs 5, preferably connected and one located at each side of the center line of the can-body, and in the form shown in Fig. 3 two pair of these preferably-connected lugs 5 are provided, a pair thereof at each side of the can-body, while in the form shown in Figs. 4 and 5 this part of the clamping or locking means comprises a band or hoop 5', completely encircling the can-body and formed as an angle-iron or lug extending around the same, and since it accomplishes the same result that a plurality of lugs disposed side by side around the body would accomplish it may for the present purposes be considered as comprising a plurality of lugs, one preferably integral with another and extending around the body of the can.

The closure comprises a closure-plate 6, preferably shown as concavo-convex, the convex surface thereof projecting toward the exterior of the can-body. This closure-plate is provided with an upwardly-extending annular flange 7, adapted to fit within the can-body, and has a laterally-extending curved annular rim 8, adapted to extend over the upper edge of the can and also the hoop or band thereof, such rim being provided on its under face with a gasket 9, usually of rubber, whereby when the closure is clamped in position a fluid-tight joint is provided. The closure is also provided with an annular reinforcing band or hoop 10 at the inner side of said flange, and which band is rigidly secured thereto by soldering or in any other suitable manner. When the receptacle is provided with only one clamping means, the body is provided with a pair of arms or ears 12, the lower ends of which are rigid or integral with a curved plate 12', secured to the body below the band, and each of which ears is provided with an aperture 13 adjacent to its upper end, the lower wall of which is located

substantially in alinement with the upper face of the laterally-extending rim 8 when the closure is in position. Carried by the closure is a pair of projections 14', extending over and beyond such rim 8 and adapted to enter the apertures of the ears 12. Each of these projections 14' is shown formed as a part of a somewhat Z-shaped member 14, the inner arms 14'' of which are integrally connected with a strip 14'''', forming a reinforcing means for the closure and for such Z-shaped members, and which integral structure is secured to the closure in any suitable manner, as by rivets or otherwise, the strip 14''' being shown preferably curved to conform to the contour of the receptacle-closure. These Z-shaped members are so formed and located that the upright portions 14''' thereof engage the inner surface of the closure hoop or band 10, while the projections 14' project over and engage the upper edge thereof, thereby holding such band in close engagement with the flange-plate of the closure. At the opposite side of the closure an integral structure 16, similar to that just described, is preferably secured, except that in the structure 14 just described the outer ends of the projections 14' are usually rounded to conform to the apertures of the standards. By this organization it may be seen that the closure band or hoop 10 is completely inclosed at successive points in its circumference, thereby to prevent displacement of the same and insure a more durable cover.

Carried by each projection 16' at the clamping side of the can is a pair of pivoted links 17, the lower ends of each pair of such links being pivoted to a yoke or actuator 18, having preferably integral with each member thereof at its pivotal point a cam surface or projection 18', adapted to engage the lugs 5, hereinbefore described, whereby it will be seen that when the closure is placed in position, with the projections 14' extending through the apertures of the ears, and which projections on the closing of the cover act as levers to clamp the same more firmly in position, the swinging actuator 18 can be readily swung downward from the position *b* to the position *c*, (shown in dotted lines in Fig. 2,) with the cam projections 18' brought under the lugs 5 of the receptacle-body, whereupon by pressing the actuator toward the body the cams will be brought into such engagement with the lugs and slightly to the outer side of the vertical plane of the pivotal arcs of the links that the head or closure will be rigidly clamped in position against other than manual displacement.

In that form thereof shown in Fig. 3 the closure is provided with a pair of clamping or locking means each similar to that just described and located opposite to each other, the second one being substituted for the projection and ear connection above set forth, whereby it will be seen that by providing the receptacle-body with two sets of angle-irons

5, located directly opposite each other, and by providing the closure with a pair of clamping means said closure can be firmly held in position against other than manual displacement or removal, whereby the closure can be positively clamped in position at opposite sides of the body.

To enable the closure to be assembled with the receptacle-body without placing it in a particular position each time, the body is provided with a band or hoop 5', completely encircling the same and formed as a lug, (see Figs. 4 and 5,) while the closure is provided with a pair of clamping or locking means, each similar to that above set forth, except that the links 17' are shown outwardly curved, so as to extend around the flange of the lug 5, secured to the body. By this organization it will be seen that the cover can be placed and locked in position at any point around the circumference of the cover without the necessity of having the clamping means register with separated and independent lugs at particular points, so that this continuous lug formed as a band or hoop takes the place of and acts in a manner similar to a series of independent lugs located side by side, and consequently may be so considered.

The cover is provided with the usual handle 22 for its manipulation, and intermediate the integral structures 14 the cover is shown provided with a pair of reinforcing-strips 23, the ends of which engage such integral structures, and thereby assist in maintaining the same in position, as well as reinforcing the closure-plate.

In the form of receptacle shown in Figs. 1 to 3, inclusive, the lugs 5 are so located as to engage the under surface of the body band or hoop and assist in maintaining the same against displacement, while in the form shown in Figs. 4 and 5 the lug is a continuous one, forming a band or hoop for the body.

Having described my invention, I claim—

1. A can comprising a body and a closure freely detachable from said body, said closure having a plurality of independent means detachably connecting said closure with the body and including a swinging cam carrying actuator having a duplex pivotal connection with said closure, and cam coöperating means secured to said body.

2. A can comprising a body and a closure, said closure having a pair of projections extending beyond the same at one side thereof; a pair of links connected with each of said projections; an actuator pivotally connected to said links and provided with cam-surfaces or projections; and means secured to said body and coöperating with said cam projections.

3. A receptacle comprising a body and a closure, having two sets of oppositely-located projections extending beyond the same, one set having detachable connection with the body to assist in maintaining the closure in position; a pair of links connected with each

projection of the other set; an actuator connected with said links and provided with cam-surfaces; and means secured to said body and cooperating with said cam-surfaces.

5 4. A can comprising a body having an ear secured thereto provided with an opening; a detachable cover having at one side thereof a projection extending into said opening and detachable from said ear on the lifting of the cover; clamping means carried at the opposite side of said closure; and means secured to said body and cooperating with said clamping means for maintaining said closure in position.

5 5. A receptacle comprising a body and a closure, said closure having two sets of projections extending beyond the same, one set having a freely-detachable connection with the body to maintain one side of the closure in position, and the other set carrying links; an actuator pivotally secured to said links and provided with cam-surfaces; and flanged means carried on said body and cooperating with said cam-surfaces to enable the closure to be clamped in position.

6. A receptacle comprising a body and a closure, said closure comprising a plate having an upwardly-extending flange provided with a laterally-extending rim carrying a gasket; two sets of projections secured to said closure, one set at each side thereof, and one set having connection with said body to maintain one side of said closure in position, and the other set carrying links pivotally secured thereto; an actuator pivotally secured to said links and carrying cam surfaces or projections; and means secured to said body and cooperating with said cam-surfaces.

7. A receptacle comprising a body and a closure, said closure comprising a plate having an upwardly-extending flange provided with a laterally-extending rim carrying a gasket; two sets of projections carried by said closure, one set at each side thereof, and one set having connection with said body to maintain one side of said closure in position, and the other set carrying links pivotally secured thereto; a hoop or band located on the inner side of said flange; an actuator pivotally secured to said links and carrying cam surfaces or projections; and flanged means carried by the receptacle-body and cooperating with said cam-surfaces.

8. A receptacle comprising a body and a closure, said closure comprising a plate having an upwardly-extending flange provided with a laterally-extending rim carrying a gasket; a pair of substantially Z-shaped structures carried by said closure, one at each side thereof, the lateral projections of one having connection with said body to maintain one side of said closure in position, and the lateral projections of the other carrying links pivotally secured thereto; a hoop or band located intermediate the inner side of said closure-flange and the upright portions of said Z-shaped structures; an actuator pivotally secured to said links and carrying cam surfaces or projections; flanged means secured to the receptacle-body and cooperating with said cam projections; and reinforcing-strips extending across the top of said closure-plate and having the ends thereof in engagement with said Z-shaped structures.

9. A can comprising a body having a pair of ears secured thereto, each provided with an opening; a detachable cover having at one side thereof a pair of projections extending into said openings and detachable from said ears on the lifting of the cover; swinging clamping means carried at the opposite side of said closure and embodying cam-surfaces; and means carried on said body and cooperating with said cam-surfaces to maintain the cover in position.

10. A can comprising a body provided with two pairs of oppositely-located members; a closure having a pair of substantially Z-shaped structures secured thereto one at each side thereof, the lateral projections of each structure having detachable connection with said body members to maintain the closure in position.

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