

C. J. SCHUSTER.
 FLUID RECEPTACLE.
 APPLICATION FILED MAY 15, 1911.

1,025,952.

Patented May 7, 1912.

Fig. 1.

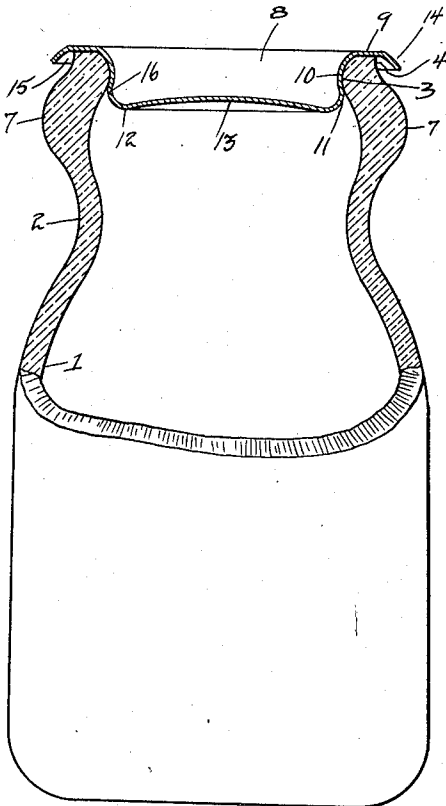


Fig. 2.

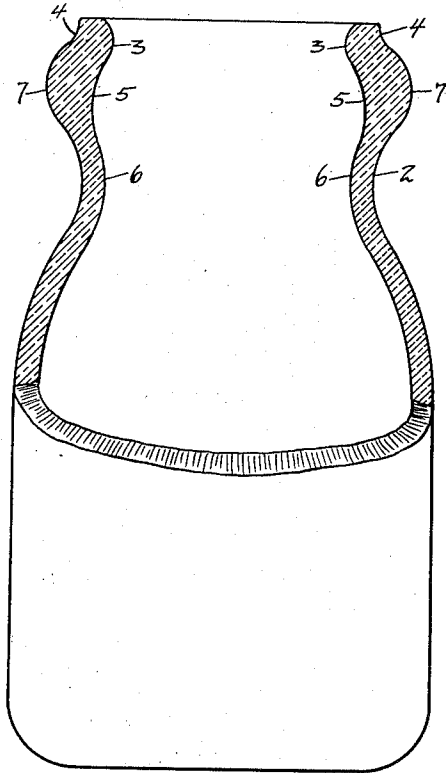


Fig. 4.

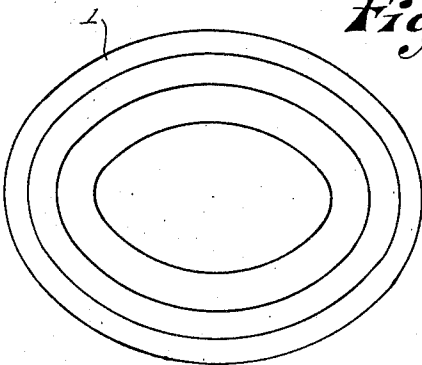
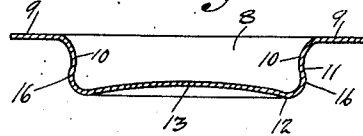


Fig. 3.



WITNESSES:

C. R. Ennis
H. C. Ward, Regd.

INVENTOR

Carl J. Schuster

By

Ennis & Schuler

ATTYS.

UNITED STATES PATENT OFFICE.

CARL J. SCHUSTER, OF MILWAUKEE, WISCONSIN.

FLUID-RECEPTACLE.

1,025,952.

Specification of Letters Patent.

Patented May 7, 1912.

Application filed May 15, 1911. Serial No. 627,251.

To all whom it may concern:

Be it known that I, CARL J. SCHUSTER, a citizen of the United States, residing at Milwaukee, county of Milwaukee, and State of Wisconsin, have invented new and useful Improvements in Fluid-Receptacles, of which the following is a specification.

My invention relates to improvements in fluid receptacles, and it pertains to both the construction of the mouth of the receptacle and the inclosing cover, and more especially, among other things,—1st. to the periphery of the cover which is extended past and is curved downwardly concentric with and at a slight distance from the exterior surface of the neck or mouth of the receptacle; 2d. to the annular groove which is formed in that part of the exterior surface of the neck which is inclosed by the downwardly curved portion of the cover, whereby an annular channel is formed at such point between the periphery of the cover and the receptacle for the reception of the finger of the user, a lever or similar instrument, whereby the cover may be readily sprung from its seat and removed; 3d. to the exterior annular collar or convex portion of the neck of the receptacle which extends outwardly beyond the periphery of the cover whereby the periphery of the cover is shielded from contact and the liability of the downwardly curved flange of the cover becoming bent in handling the receptacles, is avoided; 4th. to the peculiar shape of the contiguous surfaces of the receptacle and cover, whereby the cover is yieldingly retained in place in close liquid tight contact by the resiliency of the cover; 5th. to the upwardly curved central portion of the cover, whereby the sides of the cover are adapted to be more easily sprung inwardly when inserting or removing the cover from the receptacle, and 6th. to the preferred elliptical form of the receptacle and cover, which form facilitates handling the receptacle and discharging its contents therefrom.

The object of my improvement is to so construct the receptacle and cover that the cover may be quickly and easily inserted and may be removed without the use of special tools, for such purpose, and without as heretofore perforating the cover or bringing infectious instruments in direct contact with the contents of the receptacle, whereby the contents of the receptacle will be more perfectly preserved.

The construction of my invention is explained by reference to the accompanying drawings, in which—

Figure 1 represents a side view of the receptacle, part broken away, showing the inclosing cover in place. Fig. 2 is a side view of the receptacle shown in Fig. 1 with the cover removed. Fig. 3 represents a sectional view of the cover removed from the receptacle, and Fig. 4 represents a top view of a preferred form of receptacle and cover.

Like parts are identified by the same reference numerals throughout the several views.

1 represents the body of the receptacle and 2 is the neck. The neck 2 is provided around its mouth with an inwardly projecting bead 3, while its opposite exterior surface is provided with an annular groove or depression 4. The inner wall of the neck below the bead curves outwardly forming an annular concave surface 5 between the bead 3 and the point 6, while the opposing exterior surface 7 is made convex and the receptacle is thickened between the points 5 and 7, whereby the receptacle is given greater strength at such point, and whereby the same extends past and is adapted to shield the periphery of the cover from contact.

The cover 8 comprises the annular flat surface 9, which rests upon the top of the receptacle, the downwardly curved member 10, which is shaped to conform to and nicely fit the opposing surface of the bead 3, whereby a tight joint is formed between the cover and receptacle, which prevents the escape of its contents, the annular converging surface 11 extending downwardly and inwardly from the surface of the bottle to the point 12, and the central portion 13. The central portion 13 is preferably curved upwardly, whereby the sides of the cover are more readily sprung inwardly as the cover is inserted and removed. The horizontal surface 9 of the cover may be left straight, as shown in Fig. 3, but it is preferably inclined downwardly and outwardly forming the annular flange 14, as shown in Fig. 1. By thus turning the periphery of the cover down, as shown, it facilitates its removal as a channel 15 is formed thereby between the cover and receptacle for the reception of the finger of the user, a lever, or other instrument, by which the cover is readily sprung from its seat.

The cover is preferably formed of re-

silient material, which will yield sufficiently to permit the annular projection 16 to slide past the bead 3, as the cover is inserted. When the cover is in place, said projection 5 engages beneath the bead and holds the same in close contact with the mouth of the receptacle, whereby the liability of the contents of the receptacle escaping past said cover, is avoided.

10 While the covers are preferably formed of metal, it will be understood that they may, if desired, be formed of fiber or other resilient material, which will retain its proper shape, and will not be injuriously 15 affected by the moist contents of the receptacle.

While the receptacle may be made cylindrical in cross section, I wish it to be understood that it is preferably made elliptical, 20 when the cover, of course, will be shaped to conform to the opening or mouth of the receptacle. The elliptical shape is preferable for two reasons.—1st, a large receptacle thus formed is more readily grasped by the hand 25 of the user, while the contents of the receptacle is more readily poured through one of the narrower sides into another receptacle.

Attention is called to the fact that the extreme upper end of the receptacle is made 30 flat to conform to the flat opposing surface of the cover, and also to the important fact that the diameter of the circle described by the inner opposing surface of the bead 3 forms the minimum diameter of the receptacle which is located at the discharge end 35 of such receptacle, and the receptacle being thus contracted at its discharge end, greatly facilitates pouring the contents therefrom; also to the fact that by turning down the 40 periphery of the cover, an annular channel is formed entirely around the mouth of the receptacle between it and the opposing surface of the cover, which greatly facilitates removing the cover, as a person can insert 45 his fingers or an instrument between such opposing surface at any point around the neck of the bottle, while the downwardly converging periphery of the cover, extend-

ing as it does entirely around the receptacle, 50 cooperates in reinforcing and strengthening the cover, whereby the liability of the cover being bent or sprung out of shape, is diminished. By making the mouth of the receptacle elliptical, as shown in Fig. 4, the 55 converging sides of the ellipse form a narrow channel for the contents of the bottle as the same is being discharged, whereby the contents are more easily poured in a small receptacle.

Having thus described my invention, what 60 I claim as new, and desire to secure by Letters Patent, is—

In a device of the described class, the combination with a fluid receptacle terminating at its extreme upper end in a flat horizontal 65 surface, converging from thence inwardly and downwardly forming an annular bead, the exterior surface opposite said bead being concave or reversely curved, an annular convex portion upon the exterior surface below 70 and continuous with said concave portion; together with a resilient cover comprising a flat horizontal annular portion, a circumscribing depending peripheral flange serving as an overhanging shield and means by 75 which removal of the cover is facilitated at every point equally well in the periphery of the cover without the use of special tools; an annular concave portion to impinge and closely fit the opposing surface of said bead, 80 an upwardly dished central portion and an annular converging member interposed between and connecting the opposing edge of said annular concave portion with said upwardly dished central portion, both together 85 constituting an efficient annular spring facilitating easy and thorough introduction into, retention in, and removal from the receptacle of the resilient cover.

In testimony whereof I affix my signature 90 in the presence of two witnesses.

CARL J. SCHUSTER.

Witnesses:

JAS. B. ERWIN,
W. H. GORR.