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RECEPTACLE AND CLOSURE THEREFOR

Filed May 22, 1923

Fig. 1.

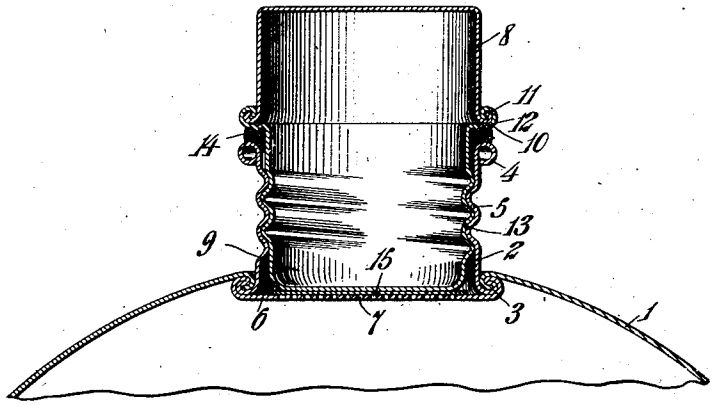
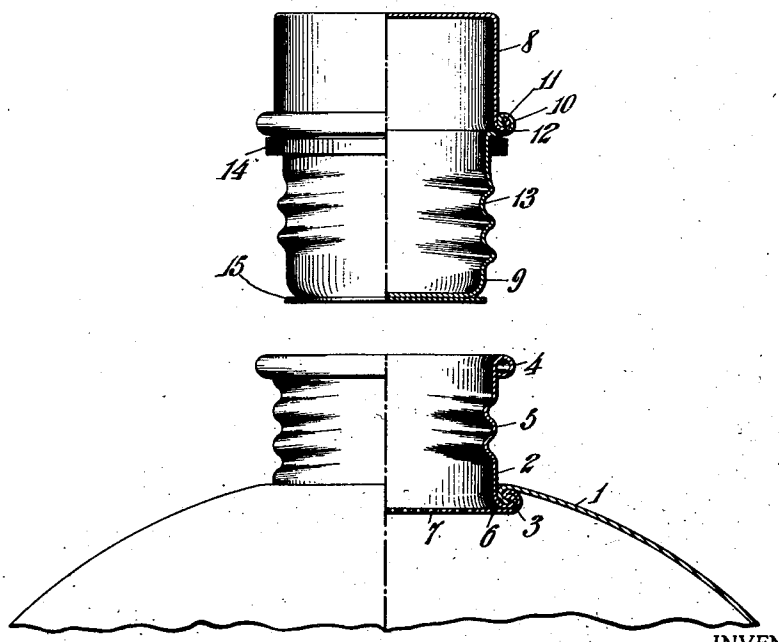


Fig. 2.



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RECEPTACLE AND CLOSURE THEREFOR.

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This invention relates to an improvement in receptacles and closures therefor, and more particularly to a tin receptacle, such as a talcum powder box.

An object of the invention is to provide a combined receptacle and closure which is arranged so that the latter may be readily removed from the former, for the purpose of shaking out the powder, and then replaced so as to form a very tight seal.

Another object consists in providing a receptacle and closure which are cheap and simple to manufacture.

Another object consists in providing certain improvements in the form, construction and arrangement of the several parts, whereby the above named and other objects may be effectively attained.

A practical embodiment of the invention is shown in the accompanying drawings, in which

Fig. 1 shows a vertical section of the upper portion of a receptacle with the closure in position thereon.

Fig. 2 represents a vertical section, partly in elevation, with the closure and sealing disc removed from the receptacle.

The upper portion of the receptacle is denoted by 1 and may be considered as being the top of a sheet metal talcum powder box.

The receptacle is provided with a neck 2 which takes, in general, the form of a small cylinder provided with one end member. This cylinder constituting the neck 2 may be drawn from suitable metal, such as sheet iron, coated with tin or lacquer, or both, in a manner well understood in the art. After it has been drawn, it may be retinned or relacquered, or both, if desired.

The cylinder is then subjected to a suitable dieing operation which presses one end into a laterally projecting curled flange 3, and forms the other end with a rolled or wired portion 4; after which its intermediate portion may be threaded, as shown at 5, by subjecting the same to the action of the customary threading rollers, in a manner well known to all those skilled in this industry.

The curled edge of the flange 3 is interlocked with the receptacle 1 by a conventional form of seam, as clearly shown in the drawings, which operation may be effected by a dieing or rolling mechanism.

The end member 6 of the neck 2 is provided with a large number of perforations 7, so that the powdered contents of the receptacle 1 may be shaken out in the ordinary manner.

The closure comprises two members 8 and 9. The upper member 8 is substantially cylindrical in form and may be drawn from suitable sheet metal, such as iron, coated with tin or lacquer, or both, in the usual manner.

The member 9 is also drawn from a blank of similar sheet metal into the form of a cylinder and, in this operation, it is also provided with a laterally projecting flange 10 which is adapted to be united with the member 8 by a folded seam 11. This may be accomplished by a dieing or rolling step. At the time the flange 10 is formed, it is provided with a downwardly projecting annular bead 12 and, prior to the uniting of the members 8 and 9, the latter is submitted to the action of threading rollers for imparting to it a thread 13 which is calculated to mate with the thread 5 in the neck 2 of the receptacle 1.

A ring or washer 14 of suitable compressible material, such as rubber compound, is fitted around the member 9 immediately below the flange 10 and bead 12, and is held in position by its frictional grip on the circumference of the member 9.

A disc 15, of some suitable material, such as wax paper, is secured to the bottom of the member 9 of the closure by a suitable adhesive, or in any other desired manner; and it will be noted that this disc 15 is large enough to entirely cover the perforated area of the end member 6 of the neck 2.

When the closure is screwed into sealing engagement with the receptacle, as indicated in Fig. 1, it will be seen that the ring or washer 14 is clamped down on top of the roll 4 by the flange 10. The said ring or washer is also clamped between the inner portion of the roll 4 and the bead 12, and the inner part of the said ring or washer is also jammed down between the inner surface of the neck 2 and the outer surface of member 9 of the closure. This action of jamming the washer down between the said parts is wedge-like in effect, and much resembles that which takes place when an ordinary cork is forced into a bottle. Inasmuch as the ordinary cork is probably the best known form of seal, it will be seen that this jamming action results in a very perfect sealing engagement between the closure and the neck of the receptacle.

At the time the closure is screwed home, the disc 15 is also clamped between the member 9 of the closure and the end member 6 in the neck of the receptacle, whereby an additional sealing point is obtained for the purpose of preventing the powdered contents from leaking out of the receptacle.

It will be understood that various changes may be resorted to in the the form, construction, arrangement and material of the several parts, and in the method of manufacturing the same, without departing from the spirit and scope of my invention; and hence I do not intend to be limited to the details herein shown and described except as they are included in the claims.

What I claim is:

1. A combined receptacle and closure comprising, a receptacle body portion, a neck portion seamed to said body portion and including a transverse perforated member, a lower closure member adapted to engage the neck portion and abut its said transverse perforated member for sealing the receptacle, an upper closure member seamed to the lower closure member, a downwardly facing annular flange adjacent said seam and a sealing element arranged to be pressed between the top of the neck portion and said annular flange for further sealing the receptable.

2. In combination, a receptacle comprising, a body portion, a neck portion, said neck portion having an interior transverse perforated member and being provided with closure engaging means, and a closure having an imperforate lower end and a sealing disc on said end, said closure being adapted to fit in said neck portion with its said end abutting said perforated member to seal the receptacle, said neck portion having a seat near its outer end, said closure having a shoulder fitted to cooperate with said seat and provided with a downwardly projecting annular bead, and a sealing element arranged to be pressed between said seat and shoulder and to be wedged by said annular bead into the space between the outer end of the neck portion and the portion of the closure below its said shoulder to provide an additional seal for the receptacle.

In testimony that I claim the foregoing as my invention, I have signed my name this 15th day of May, 1923.

ROBERT A. RUSSELL.