R. M. HOLLINGSHEAD, CLOSURE FOR RECEPTACLES, APPLICATION FILED JULY 9, 1913.

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UNITED STATES PATENT OFFICE.

RICHARD M. HOLLINGSHEAD, OF RIVERTON, NEW JERSEY.

CLOSURE FOR RECEPTACLES.

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Application filed July 9, 1913. Serial No. 778,004.

To all whom it may concern:

Be it known that I, RICHARD M. HOL-LINGSHEAD, a citizen of the United States, residing at Riverton, in the county of Bur-5 lington, State of New Jersey, have invented a new and useful Closure for Recepta-

ed a new and useful Closure for Receptacles, of which the following is a specification.

This invention relates to closures for re-10 ceptacles or containers, and has for an ob-

- ject to provide a closure particularly adapted for use in connection with receptacles for enamel, glue or like viscous liquids, the nature of which ordinarily causes the closures
- 15 to stick to the container or receptacle and render the removal thereof exceedingly difficult. My invention therefore is devised to overcome said troubles, as will be hereinafter described.
- 20 For the purpose of illustrating my invention, I have shown in the accompanying drawings one form thereof which is at present preferred by me, since the same has been found in practice to give satisfactory
- 25 and reliable results, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise
- 30 arrangement and organization of these instrumentalities as herein shown and described.

Figure 1 represents a perspective of a closure embodying my invention, the same be-25 ing shown attached to the top of a receptacle and also having an implement in position thereon to aid in the removal of the closure. Fig. 2 represents a section of a

- portion of the closure showing a disk mem-40 ber ready to be inserted therein. Fig. 3 represents a section of the same showing the disk member in assembled condition. Fig.
- 4 represents a section of the complete closure mounted upon a receptacle.
- 45 Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings:—1 designates a screw-threaded neck member of annular form having an internal circumferential

- 50 flange 2 encircling the opening 3, which is formed by the projecting annular lip 4. The flange 2 forms between the said lip 4 and the neck wall 1, a seat in which is located, in the present instance, a washer 5 of
- 55 suitable material which forms a means to prevent leakage through the joint formed

between the neck member 1 and the closure body 6, this latter member being suitably screw-threaded for engagement with the neck member 1, as will readily be under- 60 stood.

7 designates a bell formed by outwardly flaring the walls of the annular body mem. ber 8, which bell terminates in a circumferential flange 8, which as here shown, has its 95 outer edge 9 curled or crimped inwardly to act as a retainer for a disk 10 which has previously been inserted within the flange 8. As shown in Fig. 2, said disk 10 has a circumferential upturned rim which rests 70 against the inner side of the circumferential flange 8, thus reinforcing the latter from within, while said disk stiffens the upper portion of the body member also from within and prevents collapsion thereof. The 75 body member 6 is closed at the opposite end by the bottom or base 11 which is formed integral with the said body and provided with a depressed bead 12 which is adapted to seat upon the washer 5 and form a tight so joint at the desired points.

13 designates a pair of slots cut at suitable points in the flange 8 and preferably in alined relation with respect to each other for the purpose of receiving a nail, file, 25 knife-blade or like implement 14, which may be used to assist in the removal of the body member 6 from the neck member 1.

In using the closure, the neck member 1 is soldered or otherwise securely affixed to a 00 suitable receptacle as 15 with the opening 3 alined with the opening 16 of the receptacle and it will be apparent that when the parts are in assembled condition as shown in Fig. 4, the opening 3 is effectually closed and 05 leakage guarded against by the provision of the washer 5.

The novel method of forming the above described product consists in first forming the screw threaded annular neck member by 190 stamping out a cap member, forming the internal and external thread thereon and then punching the opening 3. The washer 5 is next located as shown in Fig. 4. The closure body 6 is next pressed into the form of 105 a cap with closed base 11, the depressed bead 12 around the same, the bell 7 and flange 8 shaped thereon, which operation is followed by the internal and external threading step. The disk 10 is now pressed into place and 110 the flange 8 crimped, as shown at 9, in order to hold the disk in position and form the hollow body closure complete. The slots 13 are now cut in the flange 8 and the closure is ready for insertion within the neck member 1.

It will now be apparent that I have devised a novel closure member and process of forming the same whereby a container or receptacle for viscous liquids such as enamel or the like may be equipped with the afore-

10 said closure and be secured against leakage of the contents. It will be noted that the body member 6 seats accurately upon the flange 4 of the opening 3 and seals the discharge opening 16 in an effective manner.

15 It will further be apparent that the washer 5 is pressed between the bottom of the bead 12 of the closure body 6 and the circumferential flange 2 so that even should leakage occur between the bottom 11 and flange 4 20 it will be confined by the washer 5 and prevented from passing along the joint between the neck 1 and body 6.

By the foregoing construction it will be seen that the opportunity for the enamel or 26 like liquid to leak around the body 6 and set, thereby causing the closure to adhere or stick to the neck 1 is reduced to a minimum. In case there is a tendency of the body 6 to stick to the washer 5 I have provided in the so slots 13 a means whereby an implement may be utilized to readily break the sealing action and permit the closure to be removed. It will be seen that the top portion of the body 6 is composed of a plurality of thick-nesses of material, these being bound to- 35 gether by the crimp 9, a feature of impor-tance considering that said portion is weakened by the slots 13, but new strength is gained by the use of said plurality of thickness of the portion in question. 40

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

A receptacle having an opening in the top wall thereof, a screw threaded neck having 45 on its base an inturned flange which also is seated upon said top and secured thereto, a lip rising from the inner end of said flange around said opening, said neck, flange and lip forming a depressed seat on said top 50 around said opening therein, a washer occupying said seat, and a threaded closure body adapted to be fitted to said neck and having a closed base adapted to engage the top of said lip and having a depending bead ^E in its circumferential portion adapted to descend into said seat.

RICHARD M. HOLLINGSHEAD.

Witnesses:

C. W. TOMLINSON, BENJ. H. MOORE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."

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