M. P. JANISCH.

CLOSURE FOR PAPER RECEPTACLES.

APPLICATION FILED JAN. 11, 1915.

1,147,867. Patented July 27, 1915.

Fig. 1.

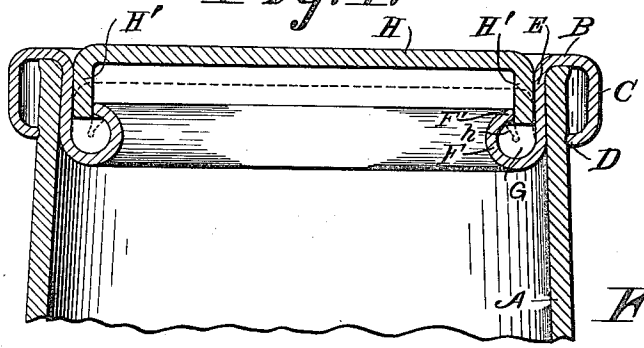


Fig. 5.

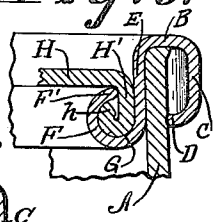


Fig. 2.

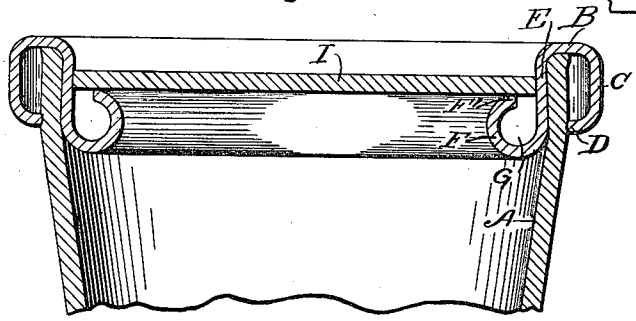


Fig. 3.

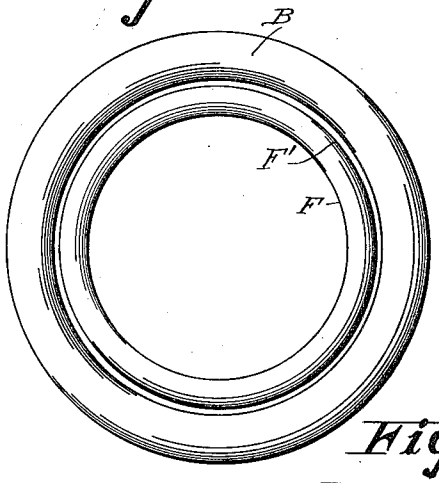


Fig. 4.

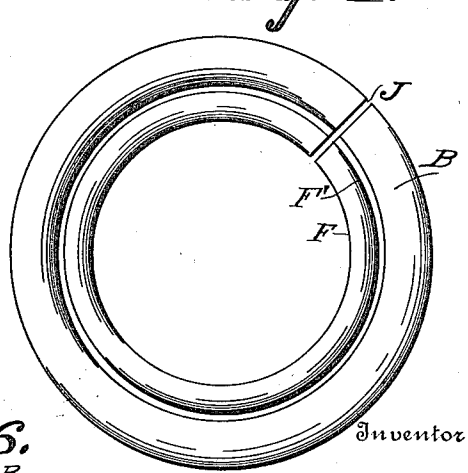
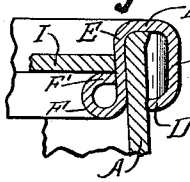


Fig. 6.



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CLOSURE FOR PAPER RECEPTACLES.

1,147,867. Specification of Letters Patent. Patented July 27, 1915.

Application filed January 11, 1915. Serial No. 1,565.

To all whom it may concern:

Be it known that I, MAXIMILLIAN P. JANISCH, a citizen of the United States, residing at Milwaukee, county of Milwaukee, and State of Wisconsin, have invented new and useful Improvements in Closures for Paper Receptacles, of which the following is a specification.

My invention relates to improvements in closures for paper receptacles, having cylindrical mouths, and pertains especially to that class of closures in which a metallic cap receiving mouth piece is adjusted to the circular walls of the receptacle.

The object of my invention is to provide a form of construction, which will be inexpensive and efficient, and which may be utilized to support or retain a removable cap in fluid tight relation to the mouth piece or in hermetically sealed relation thereto, if desired.

In the drawings—Figure 1 is a vertical sectional view of a fragment of a paper bottle embodying my invention, the cap being illustrated in the position to which it is adjusted preparatory to the operation of pressing it into interlocking engagement with the mouth piece, and with dotted lines indicating the position of said cap when in such interlocking engagement. Fig. 2 is a similar view, showing an ordinary cap as it is used in connection with a mouth piece embodying one feature of my invention. Fig. 3 is a plan view of the mouth piece illustrated in Figs. 1 and 2. Fig. 4 is a similar view, showing a slightly modified construction of the mouth piece. Fig. 5 is a fragmentary sectional view, showing a portion of a cap in sealing relation to the interlocking groove of the mouth piece, the cap illustrated being of the type shown in Fig. 1. Fig. 6 is a fragmentary view of a mouth piece embodying a slight modification from that shown in Figs. 1 and 2 and utilized to receive an ordinary cap of which a fragment is also illustrated.

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

A represents the substantially cylindrical wall at the mouth portion of a paper receptacle. The wall A is slightly tapered upwardly but this is immaterial to the invention herein disclosed. A metallic mouth piece is formed to embrace the upper margin of the wall A in clamping relation thereto. This mouth piece comprises an annular strip of metal bent or folded to form an annular member B, capping the upper margin of the wall A with a down turned portion C inclosing the marginal portion of the wall A, and an inwardly turned edge D in clamping engagement with said wall. The strip composing the mouth piece is also downwardly bent on the inner side to form a member E, adapted to embrace the inner surface of the wall of the receptacle A, and the lower marginal portion of this member E is reversely bent to form an inwardly and upwardly turned loop F, which is preferably circularly curved. The edge F′ of the strip on this side is turned in the direction of the member E, thereby forming a partially inclosed annular channel G, the lower portion of which is concavely curved in cross section.

In the construction shown in Fig. 1, I employ a circular cap H, having a downturned marginal flange H′. The cap H is formed of paper or other flexible material, and when the flange H′ is inserted in the pocket G and the cap forced downwardly, the marginal edge of the flange H′ will be bent inwardly following the contour of the channel or pocket G, and will be thereby folded upon itself substantially as indicated by dotted lines in Fig. 1. The edge or margin of the flange H′ may therefore ultimately reach the point indicated by the dotted line at *h*. The cap will therefore be securely interlocked with the mouth piece and, if desired, it may be sealed therein by paraffin or other sealing material, as clearly illustrated in Fig. 5.

It will be observed that the portion E of the mouth piece has a slight conical taper, that is to say, this wall E extends downwardly and outwardly in the form of a slightly tapered cone. I am therefore enabled to use the ordinary disk shaped cap I in a mouth piece of this character, such cap resting upon the edge portion F′ of the inturned margin of the mouth piece and also bearing against the wall E below the portion having the smallest diameter. Where the cap I is employed, it will of course be sprung into position in the usual manner followed when inserting the caps in ordinary glass milk bottles.

Referring to Fig. 4, it will be observed

that the mouth piece is split, as indicated at J, whereas in Fig. 3 it is shown as comprising an integral ring. The split mouth piece is particularly adapted to be used with receptacles, the walls of which have sufficient strength to connect the separated ends of the mouth piece and prevent them from spreading at the point J.

In Fig. 6 I have illustrated a slight modification of the mouth piece shown in Figs. 1 and 2, which consists merely in bending the inner margin F′ of the metal strip outwardly until it approximately bears against the member E. This form of construction will of course only be used where it is not desired to use the caps H, shown in Fig. 1.

I claim—

1. The combination with a receptacle, having an annular wall constituting a mouth portion, of a mouth piece covering the upper margin of said wall and comprising a strip of suitable material provided with circular outer and inner members embracing said wall, the inner member having a conically tapered wall converging upwardly and said inner member being also provided with an inturned flange at its larger or lower end, comprising the inner marginal portion of said strip, and constituting a cap receiving rest.

2. The combination with a receptacle, having an annular wall constituting a mouth portion, of a mouth piece covering the upper margin of said wall and comprising a strip of metal provided with circular outer and inner members embracing said wall, the inner member having conically tapered walls converging upwardly, and said inner member being also provided with an inturned circularly curving flange at its larger or lower end, comprising the inner marginal portion of said strip of metal and constituting a cap receiving rest, said flange being also turned upwardly along a curved line and forming a channel adapted to receive a cap flange.

3. The combination with a conically tapered paper bottle, having an annular wall constituting a mouth portion, of a mouth piece covering the upper margin of said wall and comprising a strip of metal provided with circular outer and inner members embracing said wall, the inner member having a slight conical upward taper, and said inner member being also provided with an inturned flange at its larger or lower end, comprising the inner marginal portion of said strip of metal and constituting a cap receiving rest, said flange extending along a curved line inwardly, upwardly and outwardly, substantially as described.

4. The combination with a receptacle, having an annular wall constituting a mouth portion, of a circular strip of metal folded over the upper margin of said wall and clamped upon its inner and outer surfaces, the inner margin of said strip being inwardly, upwardly and outwardly turned; and the portion of said strip which is clamped upon the surface of the receptacle wall being slightly enlarged immediately above the shelf formed by said margin.

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

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