

BOTTLE CLOSURE AND SEAL.
APPLICATION FILED JAN. 4, 1909.

Patented Dec. 7, 1909.

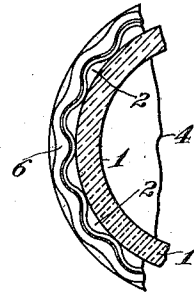


Fig. 3.

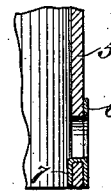
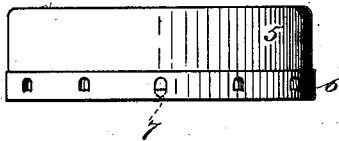


Fig. 4.

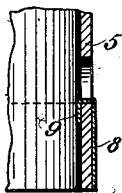


Fig. 5.

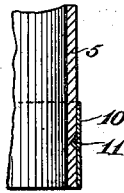


Fig. 6.

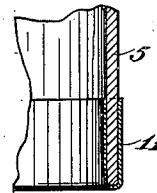


Fig. 7.

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BOTTLE CLOSURE AND SEAL.

942,421.

Specification of Letters Patent.

Patented Dec. 7, 1909.

Application filed January 4, 1909. Serial No. 470,646.

To all whom it may concern:

Be it known that we, OLOF N. TEVANDER and ARTHUR MANIERRE, citizens of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Bottle Closures and Seals, of which the following is a specification.

Our invention relates to improvements in means for closing and sealing bottles and has for its object to provide a simple and inexpensive device of this character that shall be thoroughly efficient and reliable in use.

A further object of our invention is to provide a closure adapted to cover the top of a bottle and provided with a peripheral and cylindrical depending flange of a sufficient diameter to fit over the bead of a bottle and substantially co-extensive with the surface of said bead. And a further object is to reinforce the closure flange with metal capable of retaining any shape into which it may be formed in order that the edge of the flange may be crimped or corrugated after the cover or closure is in position, thus sealing the bottle.

Other objects will appear hereinafter.

With these objects in view our invention consists in such a novel construction and arrangements of parts all as will be hereinafter fully set forth and more particularly pointed out in the appended claims.

Our invention further consists in certain modifications in the means for reinforcing the flange of the cover or closure of the bottle.

Our invention will be more readily understood by reference to the accompanying drawings forming a part of this specification, and in which,

Figure 1 is a central vertical section showing our invention in its preferred form. Fig. 2 is a transverse section taken on line $x-x$ of Fig. 1. Fig. 3 is a detail side elevation showing the preferred form of cover or closure. Fig. 4 is an enlarged detail sectional view showing a portion of the closure shown in Fig. 3. Figs. 5, 6, and 7 are views similar to that shown in Fig. 4 showing modifications in the metallic reinforcing member and the means for attaching the same to the bottle closure.

Referring now to the drawings 1 indicates a bottle provided with a bead or en-

larged portion 2 at its top. The shoulder 3 is preferably provided in order that a paste-board stopper may be used if desired. The body of the bottle closure 4 is preferably of paste-board or any material of a similar nature, and is provided with a cylindrical depending flange 5 adapted to fit over the bead 2 as shown in Fig. 1, said flange being preferably substantially co-extensive with the surface of said bead.

In order to lock the closure after it has been placed on the bottle a circular metallic reinforcing band 6 is provided and secured to the flange 5 by means of a plurality of hooks 7, the latter being formed in said band. In the formation of the hooks 7 shown in Figs. 3 and 4, the band 6 is first pressed over the flange 5 and a plurality of inverted U-shaped slits punched through the band and flange, and the inverted U-shaped portions thus formed are then bent over to form the hooks 7.

The modified form of band 8 shown in Fig. 5 is similar to band 6 except that hooks 9 similar to hooks 7 are formed in the upper edge of the band 8. In the modified form of band 10 indentures 11 are formed after the band is placed on the flange 5 which operation obviously secures the band in position.

The band 11 in the modification shown in Fig. 7 is U-shaped in cross section and is pressed securely over the edge of the flange 5 forming an effective reinforcement therefor.

In order to lock the bottle closure in position on the bottle and thus seal the same, the lower edge of the band is compressed, corrugated, or crimped by a suitable tool, when the lower portion of the bead 2 will be gripped as plainly shown in Fig. 1.

The bottle may be opened and the seal broken in any desired manner, as, for instance, by making a circular incision in the body portion of the closure for removing a portion of the same; or the band may be pried off with a suitable tool.

While we have shown what we deem to be the preferable forms of our invention, there might be still further modifications without departing from the spirit of our invention.

Having described our invention what we claim as new and desire to secure by Letters Patent is:

1. In a bottle closure and seal, a body por-

tion and a flange depending from the edge thereof, and a reinforcing member secured to said flange adapted to be compressed, crimped or corrugated, substantially as and for the purposes set forth.

2. In a bottle closure and seal, a circular portion and a peripheral flange depending therefrom, and a reinforcing member attached to said flange capable of being crimped or corrugated, substantially as and for the purposes set forth.

3. In a bottle closure and seal, a circular body portion and a substantially cylindrical flange depending from the periphery thereof, and a reinforcement secured to the lower edge of said flange capable of being crimped or corrugated and of retaining the shape thus formed, substantially as and for the purposes set forth.

4. In a bottle closure and seal, a circular body portion of paste-board, a cylindrical flange integral with and depending from the periphery of said body portion, and a reinforcement secured to said flange adapted to be crimped and to cause said flange to grip the bead of a bottle, substantially as and for the purposes set forth.

5. In a bottle closure and seal, a circular paste-board body portion and an integral cylindrical flange depending from the periphery thereof, and a metallic band secured to the periphery of said flange by means of hooks formed therein, substantially as and for the purposes set forth.

6. In a bottle closure and seal, a circular paper body portion and an integral cylindrical flange depending from the periphery thereof, a metallic band extending to the lower edge of said flange and surrounding the same, and a plurality of fastening hooks formed in said band and adapted to extend

through said flange, substantially as and for the purposes set forth.

7. In a bottle closure and seal, a substantially circular paper body portion and an integral flange extending at right angles from the periphery thereof, and a metallic band or reinforcement secured to the periphery of said flange by means of inwardly and downwardly extending hooks formed therein, the lower edge of said band registering with the lower edge of said flange, substantially as and for the purposes set forth.

8. In a bottle closure and seal, a circular body portion of paper and a peripheral depending flange integral therewith, and a substantially circular metallic reinforcing band secured to the periphery of said flange by means of a plurality of hooks formed in said band and extending inwardly and downwardly therefrom and a plurality of perforated portions in said band and flange adjacent said hooks, substantially as and for the purposes set forth.

9. In a bottle closure and seal, a circular paper body portion and a cylindrical flange depending from the periphery thereof, and a substantially cylindrical sheet metal reinforcing band secured to the periphery of said flange by means of inwardly and downwardly extending hooks formed in the upper edge of said band, substantially as and for the purposes set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

OLOF N. TEVANDER.
ARTHUR MANIERRE.

Witnesses:

JOSHUA R. H. POTTS,
HELEN F. LILLIS.