C. M. CONRADSON.
BOTTLE STOPPER FASTENER.
APPLICATION FILED APR. 13, 1906.

Fig. 1.

Fig. 2.

Fig. 3.

Witnesses:
A. Blank.

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CONRAD M. CONRADSON, OF NEW YORK, N. Y., ASSSIGNOR TO VERNETTE E. PRENTICE, OF NEW YORK, N. Y.

BOTTLE-STOPPER FASTENER.

No. 841,629.


To all whom it may concern:

Be it known that I, CONRAD M. CONRADSON, a citizen of the United States, residing in the borough of Manhattan, city of New York, county of New York, and State of New York, have invented certain new and useful Improvements in Bottle-Stopper Fasteners, of which the following is a specification.

This invention relates to and has for an object to provide an improved stoppered bottle or jar, and particularly to means for securing tapered glass stoppers upon tapered glass seats.

In the drawings accompanying and forming a part of this specification a practicable embodiment of a form of my invention is illustrated.

Figure 1 shows a portion of a bottle in elevation, the neck being shown in vertical central section and a stopper placed therein shown in elevation. Fig. 2 is an enlarged vertical section of the neck and mouth of a bottle; and Fig. 3 is the elevation of a stopper removed, showing the position at about right angles to that shown in Fig. 1.

The bottle (designated in a general way by 5) is shown as having a neck 6, which is provided with a tapered or conical seat 7 for receiving a closure or stopper having a tapered or conical face 8. The mouth of the bottle is shown as provided with an enlarged bead portion 9, which will be occupied, but not necessarily fitted by the shank portion 10 of the stopper. Such shank portion is shown as provided with a protrusion 11, which when the stopper is being placed in position will traverse a longitudinally-disposed groove 12, from which leads a transverse groove 13, the upper face 14 of which latter groove is at a slight angle to the perpendicular of the axis of the bottle. The face 15 of the protruding portion 11 is shown upon a corresponding angle for reducing the liability of chipping these faces when the stopper is placed in position and turned by means, for instance, of the handle portion 16. The engagement of the faces 14 and 15, at least one of these being helicoidal, will firmly press the face 8 upon the seat 7, and the stopper will be held from accidental dislodgement.

By having the conical faces in the neck of the bottle and upon the stopper ground to the same angle and formed so that the stoppers are interchangeable it is possible to provide for the form of locking above described, since there will be sufficient uniformity to make this commercially feasible. The contacting surfaces for the closure of the vessel being formed upon the same angle, these parts will not grind together, as is the case with the bottle-stoppers now in use, which grinding together so securely wedges and locks the stopper in the bottle that its removal at times is impossible. In the present illustration the face 14 occupies a helicoidal position and faces in a downward direction, the stopper-seat 7 facing upwardly when the bottle is in an upright position. The conical seat expands outwardly. The tendency of the stopper 8 to rise from the seat 7 will be prevented by the reaction of the face 15 against the face 14.

It will be noticed that the member 11 projects from that side of the stopper upon which the flat face of the handle portion 16 lies. This is a practicable way of making the stopper, since by placing this projection at such a position one side of the mold may be prepared for it and it may be drawn from the mold easily.

Having described my invention, I claim—

1. The combination with a bottle having an outwardly-expanding conical glass stopper-seat and an angularly-disposed glass reaction-face, of a stopper having a conical glass portion similar in angle to said seat and a glass locking portion for engaging said reaction-face.

2. The combination with a glass vessel having a glass closure-seat, of a glass closure having a glass face for seating on said seat, and said parts having cooperating glass locking means for clamping said glass face and glass seat together in seating relation.

3. A bottle provided with a neck, such neck having a conical glass stopper-seat, the mouth of the bottle having a channel parallel with its axis and an offset from said channel disposed at a slight angle to the perpendicular of said axis, and a stopper having a conical glass portion corresponding with the angle of the seat in said neck and a protruding
glass portion for traversing said channels and locking the stopper in sealing position upon said seat.

4. The combination with a glass vessel having an outwardly-expanding conical closure-seat, the face of which is of glass, of a glass closure having a conical portion, the face of which is of glass, seated directly upon said closure-seat for sealing the said vessel, and cooperating locking members carried by said vessel and closure for locking said glass faces together in sealing relation.

Signed at Nos. 9 to 15 Murray street, New York, N. Y., this 2d day of April, 1906.

CONRAD M. CONRADSON.

Witnesses:

FRED. J. DOLE,

JOHN O. SEIFERT.