

T. W. WARREN.
BOTTLE STOPPER.
APPLICATION FILED JULY 31, 1911.

1,014,427.

Patented Jan. 9, 1912.

FIG. 1

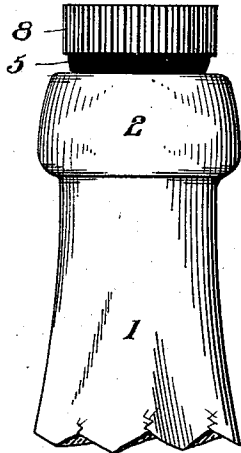


FIG. 2

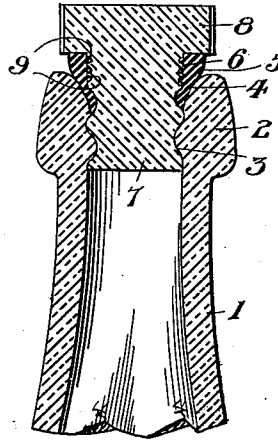


FIG. 4

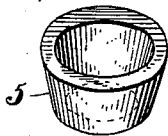
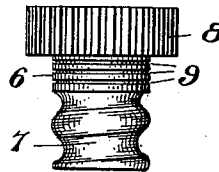


FIG. 3



WITNESSES:
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UNITED STATES PATENT OFFICE.

THOMAS W. WARREN, OF POINT MARION, PENNSYLVANIA, ASSIGNOR OF ONE-FOURTH
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BOTTLE-STOPPER.

1,014,427.

Specification of Letters Patent.

Patented Jan. 9, 1912.

Application filed July 31, 1911. Serial No. 641,553.

To all whom it may concern:

Be it known that I, THOMAS W. WARREN, a citizen of the United States of America, residing at Point Marion, in the county of Fayette and State of Pennsylvania, have invented certain new and useful Improvements in Bottle-Stoppers, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to bottle stoppers, and the object of my invention is to provide a bottle stopper that can be detachably mounted in the neck of a bottle to hermetically seal the same.

15 My invention aims to provide a stopper that can be screwed into the neck of a bottle or other receptacle, and the stopper is furnished with a gasket of compressible material that is compressed in the mouth of the bottle to form an airtight and non-leakable connection between the stopper and the bottle neck.

25 The invention will be hereinafter specifically described and then claimed, and reference will now be had to the drawing, wherein:

30 Figure 1 is a side elevation of a portion of a bottle provided with the stopper, Fig. 2 is a vertical sectional view of the same, Fig. 3 is a side elevation of a detached stopper, and Fig. 4 is a perspective view of a detached gasket.

35 The reference numeral 1 denotes a bottle neck having a rim 2 with the inner walls thereof provided with screw threads 3 of the "Whitworth" type having rounded tops and bottoms. The uppermost thread is at a point removed from the upper edges of the rim 2, and the upper inner edges of the rim 2 are cut away or flared, as at 4 to provide a seat for a gasket 5. The gasket 5 is made of compressible material, as rubber and tapers from the upper end thereof to the lower end. The gasket is mounted upon the 45 shank 6 of an exteriorly threaded stopper 7, said stopper having threads corresponding to the threads of the rim 2. The gasket 5 is of the same thickness from end to end.

The upper end of the shank has a knurled circular head 8, and said shank is provided 50 with circumferentially arranged grooves 9 into which portions of the gasket 5 are adapted to extend, whereby the gasket 5 will be frictionally held upon the shank 6.

When screwing the stopper into the bottle neck, the lower edges of the gasket 5 are compressed upon the seat 4 of the rim 2 with the lower edge of the gasket wedged in the uppermost threads of the stopper and the uppermost thread of the rim 2, thereby providing a non-leakable connection between 60 the stopper and the bottle.

It is preferable to make the stopper of a vitreous material, as glass, and the resilient gasket has the advantage of preventing the stopper from being screwed too tightly in the rim of the bottle, consequently the glass can not be fractured.

What I claim is:—

In a bottle stopper the combination with 70 a bottle neck having the throat thereof at its outer portion provided with threads and flared to form a seat, of a cylindrical shank having its inner portion formed with threads engaging with the threads of the throat and having its outer portion formed with circumferential grooves, the inner end of said shank being of the same diameter as the outer end, a head integral with the outer end of the shank and in connection with the 80 latter constituting a closure, and a tapering gasket formed from a resilient body of the same thickness from end to end, said gasket mounted against and projecting above said seat and surrounding said grooves and compressible upon the seat by the shank and head when said shank is screwed inwardly, said gasket entering said grooves and when 85 compressed providing a seal for the mouth of a bottle.

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

THOMAS W. WARREN.

Witnesses:

AMIE QUINIF, Jr.,

WILLIAM A. MILLER.