A. L. WEISSENTHANNER.

RECEPTACLE CLOSURE.

APPLICATION FILED JULY 21, 1910.

1,049,625. Patented Jan. 7, 1913.

Fig. 1

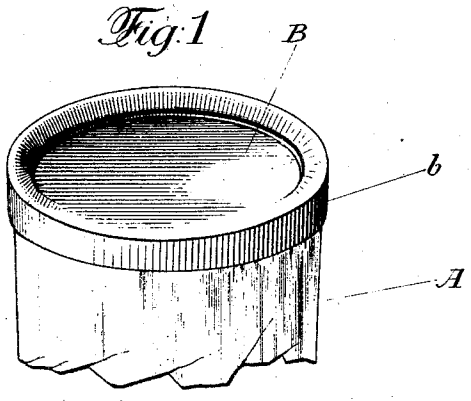


Fig. 2

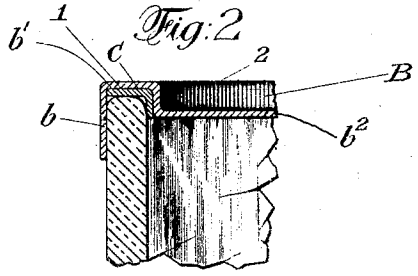
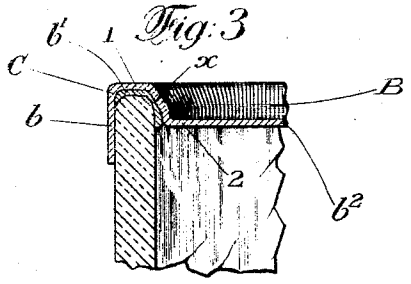


Fig. 3



Witnesses:

R. Timbrook

Joseph Schaffenberger

Inventor

Alfred L. Weissenthanner

UNITED STATES PATENT OFFICE.

ALFRED L. WEISSENTHANNER, OF BAYONNE, NEW JERSEY.

RECEPTACLE-CLOSURE.

1,049,625. Specification of Letters Patent. Patented Jan. 7, 1913.

Application filed July 21, 1910. Serial No. 573,086.

To all whom it may concern:

Be it known that I, ALFRED L. WEISSENTHANNER, a citizen of France, and resident of Bayonne, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Receptacle-Closures, of which the following is a specification.

This invention relates to an improvement in metallic covers for glass receptacles such as are ordinarily used for preserving jellies, and the like; my improvement being especially applicable to that type of cover in which a yielding packing ring is employed, and atmospheric pressure relied upon to compress such ring against, and hold the cover securely in sealing engagement with, the upper edge of the receptacle. This mode of sealing is known as the vacuum process. In the practice thereof the receptacle with the cover loosely applied thereto is introduced into a closed chamber; air is then exhausted from the chamber to create a vacuum within the receptacle, and thereafter air is permitted suddenly to enter the chamber. Theoretically by this process the packing ring should effect the reliable sealing of the receptacle, but practically the seal is defective when the ordinary glass receptacles of commerce are employed. After much experimentation I have found that the trouble arises from the presence in the upper edge of the glass receptacle of minute crizzles, which notwithstanding the pressure of the packing thereon eventually permit the ingress of air to the receptacle.

My aim, therefore, is to overcome the serious objection mentioned, and to that end I so construct and apply the cover that the packing thereof is forced tightly against the upper inner edge of the receptacle and on a plane below the crizzles, as will hereinafter appear.

In the drawings—Figure 1 is a perspective view of my improved metallic cover as applied to an ordinary glass receptacle. Fig. 2 is a transverse section through one side of the cover and glass preparatory to the exhaustion of the air from the latter. Fig. 3 is a similar section after the air has been exhausted and the cover finally shaped.

A designates an ordinary glass receptacle, and B the cover applied to the mouth thereof. This cover comprises a metallic disk having its circumferential portion flanged and shaped to provide a depending rim b and an annular groove or channel b^1 adapted respectively to embrace and receive the upper edge of the receptacle, the inner or body portion b^2 of the disk being depressed to lie within the inner diameter of the mouth of the receptacle. In pursuance of my invention I apply a rubber composition C within the annular groove or channel of the cover in such manner that the composition coats the roof, 1, and the inner side wall, 2, of the groove or channel with a thin film. This cover is first applied to the receptacle in the usual manner (as in Fig. 2) and therewith introduced to the vacuum chamber. Immediately after the air has been exhausted from the latter, the roof 1 and side wall 2 of the grooved portion of the cover are forced downwardly and outwardly by a suitable mechanical device so as to press the contained composition uniformly around and against the opposing surface of the receptacle and on a line as at x below the crizzles in the upper edge of the glass. There is thus produced adjacent the rim of the cover a beveled or inclined coated portion which is maintained in close contact with the opposing wall of the receptacle by the external pressure, thereby insuring the hermetical sealing of the receptacle.

I claim—

The combination with a glass receptacle having a plain open mouth, of a cover sealing the same by atmospheric pressure, said cover comprising a thin metallic disk having a circumferential rim, an annular groove or channel adjacent thereto, and a centrally depressed body portion, the top and inner side wall of said groove or channel being coated with a thin film of packing composition, and being repressed to inclined or beveled form around the inner upper edge of the receptacle after the cap is applied to and the air exhausted from the receptacle, whereby the composition on the inner side wall is forced downwardly and outwardly into close sealing engagement with the opposing inner surface of the receptacle and on a line below the crizzles in the upper edge of the glass.

ALFRED L. WEISSENTHANNER.

Witnesses:

R. TIMBROOK MOTT,

JOSEPH SCHARFENBERGER.