G. A. PLATZ.

MOISTUREPROOF CLOSURE.

APPLICATION FILED JULY 18, 1919.

1,364,640. Patented Jan. 4, 1921.

Fig. 1.

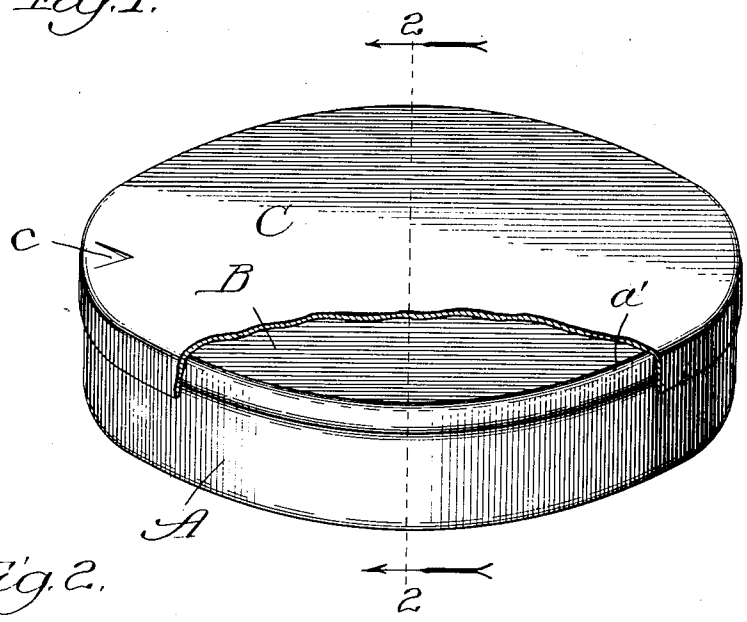


Fig. 2.

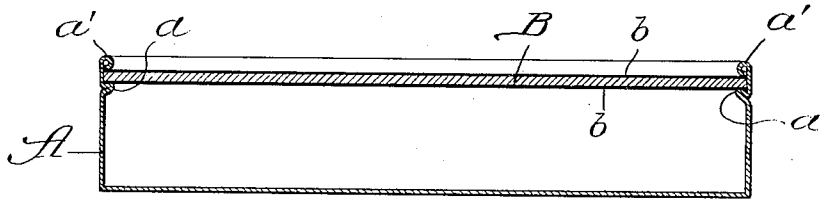
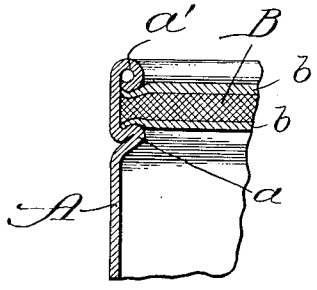


Fig. 3.



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MOISTUREPROOF CLOSURE.

1,364,640. Specification of Letters Patent. Patented Jan. 4, 1921.

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To all whom it may concern:

Be it known that I, GEORGE A. PLATZ, a citizen of the United States, residing at Racine, county of Racine, State of Wisconsin, have invented certain new and useful Improvements in Moistureproof Closures, of which I do declare the following to be a full, clear, and exact description, reference being had to the accompanying drawing, forming a part of this specification.

The present invention has for its object to provide a simple, cheap and effective moistureproof closure which while especially well adapted for the shipment of such articles as malted milk tablets, confections or the like, may be found suitable for a variety of other articles in the shipment of which it is desired either to retain the contents of the closure against access of moisture or to prevent the evaporation of moisture from such contents.

Figure 1 is a perspective view showing a closure embodying my invention, a portion of the top of the closure being broken away. Fig. 2 is a view in vertical cross section on line 2—2 of Fig. 1. Fig. 3 is an enlarged detail view in vertical section through one of the side walls of the closure and through a portion of the disk forming the cover thereof.

The metal body A of the closure is provided adjacent its top with an internal shoulder *a* that is formed by crimping in the metal at such point, this shoulder *a* having an upward inclination, as is clearly shown in Fig. 3 of the drawing, so that the inner upper edge is slightly raised to enable it to more effectively engage with the cover B and embed itself in the surface wax upon the under side of the peripheral portion of this cover, as will hereinafter more fully appear. The cover B is formed of somewhat soft and compressible paper or like stock (such, for example, as the paper stock commercially known as "milk board"), having a heavy surface coating of paraffin or like wax. In the large detail view Fig. 3 of the drawing, the surface coating of wax upon opposite sides of the disk is designated *b*. In practice, the surface coating of the cover B may be effected by applying to the cover melted paraffin in such manner and in such quantity as to produce a substantial surface film thereon.

After the contents, for example, malted milk tablets, have been placed within the body of the closure A, the cover B will be set in place so that it will snugly fit within the top of the body A, the peripheral portion of the cover resting upon the shoulder *a*. The part *a'* of the body A above the shoulder *a* will then be bent or crimped inwardly and downwardly as shown in Fig. 3, thereby causing the reverted edge of the portion *a'* to tightly clamp the peripheral edge portion of the cover B against the shoulder *a*. As the portion *a'* is thus forced downwardly against the cover B, it compresses both the body of the cover B and the surface coating of wax upon the opposite sides of the cover adjacent its peripheral edge, thus causing the raised inner edge portion of the shoulder *a* to indent and be embedded in the film of wax upon the under side of the cover, while the portion *a'* presses into the coating of wax upon the upper surface of the cover B. By thus compressing the peripheral edge portion of the cover B between the shoulder *a* and the inturned flange or portion *a'* above it, the surface coating of wax is caused to spread and to tightly seal the joint about the peripheral portion of the cover B, the edge of the cover being slightly deflected as shown in Fig. 3 and the wax being forced into the space adjacent the curved inner edge of the portion *a'* and into the space adjacent the outer edge of the shoulder *a*, thus tightly sealing the joint about the peripheral portion of the cover. By thus employing a disk of compressible paper stock that has a substantial surface coating of wax as the cover for the closure, an effective sealing of the joint between the cover and the body of the closure is insured, notwithstanding any slight irregularities in the sheet metal of which the body A is formed, or in the operation of the machinery by which the fixing of the cover in place is effected.

When the contents of the closure are to be withdrawn, the cover will be cut along its peripheral edge. This may be effected by employing for the closure a top C of familiar form that is provided with a cutter *c*, formed as a V-shaped prong lying normally in the plane of the top C but adapted to be bent inwardly for use in severing the cover B. Ordinarily, tops C of this character fit

the body of the closure loosely so that as the body is held in one hand and the top revolved by the other hand, the cutter *c* will puncture and sever the cover B adjacent its periphery.

As far as I am aware, my invention presents the first instance of a closure having a cover formed of compressible stock, the cover being provided with a substantial surface film of wax and being adapted, when the edge of the cover is compressed between the internal shoulder and the inwardly projecting portion of the closure, to insure an effective sealing of the cover.

What I claim as new and desire to secure by Letters Patent is:—

A closure of the character described, comprising a sheet metal body formed adjacent its top with an internal shoulder, a cover formed of a compressible disk having a substantial surface film of wax and resting upon said shoulder, said body being provided above said shoulder with an inwardly projecting portion between which and said shoulder said disk is tightly clamped, the surface wax being spread to seal the joint about the peripheral portion of the cover.

GEORGE A. PLATZ.