Nov. 5, 1946. A. S. LEITNER 2,410,585

LEAKPROOF POWDER CASE

Filed March 3, 1945

Fig. 1.

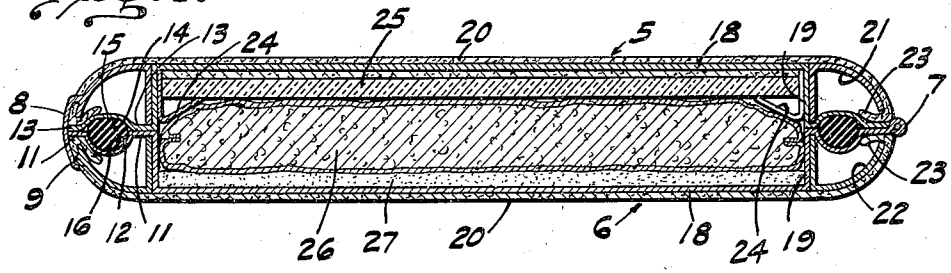


Fig. 2.

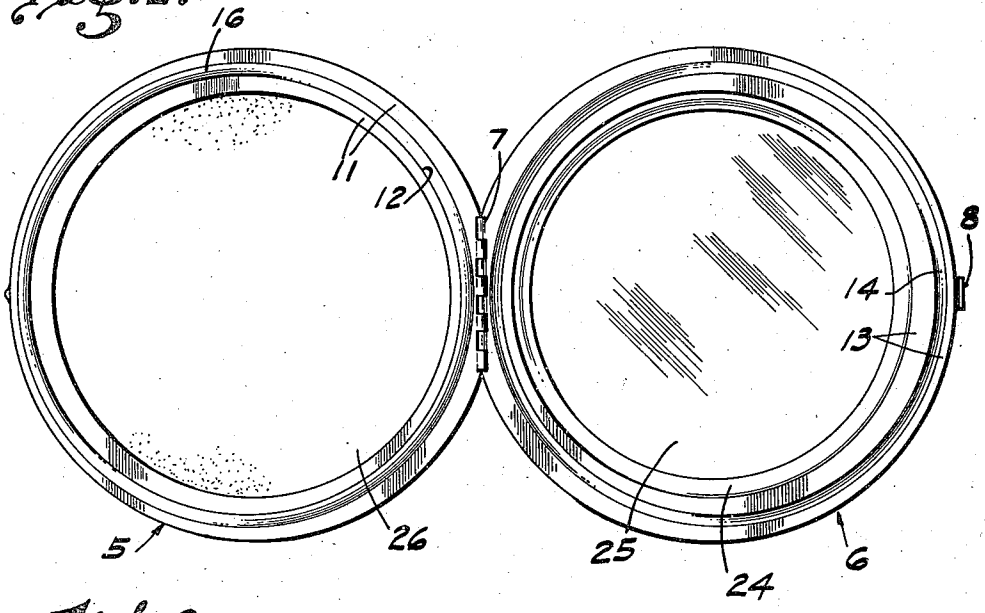
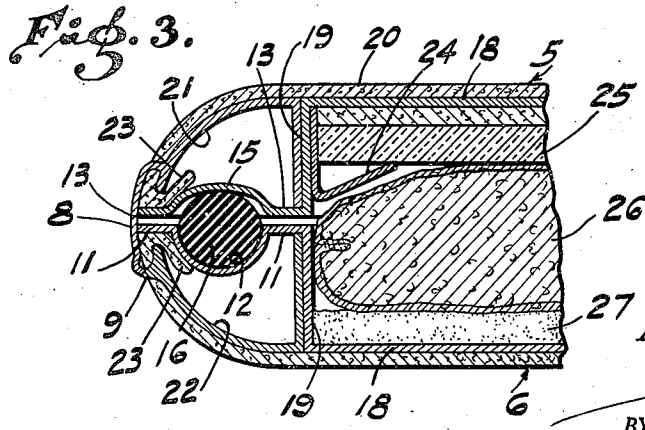


Fig. 3.



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LEAKPROOF POWDER CASE

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3 Claims. (Cl. 220—46)

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This invention relates to a leakproof powder case.

One of the present drawbacks of ladies' compacts is the tendency of the face powder contained in them to leak out between the hinged together members which are ordinarily used to form the casing of such articles, and soils the linings of expensive purses and handbags, as well as to damage or smear the contained articles.

It is one of the objects of this invention to overcome this defect by providing a leakproof powder case.

More specifically speaking it is an object of the invention to provide a toroidal ring made of compressible material, for example, sponge rubber, and so to position said ring within the article that it functions as a superior gasket to keep the powder from creeping out between juncture of the closed lid with the remainder of the article.

Another object of the invention is to eccentrically mount the sealing ring in relation to the lid and body portion of the case (both of which are circular) so that a greater convenience of manufacture and more economical use of material will result.

Still another object is to provide an improved means for gripping the ring between the body portion of the casing and the closed lid whereby the gasket is pressure deformed in a superior manner to produce the desired sealing effect.

Other objects, advantages and features of invention will hereinafter appear.

Referring to the drawing which illustrates what is at present deemed to be a preferred embodiment of the invention,

Fig. 1 is a diametrical midsection of the complete device, showing the same in a closed condition.

Fig. 2 is a plan view showing the device in open position, the scale being smaller than that of Fig. 1.

Fig. 3 is an enlarged fragmentary section showing the relation of the free portion of the hinged lid to the adjacent part of the body portion of the device and of the gasket. This view illustrates the novel, improved manner in which the gasket-compression groove in the lid is shaped so as more efficiently to deform only one side portion of the ring when the lid is completely closed.

Referring in detail to the drawing, the powder case therein shown comprises two circular members 5 and 6 which are hinged together at one side by a conventional hinge 7, the lid section 6 having its free side portion furnished with a

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resilient catch arm 8 the free end portion of which cooperates with a locking lug 9 carried by the body member 5. Said body member has a two-part flat area 11 extending along the inner face of its marginal portion, the two parts of this flat area being separated by a semicircular groove 12. The lid section 6 likewise has a two-part flat marginal portion 13, the two parts of which are separated by a groove 14, this groove, however, being of less depth than the groove 12, the depth of said groove 14 being decreased, preferably by reason of it being flattened at 15 along its deepest portion, as shown.

The reason for providing the groove 14 with the flattened strip 15 along its deepest portion is to cause the toroidal, compressible gasket, or sealing ring 16, permanently seated in the groove 12, to be compressed in such a manner as to form a more positive seal when the two casing members 5 and 6 are in the fully closed relation to each other.

The aforesaid grooves 12 and 14 are each of them (as to surface area) of the same size and shape, so that they will truly register with each other when the article is in its closed condition. but these grooves are so positioned as to avoid the necessity of widening the aforesaid flat surface portions 11 and 13 of the members 5 and 6 adjacent to the hinge 7 to provide additional stock for the formation of the latter. In order to accomplish this purpose each of said grooves is disposed eccentrically in relation to the annular flat surface in which it is formed, each groove being, adjacent to the hinge, closer to the inner than to the outer side of the flat annular area in which it is formed, and each groove having its opposite side portion disposed closer to the outer than to the inner side of the flat space which it occupies.

The hinged together members 5 and 6 may be made out of a sheet material produced either from metal or from a metal substitute. Said members may be described as angularly dish shaped, being each shown in the drawing with a flat central portion 18 integrally surrounded by a flange 19 which is directed inwardly at a right angle, the already described grooved portions, as to their general directions, extending outwardly at a right angle in relation to said flanges. and being integral with them.

Leather, or leather like covers 20 are shown cemented to the exterior surface of the device, annular sheet metal inserts 21 and 22, angular in cross section, being secured to the outer faces of flanges 19 to clamp in place the marginal

portions 23 of said covers 20. These metal inserts 21 have their outer portions curved as shown, in order to give a streamline appearance to the case as a whole. To the inner face of the upper flange 19 is secured an annular, angular bracket 24 for securing in place a circular mirror 25.

A powder puff 26 is shown overlying a layer of powder 27 to fill the case in the usual manner.

What is claimed is:

1. A leakproof powder case comprising two hinged together members having marginal portions with flat areas extending around them adapted to be brought into mated contact to close the case, one of said members having along its said area a groove which is semicircular in cross section, and the other of said members having along its said flat area a groove of lesser depth than said semicircular groove, said grooves registering with each other when the case is closed, and a toroidal ring having one of its side portions sealed permanently in said semicircular groove and having its opposite side portion when

uncompressed projecting above the first recited groove and deformable sufficiently to form a positive seal when said two members are swung completely together.

2. The subject matter of claim 1, and said groove which is of lesser depth having its deepest portion flattened.

3. In a leakproof powder case, two circular members having each a peripheral edge portion connected to that of the other by a hinge, said members having annular marginal face portions which abut when the device is closed, there being in each of said marginal portions a groove which matches with that of the other, each of said grooves being eccentrically positioned in relation to said circular members, so as to be offset from the hinged portion of the device, thereby providing additional space to be occupied by said hinge, and a sealing ring permanently mounted in one of said grooves to form a seal when the device is in a closed condition.

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