April 6, 1943. R. NYDEN 2,315,647

CONTAINER

Filed March 11, 1942

Fig. 2

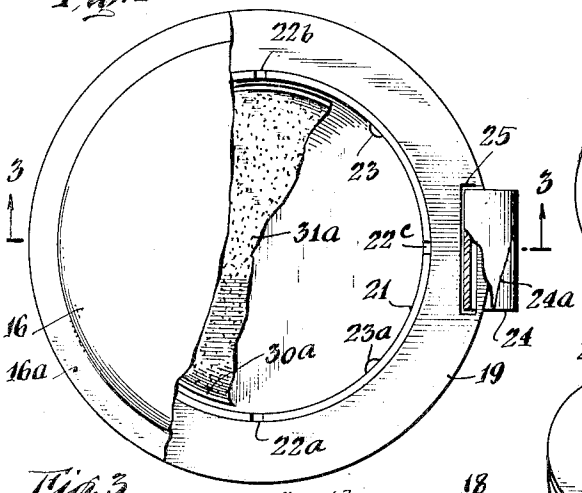


Fig. 1

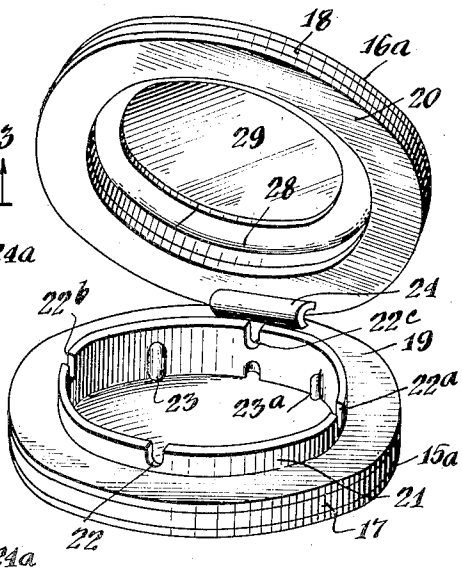


Fig. 3

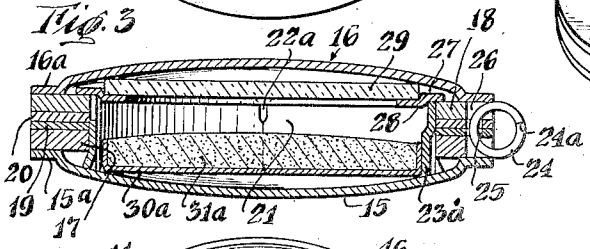


Fig. 4

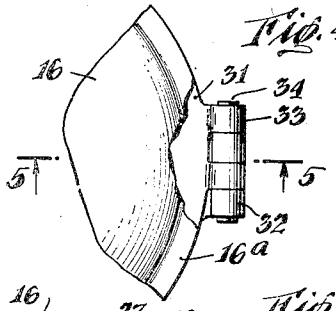


Fig. 7

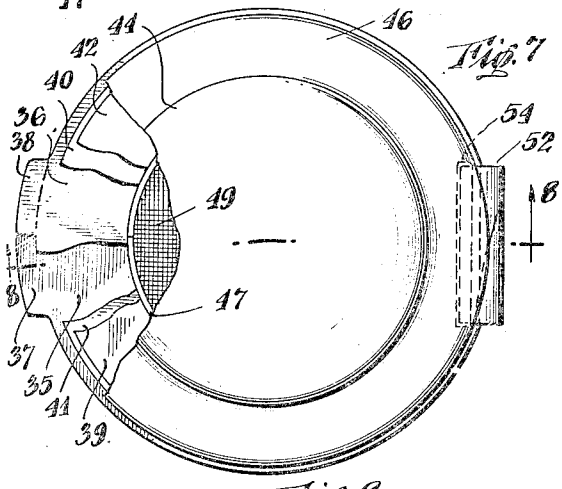


Fig. 5

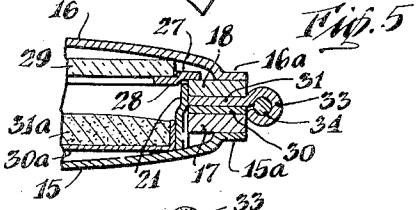


Fig. 6

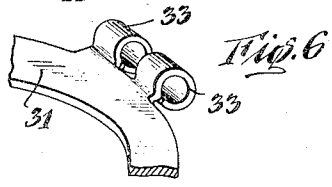
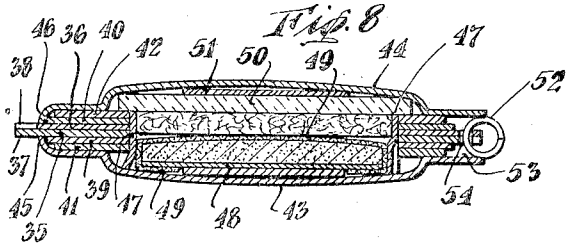


Fig. 8



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2,315,647

CONTAINER

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Application March 11, 1942, Serial No. 434,165

3 Claims. (Cl. 132—83)

This invention relates to a new and improved container or the like and particularly relates to that type of container which is designed for holding cosmetics such as face powder, rouge, etc. In the past it has been customary to make such containers from metal which lends itself to ready forming by automatic machinery. However, in view of the present necessity of diverting metal to war needs and the resulting scarcity of such material in the field of civil manufacture, cosmetic manufacturers have been confronted with a very grave problem in providing suitable containers for their products. This problem is rendered more acute by the exacting requirements and fastidiousness of customers for this class of goods.

An object of the present invention is to provide a container utilizing entirely or to a substantial degree, materials not essential to the war effort, while at the same time sacrificing nothing in the appearance, utility or lasting qualities of the container. As a matter of fact, in several ways the appearance and utility of the container have been enhanced.

A further object is that of providing a container of this character which may be readily assembled by means of automatic machinery and with relatively unskilled labor.

A further object is that of providing a container formed of materials which are particularly suited to decoration and which can be artistically finished so as to form a very pleasing article in which sales appeal is greatly increased.

Another object is that of providing a container of this type which is suited for use either with the so-called "cake" cosmetics or the sifter or loose powder type, and which is substantially leakproof when used with either type cosmetic.

With these and other objects in mind, reference is had to the attached sheet of drawings, in which:

Fig. 1 represents a perspective view of a container in partially open position and embodying one form of the invention;

Fig. 2 is a top plan view of the container shown in Fig. 1 partially broken away to show details of inner construction;

Fig. 3 is a vertical cross section taken along the line 3—3 of Fig. 2 looking in the direction of the arrows;

Fig. 4 is a fragmentary view of a modified hinge construction suitable for use in connection with the container previously illustrated;

Fig. 5 is a cross section taken substantially on the line 5—5 of Fig. 4, looking in the direction of the arrows;

Fig. 6 is a fragmentary perspective view of a portion of the hinge structure shown in Figs. 4 and 5.

Fig. 7 is a top plan view of a slightly modified form of container partially broken away to reveal details of construction; and

Fig. 8 is a cross section taken substantially along the line 8—8 of Fig. 7 looking in the direction of the arrows.

Turning now to Figs. 1, 2 and 3 there is shown a container formed with lower and upper body portions 15 and 16. These members are made of any desirable material, preferably of paper, cardboard, fiberboard, or the like, and as illustrated, may be domed slightly so as to present convex outer surfaces and concave inner surfaces. Each of these sections has a plane annular rim as shown at 15*a* and 16*a*. Bearing against such annular rims, on the inner side thereof, are spacer rings 17 and 18, of greater width than the surfaces of rims 15*a* and 16*a* but of the same outer diameter. These spacer rings are likewise formed of any suitable material, but preferably of paper, fiberboard or cardboard and are secured to the inner surface of the rim portions 15*a* and 16*a* by the use, for example, of an adhesive. Additional spacer rings 19 and 20 are secured to the exposed surfaces of the spacer rings 17 and 18 by adhesive. These rings are preferably thinner than the spacer rings 17 and 18 and may be of a slightly stronger or tougher material so as to resist handling and wear, to present a finished appearance and to provide a sufficiently strong support for the hinge structure for hinging the upper and lower body parts together.

Projecting downwardly into the lower body 15 and frictionally engaging the inner side walls of the spacer rings 17 through 19 is a collar member 21 which may be formed of metal, paper, plastic or any other resilient material. This collar is formed with spaced notches 22, 22*a*, 22*b*, 22*c* in its upper edge and struck out portions 23 and 23*a* in its lower edge. The upper body member 16, carrying the spacer rings 18 and 20, fits over the collar 21 and into engagement with the spacer or side wall rings of the lower body member so that the upper edges of the collar 21 fit in intimate contact with the inner surface presented by the spacer or side wall rings 18 and 20. The notches 22, 22*a*, 22*b* and 22*c* permit contraction of the collar as the top body portion is moved into position, giving a powder tight or sift-proof, friction fit of the parts.

It will be seen from the foregoing description that the flat peripheral flanges 15*a* and 16*a* of the upper and lower body members are angularly disposed to the outwardly convexed or domed body parts 15 and 16 respectively and that the laminated wall structure is attached directly to the inner faces of these flat flanges, whereby said flanges form a part of the laminated wall structure. This is a particularly advantageous structure because it reinforces and rigidifies the container making it capable of withstanding the stresses in use and making it possible to utilize light or thin materials, such as cardboard or other fibrous materials, and entirely avoiding the use of metals. Additionally, this improved structure lends itself very well to mass production, such as by means of automatic machinery. At the same time, a very attractive external appearance is presented.

A hinge member 24, formed of plastic, fiberboard or other material and having, for example, a diagonal opening or division line 24*a* running through its length is provided and is received in aligning openings 25 formed in the spacer rings 19 and 20, spacer rings 17 and 18 being cut away as at 26 to afford a recess for partial accommodation of the hinge member 24. The upper body 16 carries in its interior a reflective mirror surface 29 of any suitable material held in place by the bezel 27 which is offset at 28 to form a shoulder for accommodating said mirror.

In Figs. 4 through 6, a modified hinge construction for the two body members is shown, in which the spacer rings 30 and 31, carried by the lower and upper body member portions respectively, are formed with extensions 32, 33 designed to receive a pivot pin 34 and thus resemble a conventional hinge assembly. In this instance, the spacer rings 30 and 31 should preferably be made of a plastic or a fiber board having characteristics that readily lend themselves to proper forming treatment for such a purpose.

In the modified embodiment of Figs. 7 and 8 the spacer rings 35 and 36, carried by the lower and upper body members respectively, are provided with portions 37 and 38 which extend slightly beyond the outer edge of the container and provide finger gripping members to facilitate opening the container. These spacer rings 35 and 36 as shown preferably overlie and underlie additional spacer rings 39, 40, 41 and 42, all of which are formed of paper or cardboard and may be held together by suitable adhesives. The outer annular rims or flanges of lower body portion 43 and the upper body portion 44 in turn are positioned in contact with the outer spacer rings. The annular rim or flange 45 of the lower body member 43 and the annular rim or flange 46 of the body member 44 each has a turned over lip portion which covers the spacer rings 39, 41 and 40, 42 respectively and seals against the outer edges of these rings and of the spacer rings 35 and 36. A collar member 47 is positioned in the lower body portion 43 and frictionally bears against the inner surface of the spacer rings 35, 39, 41 as in the previously described container, and in this embodiment, a powder receptacle 48 covered by a screen or mesh 49 is inserted inside the collar so that loose powder can be dispensed therefrom. A mirror 50 is positioned in the upper surface of the container body 44 and a spacing member 51 located back of the mirror, provides against a collapsing of the domed portion of the body 44. The hinge 52 engages the spacer rings 35 and 36 through the opening 54 provided therein and a recess 53 in the spacer rings 39, 40, 41 and 42, partially accommodates said hinge member.

In operation, the containers described in the several views can be used interchangeably for cake powder or loose powder. If, as is shown in Fig. 3, cake powder is used, the same is usually available in a holder 30*a* which presses into the inside of the collar 21 and against the struck out portions 23 and 23*a* and is thus held in place. Powder 31 is then available for use. On the other hand, when loose powder is preferred, the arrangement just explained in connection with Figs. 7 and 8 is resorted to. In any case the collar 21 or 47 makes a tight friction fit with the inner surfaces of the laminated wall structure so as to make a sift-proof joint and to hold the body members in closed position.

Thus, it will be seen that the objects of my invention have been achieved and that these structures with the many re-arrangements of the parts that can be resorted to all meet the spirit of my invention as heretofore described.

I claim:

1. In a container, in combination, two complementary body members one of which is outwardly domed at its central portion and has a marginal outwardly extending flat peripheral reinforcing flange and the other of which is provided with a side wall extending therearound and having an interior surface extending around the interior, a substantially flat spacer member extending along and secured to the inner surface of said flat peripheral reinforcing flange so as to cooperate therewith to form a laminated side wall for the container having an inner surface extending around the interior thereof substantially in alignment with said first mentioned interior surface, a second substantially flat spacer member similar to the first and attached to form a part of said laminated side wall, said second spacer member being made of tougher material than the first mentioned spacer member and having a peripheral part extending outwardly beyond the adjacent outer edge of said first mentioned spacer member to form a hinge connection, a separate interior collar in fixed engagement with the inner surface of said laminated side wall and forming therewith a sift-proof joint, said collar extending beyond said laminated side wall into frictional engagement with said first mentioned interior surface of the body member to hold said body members frictionally in closed position, and a hinge member connecting said body members together and including a connecting member having individual structural attachment to said peripherally extending part of said tough spacer member, said spacer member at the outer face of the side wall having an outwardly extending manipulating projection for assisting in opening the container.

2. In a container, in combination, two complementary body members one of which is outwardly domed at its central portion and has a marginal outwardly extending flat peripheral reinforcing flange and the other of which is provided with a side wall extending therearound and having an interior surface, a substantially flat spacer member extending along and secured to the inner surface of said flat peripheral reinforcing flange so as to cooperate therewith to form a laminated side wall for the container having an inner surface extending around the interior thereof substantially in alignment with said first mentioned interior surface, a second substantially flat spacer

member similar to the first and attached to form a part of said laminated side wall, said second spacer member being formed of a tougher material than that of the first spacer member and having a peripheral part extending outwardly beyond the adjacent outer edge of said first mentioned spacer member to form a hinge connection, said second spacer member forming the outer face of said side wall, and a hinge member connecting said body members together and including direct structural attachment to said peripherally extending part of said tough spacer member.

3. In a container, in combination, two complementary body members each having an outwardly domed part and each having an outwardly extending peripheral flat reinforcing flange angularly disposed to the domed part, a substantially flat spacer member extending along and secured to the inner surface of each of said peripheral reinforcing flanges so as to cooperate therewith to form a laminated side wall for each of the body members of the container, a second substantially flat spacer member for each said body member similar to the first mentioned spacer members and attached to form a part of said laminated side wall of each body member, said second spacer members having peripheral parts extending outwardly beyond the adjacent outer edges of said first mentioned spacer members, a hinge member connecting said body members together including direct structural attachment to said peripheral extending parts of said second spacer members, and a mirror retainer positioned adjacent to the inner domed part of one of said body members and having outer marginal parts overlying one of said first mentioned spacer members for supporting said retainer in operative position.

ROBERT NYDEN.