G. P. ALTENBERG.
CASING FOR BOTTLES AND THE LIKE.
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Witnesses:
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To all whom it may concern:

Be it known that I, GEORGE P. ALTENBERG, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Casings for Bottles and the like, of which the following is a specification.

My invention relates to casings for bottles and the like, and is shown as applied to a carafe.

In structures of this character, the bottle or container is made of fragile material, such as glass, and the casing is usually made of metal.

It is the object of my invention to provide novel means whereby the container is securely held in the casing.

The invention will be further readily understood from the following description and claims, and from the drawing, in which latter:

Figure 1 is a side elevation of my improved device, partly in central axial section on a line corresponding to the line 1-1 of Fig. 4, and partly broken away. Fig. 2 is a cross-section of the casing of my improved device, taken on a line corresponding to the line 2-2 of Fig. 1, the container being shown in plan view. Fig. 3 is a detail in cross-section on a line corresponding to the line 3-3 of Fig. 1. Fig. 4 is a bottom view of my improved device, partly broken away; and, Fig. 5 is a detail in section on the line 1-1 of Fig. 4, showing, in full lines, the relation between the container and cushion when the casing-members are fully assembled, and showing their relation in dotted lines when the pins are in position to enter the inclined slots.

20 represents the container, usually of fragile material, as glass. It is instanced as a carafe of the vacuum heat-insulated type.

21 represents the casing, which is preferably formed up from sheet metal, and comprises an upper member 22 and a lower member 23. The upper member is provided with an opening 24 through which the neck of the container projects. The connection and present a pleasing appearance, I provide the adjacent ends of said members with overlapping annular flanges 26, 27, the flange 26 being shown as an outer flange on the upper member, and the flange 27 being shown as an inner flange on the lower member. Above the flange 26 there is an annular bead 28 and below the flange 27 there is an annular bead 29. The upper wall 30 of the annular bead 29 extends inwardly to a greater extent than the lower wall 31 of the upper bead. The difference between the widths of the said adjacent walls of said beads is preferably equal to the thickness of one of the flanges. That is to say, the adjacent walls of the beads 28, 29, are of unequal radial extension, the wall from which the inner flange projects being of a width greater than the adjacent wall of the bead from which the outer flange projects, equal to the thickness of said outer wall, so that in outward appearance the said beads are of substantially equal cross-section. For connecting said members, I provide the outer flange with inward protuberances 36, shown in the form of pins, which cooperate with inclined slots 37 in the inner flange. Each of these inclined slots merges into a recess 38 located in the longitudinal projection of the inner flange formed by a local bulge 39 of the upper wall at the upper end of said inclined slot.

41 is a pin which passes through a hole 42 in said inner flange and is normally pressed outwardly by a spring 43 secured to the inner face of said inner flange, as by a rivet 44. The pin 41 has a rounded end 45 arranged to be received in a hole 46 in the outer flange. The bottom of the lower member is provided with a central aperture 51, shown formed by an annular screw-threaded wall 52 rigid with the lower member.

53 is a shell, preferably formed up from sheet-metal and having an outer threaded wall 54 and an inner threaded wall 55.

56 is a resilient cushioning body received 100 in said shell, and may be composed of rubber. Its upper end cooperates with the rounded bottom 57 of the container and is preferably formed with an annular lip 58 which extends above the wall 105 of the shell 53 and preferably normally flares outwardly therefrom and arranged to yield to pressure between said shell and the
bottom of said container. This cushioning body is preferably of cup-like form having an upper outer annular resilient lip.

The outer threads of the shell cooperate with the threads of the wall 52 and the inner threads of the shell cooperate with the cushioning body 56, so that the cushioning body may be adjusted axially with relation to the shell and the shell adjusted axially with relation to the lower member. The cushioning body is preferably annular and has a central recess 59, shown as a bore extending through said cushioning body, forming a tubular body which is longitudinally compressed when the parts are assembled for affording extreme resiliency. The bottom 60 of the shell is preferably formed with a slot 61 through which an instrument, such as a knife-blade or coin, may pass, into said recess 59, providing ready means for turning the shell in the lower member for adjusting the same axially. The adjustment desired is such that, when the parts are assembled, the base 62 of the neck of the container, which is preferably of ogee form in cross-section, may impinge firmly against the inner face of the upper portion 63 of the upper member, which is preferably of similar cross-sectional form.

In assembling the parts, the container is placed within the upper and lower members of the casing, and the casing members have longitudinal movement imparted to them pushing the upper member toward the lower member, and causing the pins 36 to pass through the recesses 38, wherein relative rotary movement is caused between the casing members, for causing said pins to enter and pass lengthwise along the inclined slots 37, until the locating or locking pin 41 shall snap into the holes 46, when the parts are assembled in relation. The cushioning body 56 and shell 53 having been properly adjusted, the proper cushioning force is exerted against the bottom of the container irrespective of any inequalities that may exist in said bottom.

The bottom of the container is arranged to impinge against the lip of the cup-like cushioning member, as shown in dotted lines in Fig. 5, approximately when the pins 36 are entering their slots, so that the container and casing members may be arranged in axial alinement before substantial pressure is exerted between the parts, which axial alinement is maintained throughout the assembling operation owing to the contact with the container of said cup-like cushion and yielding of the latter to the pressure exerted in the clamping operation. The clamped relation of said cushion-lip and bottom of the container is shown in full lines in Figs. 1 and 5. Breakage of the parts is thus also avoided. The base of the neck finds lodgment in the similarly formed upper portion of the upper member of the casing.

My improved device provides a cushioning support for the container within the casing which accommodates itself to the container, and centers the container with relation to the casing in assembling the same, whereby the axis of the container is caused to coincide with the axis of the casing, so that the neck of the container will not protrude from the casing in true axial relation, as is the case with the invention shown in full, and wherein the axis of the casing is caused to extend somewhat within said shell past and overhanging the upper end of the wall of said shell for cushioning said fragile container.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. In combination, an inner fragile container, an outer casing having a central threaded wall in its bottom, a cushion coacting with said fragile container for cushioning the same, and a shell the wall whereof has inner threads and outer threads, said cushion being an integral body of elastic material cooperating with said inner threads for adjustably positioning said cushion in said shell toward and from said fragile container, and said outer threads of said shell coacting with said threaded wall for simultaneously adjustably positioning said shell and said cushion toward and from said fragile container.

2. In combination, an inner fragile container, an outer casing having a central threaded wall in its bottom, a shell having threaded connection with said threaded wall for adjustably positioning said shell toward and from said inner fragile container, and a cushion coacting with said fragile container for cushioning the same, said cushion being an integral structure of elastic material comprising a tubular portion in said shell and an outwardly flaring upper end flaring outwardly across the upper end of the wall of said shell and arranged for coaction with the bottom of said inner fragile container for resiliently compressing said tubular portion in a direction lengthwise thereof and flexing said outwardly flaring upper end across the upper end of the wall of said shell for cushioning said fragile container.

3. In combination, an inner fragile container, an outer casing, an adjustable shell in the bottom of said casing adjustable toward and from said fragile container, said shell having an annular wall and a bottom, a cushion coacting with said container, said cushion being an integral body of elastic material comprising a tubular portion and an outwardly flaring annular upper end portion integral with each other, said tubular portion received in and extending parallel with said annular wall of the said shell and said outwardly flaring annular upper end portion arranged for being flexed from within said shell past and overhanging the upper end of the wall of said shell for cush-
ioning said fragile container above said shell, said shell having a bottom provided with a slot therethrough communicating with the bore of said tubular portion of said cushion.

4. In combination, an inner container, an outer casing comprising an upper member and a lower member, said members having overlapping flanges, the outer one of said flanges provided with inwardly extending protuberances and the inner one of said flanges provided with inclined slots located in the longitudinal projection of said inner flange, the upper walls of said slots bent inwardly for forming bulges having recesses at their outer sides in the longitudinal projection of said inner flange, said recesses communicating with the outer ends of said inclined slots for receiving said protuberances, mating holes in said overlapping 20 flanges, and an outwardly extending spring-pressed pin on said casing member provided with said inner flange for locking said casing members in assembled relation, and a resilient cushion between the bottoms of 25 said container and lower member.

In testimony whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

GEORGE P. ALTENBERG.

Witnesses:

ALMA E. ALTENBERG,

ALWIN J. SCHOCKMAN.