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A. H. PAYSON
BOTTLE ASSEMBLY
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2,099,174

FIG. 1

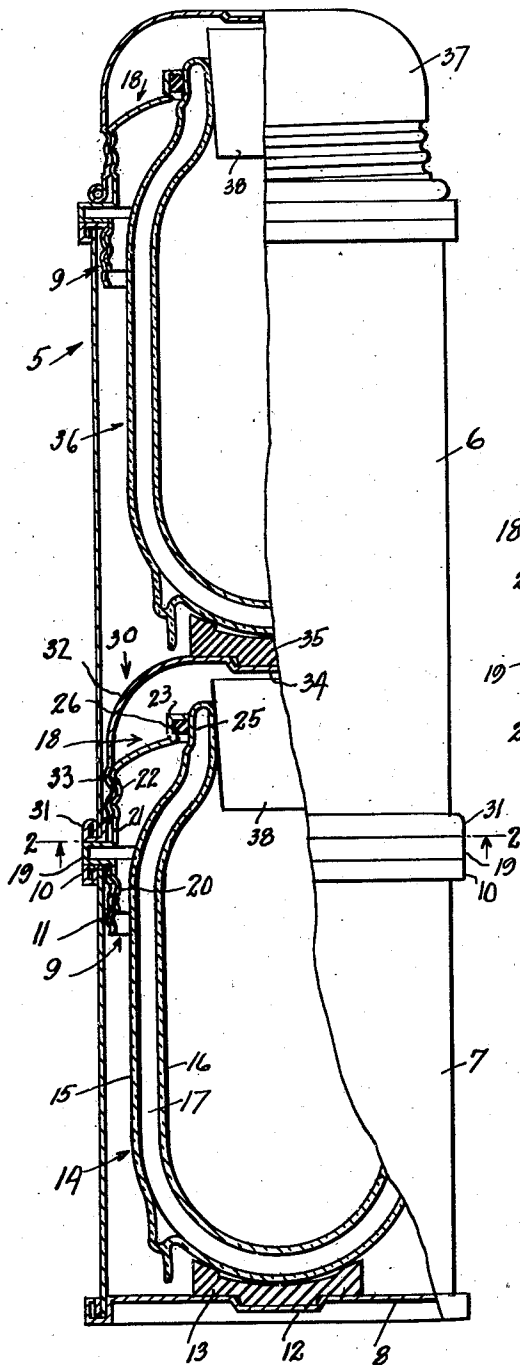


FIG. 2

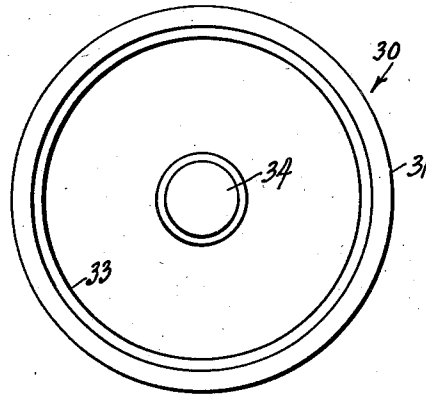


FIG. 3

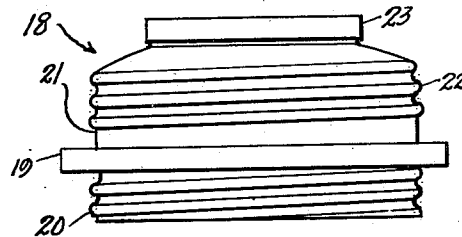
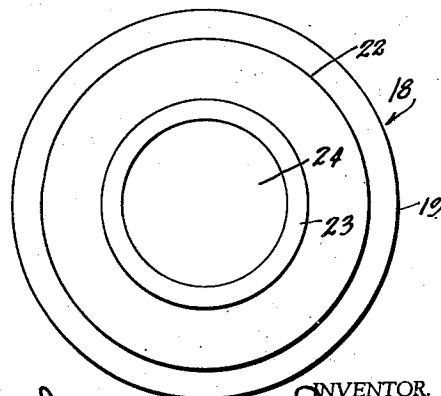


FIG. 4



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BOTTLE ASSEMBLY

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Application August 18, 1937, Serial No. 159,687

9 Claims. (Cl. 215—13)

This invention relates to bottle assemblies, and has for one of its objects the provision of inexpensive, yet highly efficient means for compactly packing a pair of bottles, one above the other, to form a neat and attractive assembly or unit, such packing being effected in such manner as to make the bottles readily accessible for service.

Another object of the invention is to provide a bottle casing of two or more sections, adapted to be joined in tandem, wherein the bottom of the upper section is a duplicate in form of the cap of the upper section, and similarly to the cap of the upper section, may be used as a drinking cup, and in such capacity serve the bottle immediately beneath it.

Another object of the invention is to design a casing economical to manufacture, and for that purpose I have devised a casing having a plurality of parts, similar in form, to manufacture which, the same tools, dies, jigs and methods of manufacture may be used.

Other objects and advantages will be apparent upon reading the specification in conjunction with the accompanying drawing, in which Figure 1 is a front elevation, partly in section, of my improved bottle assembly;

Figure 2 is a bottom plan view of the upper bottle casing, looking in the direction of the arrows, line 2—2 of Figure 1;

Figure 3 is an elevation of one of a pair of coupling heads used in the assembly illustrated in Figure 1, one of said coupling heads being used in association with each casing section; and

Figure 4 is a top plan view of the coupling head shown in Figure 3.

Referring now to the drawing in detail, 5 indicates in general an assembled casing embodying my invention, such construction comprising an upper outer shell or casing section 6 and a similar lower shell or casing section 7. The lower shell 7 is provided with a bottom closure 8, which is preferably unitary therewith, and which closure has a central depression 12, for the location of a shock absorber. Near the upper end of this lower shell is a ring 9, and a collar 10 is formed at the top thereof. Mounted between said ring 9 and the collar 10, and supported by said collar is a cylindrical sleeve 11 which is preferably screw threaded.

The upper shell 6, is identical in construction with the lower shell 7 just described, except for its length and the bottom closure. In the upper shell, the bottom closure consists of a cup 30 which also acts as a cap for said lower casing 7. This closure 30 is identical in form with the cup 31 of the upper casing. The cup in the lower end of this upper casing, however, is preferably made unitary therewith as shown. This closure may also be used as a drinking cup 10 for the contents of the lower bottle. The top of the closure member 30, is provided with a central depression 34 for the purpose of locating a shock absorber therein and in this particular the said cup-closure is similar to the closure 8 15 of the lower casing.

The bottles illustrated in my disclosure are of the vacuum type. The bottle 14 is positioned in the lower casing section 7 with its bottom resting on the shock absorber 13, which is preferably in the form of a rubber pad shaped on its upper surface to follow generally the contour of the bottom of the bottle. The lower surface of the pad is so shaped as to enable it to fit in the depression 12 of the bottom closure 8, and to be held thereby against shifting. The ring 9 besides acting as a support for the cylindrical sleeve 11, also acts as a locator to maintain the bottle in its proper relation to the walls of the casing section 7. Upon the bottle being located in the casing 7 the coupling head illustrated in Figure 3 is fitted into the cylindrical sleeve 11, said coupling having a thread portion 20 adapted to cooperate with the threaded portion of said sleeve. This coupling head is screwed down until its medial rim 19 forms an intimate connection with the collar 10 of the lower casing section 7. The said coupling head has an annular breast portion 18, which terminates in an annular packing chamber 26, in which is a resilient packing which supports the neck of the bottle near its mouth. The bottle is provided with a stopper 38, which may be of cork or other suitable material.

The assembly of the lower bottle and casing section is now complete. The upper casing section may now be screwed or otherwise secured to the casing section of the lower bottle assembly. For this purpose, the corrugated screw thread 33 of the bottom closure 30 of the upper casing en- 50

gages the screw thread 22 of the coupling head of the lower casing, and the upper casing is screwed down on the lower casing until the bead 31 is in intimate contact with the rim 19 of the coupling head. The shock absorber 35 is then located in the depression 24 of the cap 30, and the bottle 36, is seated thereon and is held in alignment and padded in exactly the same manner and by exactly similar means as described with reference to the bottle 14 in the lower casing. Similarly, a stopper 38 is provided for the bottle in the upper casing, and a cap 37 is provided which also may be used as a cup. A coupling head similar to that described to join the upper and lower casings together is provided for the top of the upper casing and the method of connecting this coupling head is exactly the same as in the lower casing. The cup for the upper casing, however, is a separable unit and is provided with a beaded edge as shown which intimately contacts with the rim 19 when the same is used as a closure.

I have described what I believe to be the best embodiment of my invention. However, I do not wish to be limited in patent protection to the embodiment shown and illustrated, but what I desire to cover by Letters Patent is set forth in the appended claims.

I claim:

1. In a casing for a bottle assembly, an upper casing section, a coupling head adapted to be secured to said upper casing section, a separable cup-shaped cap adapted to be secured to said coupling head, a cup-shaped closure for the bottom of said upper casing section, a lower casing section, a coupling head adapted to be secured to said lower casing section, and a bottom closure for said lower casing section, the cup-shaped bottom closure of the upper casing section being adapted to form a union with the coupling head of the lower casing section, and thereby unite the upper and lower casing sections into a unitary assembly.

2. In a casing for a bottle assembly, an upper casing section, a coupling head adapted to be secured to said upper casing section, a separable cup-shaped cap adapted to be secured to said coupling head, a cup-shaped closure permanently fixed to the bottom of said upper casing section, a lower casing section, a coupling head adapted to be secured to said lower casing section, and a bottom closure for said lower casing section, the cup-shaped bottom closure of the upper casing section being adapted to form a union with the coupling head of the lower casing section, and thereby unite the upper and lower casing sections into a unitary assembly.

3. In a casing for a bottle assembly, an upper casing section, a cylindrical sleeve secured to the top of the upper casing section adapted to cooperate in being secured to a coupling head, a coupling head for said upper section adapted to be secured to said cylindrical sleeve, a separable cup-shaped cap adapted to be secured to said coupling head, a cup-shaped closure for the bottom of said upper casing section, a lower casing, a cylindrical sleeve secured to the top of the lower casing section adapted to cooperate in being secured to a coupling head, a coupling head for said lower section adapted to cooperate in being secured to said cylindrical sleeve, and a bottom closure for said lower casing section, the cup shaped bottom closure of the upper casing section being adapted to form a union with the coupling head of the lower casing section, and thereby unite the upper and lower casing sections into a unitary assembly.

4. In a bottle assembly, an upper casing section, a coupling head adapted to be secured to said upper casing section, a separable cup-shaped cap adapted to be secured to said coupling head, a cup-shaped closure for the bottom of said upper casing section, a shock absorber, and means for locating the same in said bottom closure, a bottle adapted to rest on said shock absorber, means for absorbing shocks at the neck of said bottle, a lower casing section, a coupling head adapted to be secured to said lower casing section, a bottom closure for said lower casing section, a shock absorber, and means for locating the same on said bottom closure, a bottle adapted to rest on said shock absorber, and means for absorbing shocks at the neck of said bottle, the cup-shaped bottom closure of the upper casing section being adapted to form a union with the coupling head of the lower casing section, and thereby unite the upper and lower casing sections into a unitary assembly.

5. In a bottle assembly, an upper casing section, a coupling head adapted to be secured to said upper casing section, a separable cup-shaped cap adapted to be secured to said coupling head, a cup-shaped closure for the bottom of said upper casing section, a bottle in said upper casing section, means for absorbing shocks to said bottle, a lower casing section, a coupling head adapted to be secured to said lower casing section, a bottom closure for said lower casing section, a bottle in said lower casing section, and means for absorbing shocks to said bottle, the cup-shaped bottom closure of the upper casing section being adapted to form a union with the coupling head of the lower casing section, and thereby unite the upper and lower casing sections into a unitary assembly.

6. An upper bottle, a lower bottle, a casing section for each of said bottles, a coupling head for each of said casing sections, upper and lower threaded areas on each of said coupling heads, a threaded sleeve secured to the top of each of said casing sections adapted to engage with the lower threaded areas of the respective couplings for the upper and lower casing sections, a separable threaded closure cap adapted to engage with the upper threaded area of the upper casing section coupling head, and a threaded cup-shaped bottom closure permanently secured to the upper casing section adapted to engage with the upper threaded area of the coupling head for the lower casing section.

7. An upper bottle, a lower bottle, a casing section for each of said bottles, a coupling head adapted to be secured to the top of each of said casing sections, a closure cap adapted to tightly fit over the upper casing section coupling head, and a cup-shaped bottom closure secured to the upper casing section adapted to tightly fit over the upper coupling head for the lower casing section, and a closure for the lower casing section.

8. An upper vacuum bottle, a lower vacuum bottle, a casing section for each of said bottles, a coupling head adapted to be secured to the top of each of said casing sections, upper and lower threaded areas on each of said coupling heads, a threaded sleeve secured to the top of each of said casing sections adapted to engage with the lower threaded areas of the respective coupling heads for the upper and lower casing sections, a separable threaded closure cap adapted to engage with the upper threaded area of the upper casing section coupling head, a central depression at the top of said bottom closure, a resilient pad in the

said depression for cushioning the upper bottle, a bottom closure on the lower casing section having a central depression, and a resilient pad therein for cushioning the lower bottle.

5 9. An upper vacuum bottle, a lower vacuum bottle, a casing section for each of said bottles, a coupling head adapted to be secured to the top of each of said casing sections, upper and lower threaded areas on each of said coupling heads, a
10 threaded sleeve secured to the top of each of said

casing sections adapted to engage with the lower threaded areas of the respective couplings for the upper and lower casing sections, a threaded drinking cup forming closure permanently secured to the bottom of the upper casing section in threaded engagement with the upper threaded
5 area of the coupling head for the lower casing section, and a closure for said lower casing section.

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