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DRIPLESS POURING SPOUT

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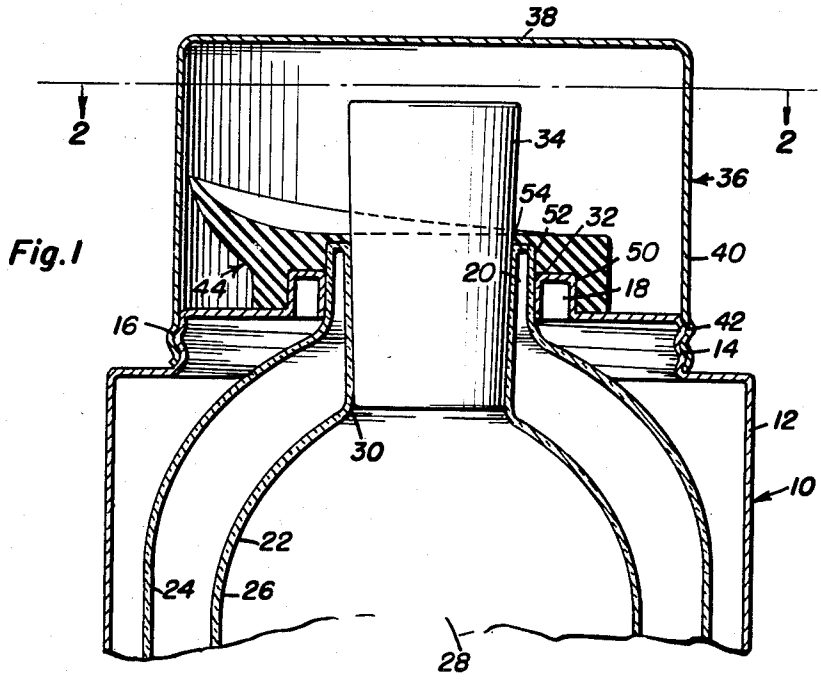


Fig.1

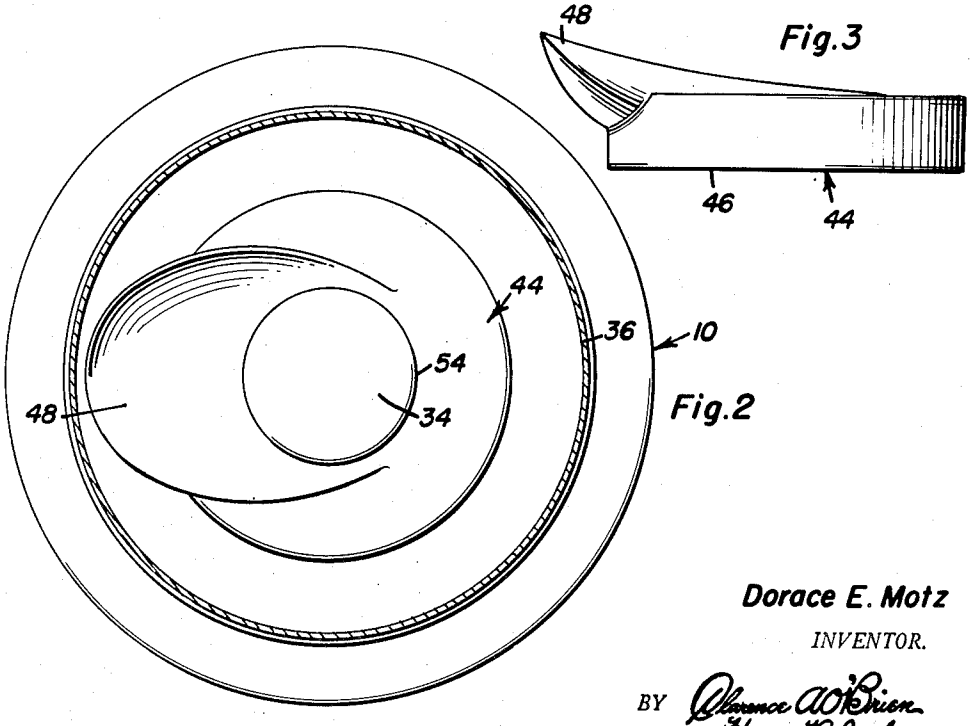


Fig.2

Fig.3

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DRIPLESS POURING SPOUT

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2 Claims. (Cl. 222—131)

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This invention relates generally to a dripless cap, and more particularly to a dripless cap having a pouring spout, said cap being adapted for use with a vacuum bottle.

It is well known that the conventional vacuum bottle has a relatively small pouring opening with respect to the diameter of the upper end so that it is difficult to pour liquids from the vacuum bottle when it is filled to the top. It is obvious that the pouring of liquids from a vacuum bottle would be much less messy, with less liquid being spilled if the vacuum bottle were provided with a suitable pouring spout.

The primary object of this invention is to provide a dripless cap for a vacuum bottle in the form of a pouring spout for attachment to the upper end of a vacuum bottle.

Another object of this invention is to form an improved dripless cap having a pouring spout which may be secured to the upper end of a vacuum bottle, and conveniently removed for washing both the cap and the upper end of the vacuum bottle.

Another object of this invention is to provide a dripless cap for a vacuum bottle which is made of a slightly resilient material so that it may be compressibly engaged over the upper end of the vacuum bottle.

A further object of this invention is to provide a dripless cap for vacuum bottles with said cap having a pouring spout, and said cap being of such configuration that it may be installed on the upper end of a vacuum bottle and within the conventional cap for a vacuum bottle.

With these objects definitely in view, this invention resides in certain novel features of construction, combination and arrangement of elements and portions as will be hereinafter described in detail in the specification, particularly pointed out in the appended claims, and illustrated in the accompanying drawings which form a material part of this application, and in which:

Figure 1 is a partial central transverse vertical sectional view showing the dripless cap, which forms the subject of this invention, secured to the upper end of a conventional vacuum bottle;

Figure 2 is a horizontal sectional view taken substantially upon the plane indicated by the section line 2—2 of Figure 1 and showing the construction of the spout on the dripless cap; and

Figure 3 is a front elevational view of the dripless cap, which forms the subject of this invention.

Similar characters of reference designate similar or identical elements and portions throughout the specification and throughout the different views of the drawings.

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Referring now to the drawings in detail, the novel dripless cap, which forms the subject of this invention, is illustrated in Figure 1 as being attached to a conventional vacuum bottle which will be referred to in general by the reference numeral 10.

The vacuum bottle 10 includes an outer metal casing 12 which is formed at its upper end with a reduced shoulder 14 which is bent to form a plurality of external threads 16. The outer metal casing 12 is further reduced to form a top shoulder 18 which is in firm engagement with the neck 20 of an inner casing 22.

The inner casing 22 is in the form of a double wall glass container having an outer wall 24 and an inner wall 26 in spaced relation to the outer wall 24. Within the inner wall 26 is a liquid receiving space 28. In the vicinity of the neck 20, the inner wall 26 is tubular to form a liquid receiving and discharge opening 30. The outer wall 24 also has a tubular portion 32 in the area of the neck 20, the tubular portion 32 of the outer wall 24 being joined to the tubular portion 30 of the inner wall 26 at their upper ends. The tubular portion 32 of the outer wall 24 is in firm engagement with the upper end of the metal casing 12.

In order to close the tubular liquid receiving and discharge opening 30, the vacuum bottle 10 is provided with a cork 34 tightly engaged within the tubular opening 30. The vacuum bottle 10 is provided with a cup-shaped cap 36. The cup-shaped cap 36 has a top wall 38 and a cylindrical side wall 40. The cylindrical side wall 40 is bent to form a plurality of threads 42 which are in engagement with the threads 16 on the shoulder 14 of the outer metal casing 12.

The dripless cap, which forms the subject of this invention, is referred to generally by the reference numeral 44. The cap 44 has a substantially circular body portion 46 and a curved pouring spout 48. The circular body portion 46 has an enlarged bore 50 in its lower side, the bore 50 engaging over the shoulder 18 of the metal outer casing 12. The body portion 46 is also provided with an intermediate concentric smaller bore 52 which is in engagement with the tubular portion 32 of the outer wall 24 of the inner casing 22 and encloses the upper end of the inner casing 22. The body portion 46 is also provided with a concentric bore 54 through its upper side, the bore 54 being in alignment with the tubular open-

ing 30 of the casing 22, and in engagement with the cork 34.

The upper surface of the body portion 46 is mostly flat, and curves outwardly and upwardly adjacent one edge to form the upper surface of the pouring spout 48. The pouring spout 48 extends from one side of the body portion 46 as an outwardly sloping flange portion. It is readily seen that due to the configuration of the upper surface of the body portion 46 and the spout 48, that any fluid left in the spout 46 during the pouring process will return to the fluid receiving compartment 28 through the tubular opening 30 of the vacuum bottle 10.

In order that the cap 44 may be easily removed from the vacuum bottle 10 for washing, and at the same time be firmly secured thereon, it is made of a resilient material such as rubber, or a suitable plastic.

Minor modification of the cap, varying in minor details from the embodiment of the cap illustrated and described herein may be resorted to without departure from the spirit and scope of the invention, as defined in the appended claims.

Having described the invention, what is claimed as new is:

1. A removable pouring spout for a vacuum bottle comprising a circular body portion and a pouring spout integral with said body portion, said body portion having an internal configuration to fit tightly over the top of said vacuum bottle, said body portion having a large lower bore for engagement over a top shoulder of the outer case of the vacuum bottle, an intermediate smaller bore for engagement over the top of the inner casing of the vacuum bottle, and a still smaller bore at the upper side of said body portion for engagement with a sealing cork.

2. A removable pouring spout for a vacuum bottle comprising a circular body portion and a pouring spout integral with said body portion, said body portion having an internal configuration to fit tightly over the top of said vacuum bottle, said body portion having a large lower bore for engagement over a top shoulder of the outer case of the vacuum bottle, an intermediate smaller bore for engagement over the top of the inner casing of the vacuum bottle, and a still smaller bore at the upper side of said body portion for engagement with a sealing cork, said body portion being formed of a slightly resilient material whereby said body portion may be jammed over the upper end of the vacuum bottle.

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