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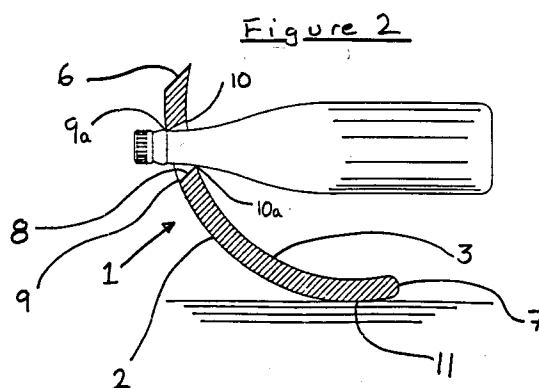
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(54) **A bottle support.**

(57) A free-standing bottle support (1) for supporting a bottle in a substantially horizontal attitude above a horizontal support surface upon which the support (1) is stood, which support (1) has a head portion (6) rigidly connected to a base portion (7), the head portion (6) comprising means (8,9,10) for receiving and retaining a neck of the bottle, which bottle support (1) is characterised in that the base portion (7) has a curved contact face (11) for resting on the support surface when the support is stood on the support surface, the arrangement being such that the head portion (6) supports the bottle in a balanced condition with the centre of gravity of the assembly of support and bottle above the curved contact face (11) for a range of positions of the neck of the bottle relative to the receiving and retaining means (8,9,10) of the head portion.


**EP 0 659 375 A1**

The present invention relates to a free-standing bottle support for receiving and supporting an individual bottle in a balanced manner.

A known free-standing bottle support for supporting and displaying an individual bottle in a substantially horizontal attitude above a support surface is made from a curved wooden stave of a wine barrel which is cut to an appropriate length. Near one end, the stave is provided with a through hole which extends between the two major surfaces of the stave and is dimensioned to receive the neck portion of a bottle to be supported. The other end of the stave is cut at an angle to the major surfaces of the stave to form an end face upon which the bottom support carrying the bottle is balanced on end on the support surface. Such a known bottle support is illustrated in Figure 1 of the accompanying drawings. Clearly for this configuration to balance, the centre of gravity of the assembly of the bottle and the bottle support must be almost directly above the end face. However, to achieve the balanced condition, it is usually necessary to "fine tune" the position of the bottle neck within the through hole since, if the neck is placed too far forward or rearward of the balanced position, then the bottle support will topple over due to the moment exerted about the end face.

The present invention seeks to provide a bottle support which overcomes the above mentioned problem.

Accordingly, the present invention provides a free-standing bottle support for supporting a bottle in a substantially horizontal attitude above a horizontal support surface upon which the support is stood, which support has a head portion rigidly connected to a base portion, in which support the head portion comprises means for receiving and retaining a neck of the bottle, the base portion has a curved contact face for resting on the support surface when the support is stood on the support surface, the arrangement being such that the head portion supports the bottle in a balanced condition with the centre of gravity of the assembly of support and bottle above the curved contact face for a range of positions of the neck of the bottle relative to the receiving and retaining means of the head portion.

In order that the invention may be more readily understood, an embodiment thereof will now be described, by way of example, with reference to the accompanying drawings, in which:

Figure 1 is a cross-sectional side view of a known bottle support supporting a bottle;

Figure 2 is a cross-sectional side view, taken on the line A-A of Figure 3, of a bottle support embodying the present invention supporting a bottle; and

Figure 3 is a front elevational view of a bottle support embodying the present invention.

Referring to Figure 2, a free-standing bottle support 1 embodying the invention comprises a single curved block of a generally rigid material, such as acrylic plastics material, the block having a major convex surface 2 and a major concave surface 3, two parallel side surfaces 4, 5 and two end surfaces 6, 7. The portion of the block near the one end surface 6 is herein termed the head portion. In a similar manner to the known bottle support shown in Figure 1, the head portion of the bottle support 1 embodying the present invention is provided with a through hole 8 which extends through the thickness of the block from the convex surface 2 to the concave surface 3. The hole 8 is dimensioned to receive and retain a neck portion of a bottle such as a wine bottle or the like.

In the embodiment of the bottle support 1 shown in Figure 2, the convex surface 2 and the concave surface 3 of the bottle support 1 are formed as arcs of a circle. Each arc extends through approximately 90° so that the bottle support 1 defines, in cross-section as shown in Figure 2, a quarter of a circle. When the bottle support 1 and the bottle supported thereby are in a balanced position standing on a support surface as shown in Figure 2, the portion of the support near end surface 6 is oriented substantially vertically and the portion of the support near the other end surface 7 lies substantially horizontally such that the bottle support rests on a curved contact portion of the convex surface 2 of the bottle support.

The hole 8 defines a first circular edge 9 where it debouches onto the convex surface 2 and a second circular edge 10 where it debouches onto the concave surface 3. The hole 8 tapers slightly from the first circular edge 9 to the second circular edge 10 such that the diameter of the hole 8 at the concave surface 3 is smaller than that at the convex surface 2.

The end 6 of the bottle support 1 formed with the hole 8 is formed as a planar surface and the opposite end 7 is rounded. Both ends 6, 7 connect the convex surface 2 and the concave surface 3 together.

In use of the illustrated bottle support, a neck portion of a bottle is inserted into the hole 8 in the head portion from the concave side such that the opening (or cork end) of the bottle projects beyond the convex surface 2 of the bottle support 1 and the main body of the bottle lies on the concave surface 3 side of the bottle support 1. As shown in Figure 2, an upper part 9a of the first circular edge 9 contacts an upper part of the bottle neck near the bottle opening and a lower part 10a of the second circular edge 10 contacts a lower part of the bottle neck near the main body of the bottle, thereby

supporting and retaining the bottle in the hole 8. With the bottle in this position, the bottle is balanced in the bottle support 1 on a curved base portion 11 of the convex surface 2 near the rounded end surface 7. In the balanced position, the centre of gravity of the assembly of the bottle, the contents of the bottle and the bottle support 1 is located over the base portion 11.

If the centre of gravity of the assembly of the bottle and the bottle support is moved forwardly or rearwardly of the initial balanced position, for example by pushing the bottle neck further into the hole 8 or pulling the bottle neck further out of the hole 8, then the bottle support 1 will "rock" into a new balanced position, since the location of the base portion 11 of the convex surface 2 is variable due to the curved configuration of the bottle support. Thus, if the neck of the bottle is pushed further into the hole 8, the centre of gravity is also moved in the same direction and, therefore, the base portion 11 would need to be located further in the same direction in order to be under the new centre of gravity. As the base portion 11 is curved it is possible for the bottle support 1 simply to tilt such that the new centre of gravity is suitably aligned over the new position of the base portion 11.

Accordingly, it is not necessary to be as accurate when positioning the bottle within the hole 8 of the bottle support 1 as one would have to be if one was positioning a bottle neck in the known bottle support.

Whilst the embodiment of the invention shown in Figures 2 and 3 shows the bottle support 1 made of an entirely curved configuration, it is envisaged that the bottle support 1 can be provided with a curved portion only near the end 7 to form the base portion 11 and a linear portion projecting from the curved base portion having a hole 8 for receiving the bottle neck.

Preferably, the bottle support 1 is a one-piece structure made from acrylic plastics material. The bottle support 1 may be formed from two or more components.

The features disclosed in the foregoing description, in the following claims and/or in the accompanying drawings may, both separately and in any combination thereof, be material for realising the invention in diverse forms thereof.

## Claims

1. A free-standing bottle support (1) for supporting a bottle in a substantially horizontal attitude above a horizontal support surface upon which the support (1) is stood, which support (1) has a head portion rigidly connected to a base portion, the head portion (6) comprising means

(8) for receiving and retaining a neck of the bottle, which bottle support (1) is characterised in that the base portion (11) has a curved contact face (2) for resting on the support surface when the support (1) is stood on the support surface, the arrangement being such that the head portion (6) supports the bottle in a balanced condition with the centre of gravity of the assembly of support (1) and bottle above the curved contact face (2) for a range of positions of the neck of the bottle relative to the receiving and retaining means (8) of the head portion (6).

2. A bottle support (1) according to Claim 1, wherein the bottle support (1) is a one-piece structure.
3. A bottle support (1) according to Claim 1 or 2, wherein the bottle support (1) is of a curved configuration.
4. A bottle support (1) according to Claim 3, wherein the bottle support (1) defines an arc of a circle extending through approximately 90°.
5. A bottle support (1) according to any preceding claim, wherein the means (8) for receiving and retaining a neck of the bottle comprises a hole (8) passing through the head portion (6) of the bottle support (1).
6. A bottle support (1) according to Claim 5, wherein the hole (8) is tapered for retaining the bottle neck.
7. A bottle support (1) according to any preceding claim, wherein the bottle support (1) is manufactured from acrylic plastics material.

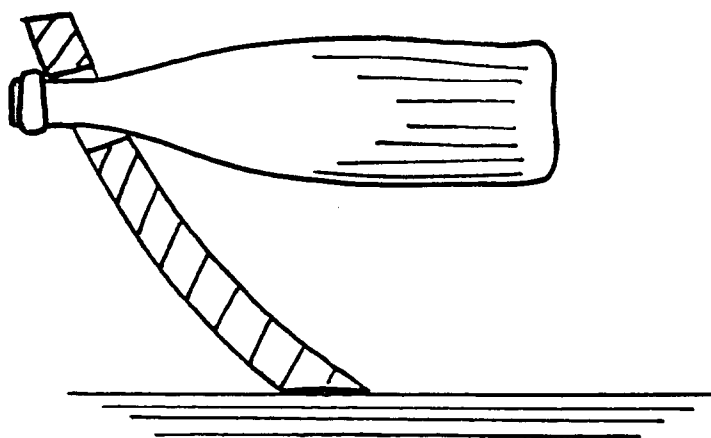


Figure 1

Figure 2

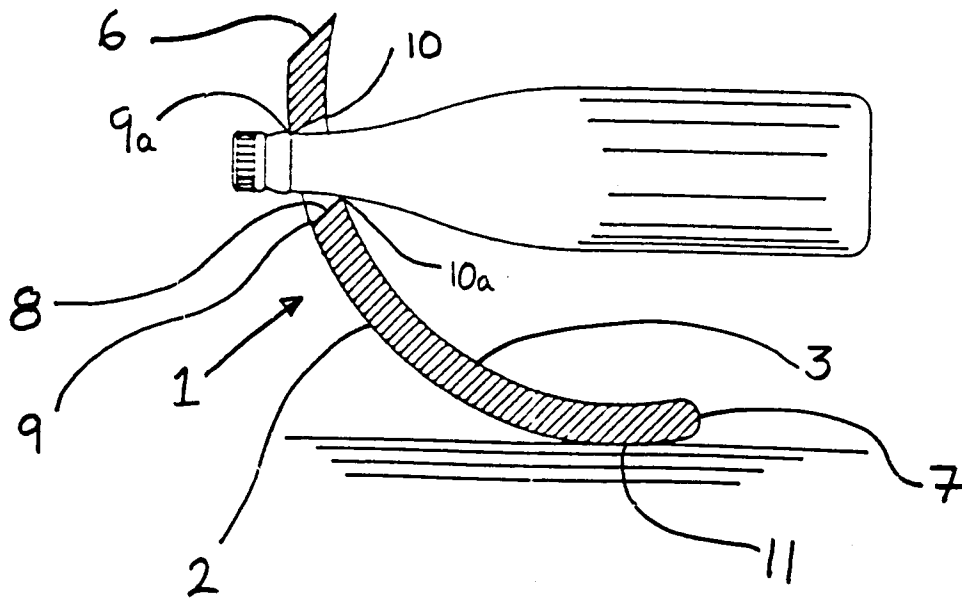
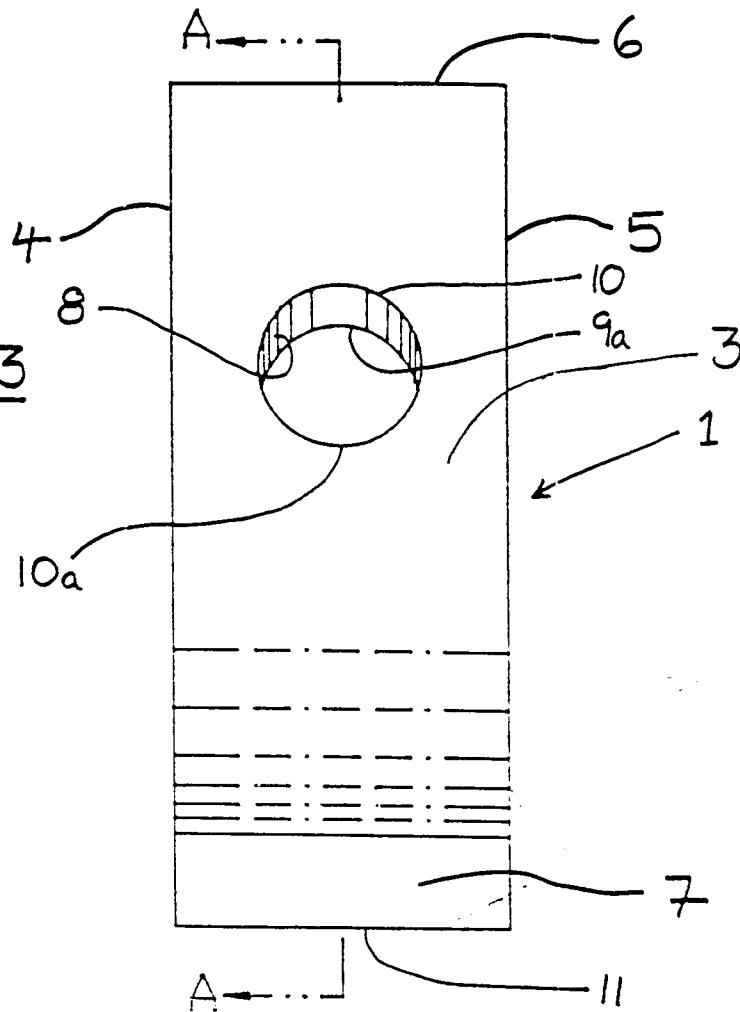


Figure 3





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## EUROPEAN SEARCH REPORT

Application Number  
EP 94 10 8936

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	AU-B-614 258 (GITTOES) * the whole document *	1	A47G23/02 A47B73/00
A	DE-U-91 13 073 (LANGENBACH) -----		
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			A47G A47B A47F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 6 April 1995	Examiner Vistisen, L
<b>CATEGORY OF CITED DOCUMENTS</b>			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	