

A CONTAINER CARRYING STRUCTURE

BACKGROUND OF THE INVENTION

The present invention relates to a container carrying structure which can be easily hung on a waist belt, whereby when going out for a picnic, a user can easily carry the container with both hands free and without affecting the action.

When going out for a picnic, various kinds of containers such as a plastic bottle, a metal top-pop can or a glass bottle are carried with a user. Such containers are not equipped with any hanging device so that the user must directly hold them or carry them in a hand bag. This makes the user's hands unable to freely move and will affect the action of the user.

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SUMMARY OF THE INVENTION

It is therefore a primary object of the present invention to provide a container carrying structure which has a cooperative fitting collar enabling the container to be easily hung on a waist belt, whereby when going out for a picnic, a user can easily carry the container with both hands free and without affecting the action.

The present invention can be best understood through



the following description and accompanying drawings, wherein:

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a perspective exploded view of a first embodiment of the present invention;

Fig. 2 is a sectional assembled view of the first embodiment;

Fig. 3 shows that the bottle body of the present invention is hung on a waist belt via the hanging hook of the fitting collar;

Fig. 4 is a perspective exploded view of a second embodiment of the present invention;

Fig. 5 is a sectional assembled view of the second embodiment;

Fig. 6 is a perspective exploded view of a third embodiment of the present invention;

Fig. 7 is a sectional assembled view of the third embodiment;

Fig. 8 is a perspective exploded view of a fourth embodiment of the present invention;

Fig. 9 is a sectional assembled view of the fourth embodiment;

Fig. 10 is a perspective exploded view of a fifth embodiment of the present invention;

Fig. 11 is a sectional side view of the fifth embodiment;



Fig. 12 is a perspective exploded view of a sixth embodiment of the present invention;

Fig. 13 is a sectional side view of the sixth embodiment;

Fig. 14 is a perspective exploded view of a seventh embodiment of the present invention; and

Fig. 15 is a sectional assembled view of the seventh embodiment.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Please refer to Fig. 1. The present invention includes a bottle body 10 and a fitting collar 20. An upper portion of the bottle body 10 is formed with a neck section 11 and a straight (or inclined) section 12 below the neck section 11. A middle portion of the bottle body 10 is disposed with an outer thread section 13 below which a conic section 14 is disposed adjacent to the outer thread section 13. A turning point A is defined between the outer thread section 13 and the conic section 14. The inner periphery of the fitting collar 20 is formed with inner thread 21. The diameter of the fitting collar 20 is slightly larger than that of the straight section 12 of the bottle body 10. One side of the outer periphery of the collar 20 is disposed with a hanging hook 22. A lower end of the hanging hook 22 has an inward extending stopper flange 221. The total length of the diameter of the collar 20 including the hanging hook 22 is just equal to the



diameter of the bottom end of the conic section 14 of the bottle body 10. Accordingly, the bottle body 10 coupled with the fitting collar 20 can be received in a packing box or placed on a shelf without wasting space. In addition, the outer periphery of the fitting collar 20 can be disposed with multiple axial convex stripes' 23 for facilitating coupling operation and enhancing appearance of the bottle body 10.

Please refer to Fig. 2. When assembled, the fitting collar 20 is downward fitted through the neck section 11 and straight section 12 of the bottle body 10 with the inner thread 21 screwed with the outer thread 13 of the bottle body 10. At this time, the lower end of the collar is engaged with the turning point A. The hanging hook 22 of the collar 20 can be hung on a waist belt B (referring to Fig. 3) for easy carriage.

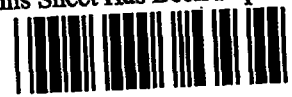
Fig. 4 shows a second embodiment of the present invention, which is composed of a bottle body 30, 30', 30'' and a fitting collar 40. The upper portion of the bottle body 30 is formed with a neck section 31 and the middle and lower portions of the bottle body are formed with a downward tapered inclined section 32. The upper portion of the bottle body 30' is formed with a neck section 31' and the middle and lower portions of the bottle body are formed with a straight section 32'. In addition, the middle portion of the bottle body 30' is disposed with an annular



flange 33' having a triangular cross-section. The upper portion of the bottle body 30" is formed with a neck section 31" and the middle and lower portions of the bottle body are formed with a straight section 32". In addition, the middle portion of the bottle body 30" is disposed with multiple triangular projections 33" which are annularly arranged. Each triangular projection 33" has an arch face. One side of the fitting collar 40 is disposed with a hanging hook 41 having an inward extending stopper flange 41 at lower end.

Referring to Fig. 5, when assembled, the fitting collar 40 is upward fitted onto and engaged with the inclined section 32 of the bottle body 30. Alternatively, the fitting collar 40 is upward fitted onto the straight section 32' of the bottle body 30' and engaged with the triangular flange 33' and located. Alternatively, the fitting collar 40 is upward fitted onto the straight section 32" of the bottle body 30" and engaged with the triangular projections 33".

Fig. 6 shows a third embodiment of the present invention, which is composed of a bottle body 50 and a fitting collar 40. An upper portion of the bottle body 50 is formed with a neck section 51. An upper and a lower step section 52, 53 are disposed below the neck section 51. An upper portion of the lower step section 53 is disposed with several reverse triangular projections 54 which are

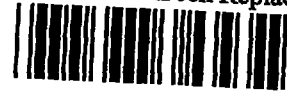


annularly arranged. Each projection 54 has an arch face. One side of the fitting collar 40 is disposed with a hanging hook 41 having an inward extending stopper flange 411 at lower end.

When assembled, the fitting collar 40 is resiliently upward fitted through the reverse triangular projections 54 of the bottle body 50 (referring to Fig. 7) and engaged between the upper step section 52 and the projections 54.

Fig. 8 shows a fourth embodiment of the present invention, which is composed of a bottle body 60 and a coupling body 70. An upper portion of the bottle body 60 is formed with a neck section 61 and a middle and a lower portions of the bottle body 60 are disposed with a straight section 62. In addition, an upper position of the middle portion is disposed with a projecting block 63 formed with a hook hole. The coupling body 70 is substantially S-shaped, having an insertion hook 71 at one end and a hanging hook 72 at the other end. The hanging hook 72 has an inward extending stopper flange 721 at lower end.

Referring to Fig. 9, when assembled, the insertion hook 71 of the coupling body 70 is downward inserted into the hook hole of the projecting body 63 of the bottle body 60. Alternatively, when it is desired to hang the bottle body on the waist belt, the insertion hook 71 is upward inserted into the hook hole of the projecting body 63,

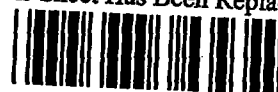


whereby the hanging hook 72 can be hung on the waist belt.

Fig. 10 shows a fifth embodiment of the present invention, which is composed of a bottle body 80 and a coupling block 90. An upper portion of the bottle body 80 is formed with a neck section 81 and a middle and a lower portions of the bottle body 80 are disposed with a straight section 82. In addition, an upper position of the middle portion is disposed with a plane face 83 with a certain dimension. The coupling block 90 has an adhesion face 91 and a hanging hook 92 extending from upper end of the adhesion face 91. The hanging hook 92 has an inward extending stopper flange 921 at lower end.

When assembled, the plane face 83 of the bottle body 80 is first painted with an adhesive agent and then the adhesion face 91 of the coupling block 90 is adhered to the plane face 83 and fixed thereon (referring to Fig. 11).

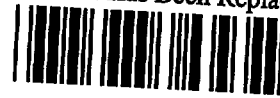
Fig. 12 shows a sixth embodiment of the present invention, which is composed of a bottle body 50' and a fitting collar 40'. An upper portion of the bottle body 50' is formed with a neck section 51'. A middle and a lower portions of the bottle body 50' are disposed with a straight section 52'. The middle portion is disposed with an annular triangular insertion groove 53'. The top face of the fitting collar 40' is disposed with three arch resilient insertion plates 41' at equal intervals. The



insertion plates 41' are inclined toward the center of the collar 40'. One side of the collar 40' is disposed with a hanging hook 42' having an inward extending stopper flange 421' at lower end.

When assembled, the bottle body 50' is upward fitted into the fitting collar 40' with the resilient insertion plates 41' resiliently outward stretched. At this time, the free ends of the resilient insertion plates 41' are engaged in the insertion groove 53' of the bottle body 50' (referring to Fig. 13) to locate the collar 40' on the bottle body. When the bottle body 50' is pulled upward, the bottle body 50' can be separated from the fitting collar 40'.

Fig. 14 shows a seventh embodiment of the present invention, which is composed of a bottle body 80' and a coupling block 90'. An upper portion of the bottle body 80' is formed with a neck section 81'. A middle and a lower portions of the bottle body are disposed with a straight section 82' having a plurality of equally spaced circular grooves defined thereon. In addition, an upper position of the middle portion is disposed with an insertion recess 83' with a certain dimension. Right under the insertion recess 83' is disposed a relatively large concavity 84'. The elongated coupling hanger 90' has a long stick portion 91' having an outwardly tapered hollow insertion protrusion 92' on its inner side face. A hanging hook 93' slantly

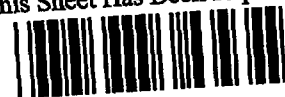


extends in the outward direction from the bottom end of stick portion 91.'

When assembled, the insertion protrusion 92' of the coupling hanger 90' is inserted into the insertion recess 83' of the bottle body 80' (referring to Fig. 15) with the stick portion 91' attached to the surface of the bottle body 80' for hanging purpose.

According to the above arrangements, the present invention has the following advantage: by means of the hanging hooks 22, 41, 42' of the fitting collars 20, 40, 40' or the hanging hook 72 of the coupling body 70 or the hanging hooks 92, 93' of the coupling blocks 90, 90', the bottle body can be easily hung on a waist belt B. By means of the stopper flanges 221, 411, 421', 721, 921, 931' of the hanging hooks 22, 41, 42', 72, 92, 93', the bottle body is prevented from detaching from the waist belt and can be easily carried.

The above description and accompanying drawings are only used to illustrate some embodiments of the present invention. Any modification or variation derived from the embodiments should fall within the scope of the present invention.



WHAT IS CLAIMED IS:



1. A container carrying structure comprising a bottle body and a fitting collar, wherein:

an upper portion of the bottle body is formed with a neck section and a straight (or inclined) section is disposed below the neck section, a middle portion of the bottle body being disposed with an outer thread section below which a conic section is disposed adjacent to the outer thread section, a turning point being defined between the outer thread section and the conic section;

an inner periphery of the fitting collar is formed with inner thread, one side of outer periphery of the collar being disposed with a hanging hook, the hanging hook having an inward extending stopper flange at lower end, the inner thread of the fitting collar being screwed with the outer thread of the bottle body with the lower end of the collar engaged with the turning point, whereby by means of the hanging hook of the fitting collar, the bottle body can be stably hung on a waist belt.

2. A container carrying structure as claimed in claim 1, wherein the outer periphery of the fitting collar is disposed with multiple axial convex stripes for facilitating coupling operation and enhancing appearance of the bottle body.



3. A container carrying structure as claimed in claim 1, wherein the middle and lower portions of the bottle body are formed with a downward tapered inclined section, whereby the fitting collar is upward fitted onto and engaged with the inclined section of the bottle body.

4. A container carrying structure as claimed in claim 1, wherein the middle and the lower portions of the bottle body are formed with a straight section, the middle portion of the bottle body being disposed with an annular flange having a triangular cross-section, the fitting collar being upward fitted onto the straight section and engaged with the triangular flange of the bottle body.

5. A container carrying structure as claimed in claim 1, wherein the middle and the lower portions of the bottle body are formed with a straight section, the middle portion of the bottle body being disposed with multiple triangular projections which are annularly arranged, each triangular projection having an arch face, the fitting collar being upward fitted onto the straight section and engaged with the triangular projections.

6. A container carrying structure as claimed in claim 1, wherein an upper and a lower step section are disposed below the neck section of the bottle body, an upper portion of the lower step section being disposed with several





reverse triangular projections which are annularly arranged, each projection having an arch face, the fitting collar being resiliently upward fitted through the reverse triangular projections of the bottle body and engaged between the upper step section and the reverse triangular projections.

7. A container carrying structure as claimed in claim 1, wherein the middle and the lower portions of the bottle body are disposed with a straight section, an upper position of the middle portion being disposed with a projecting block formed with a hook hole, the coupling body having an insertion hook at one end and a hanging hook at the other end, the insertion hook of the coupling body being upward inserted into the hook hole of the projecting body, whereby the hanging hook can be hung on the waist belt.

8. A container carrying structure as claimed in claim 1, wherein the middle and the lower portions of the bottle body are disposed with a straight section, an upper position of the middle portion being disposed with a plane face with a certain dimension, the coupling block having an adhesion face and a hanging hook extending from upper end of the adhesion face, the adhesion face of the coupling block being adhered to the plane face by an adhesive agent and fixed thereon.





9. A container carrying structure as claimed in claim 1, wherein the middle and the lower portions of the bottle body are disposed with a straight section, the middle portion being disposed with an annular triangular insertion groove, a top face of the fitting collar being disposed with three arch resilient insertion plates at equal intervals, the insertion plates being inclined toward the center of the collar, the bottle body being upward fitted into the fitting collar with the resilient insertion plates resiliently outward stretched and with the free ends of the resilient insertion plates engaged in the insertion groove of the bottle body so as to locate the fitting collar on the bottle body.

10. A container carrying structure as claimed in claim 1, wherein the middle and the lower portions of the bottle body are disposed with a straight section having a plurality of spaced circular grooves defined thereon, an upper position of the middle portion being disposed with an insertion recess with a certain dimension under which is disposed a relatively large cavity, an elongated coupling hanger having an outwardly tapered insertion protrusion on one inner side of its upper end and an elongated stick portion; said insertion protrusion of the coupling hanger being inserted into the insertion recess of the bottle body with the stick portion attached to the surface of the bottle body.

