A combined drinking vessel and container having a recessed upper closure which upon removal provides a container rim structure suitable for drinking purposes. A detachable handle having a lower container-supporting flange and an upper clamping member fastened to the ends of a gripping handle is adapted to engage the lower and upper portions of the container so as to form a mug-type arrangement therewith.

12 Claims, 7 Drawing Figures
CONTAINER AND DETACHABLE HANDLE STRUCTURE THEREFOR

This application is a continuation-in-part application of Ser. No. 251,072, filed May 8, 1972.

FIELD OF THE INVENTION

The present invention relates to a combined drinking vessel and liquid-dispensing container and, more particularly, to a drinking container adapted to have a detachable holder or gripping handle mounted thereon.

DESCRIPTION OF THE PRIOR ART

In the beverage industry, it is conventional to sell beverages, carbonated or non-carbonated, alcoholic or non-alcoholic, in metallic cans. Frequently, the cans are provided with opening tabs or structure permitting the top portions thereof to be wholly or partially removed so as to facilitate drinking therefrom. Removal of the upper or top portions of the cans during opening often causes sharp edges to be formed along the lines of separation between the removable top can portion and the remainder of the beverage-containing can or receptacle. The sharp edges or burrs which are formed in proximity to the rims of the container during the opening of the container top portion, are objectionable in that they may cause injury to the lip of a drinker.

Furthermore, beverage-containing cans of the aforesaid type are usually grasped and manipulated by the person drinking therefrom, about the circumference of the generally cylindrical container. Since the container or can surface is frequently smooth and slippery because of the can having been immersed in ice or stored in a refrigerated environment, the danger arises that the can may slip from the grasp of the user.

In order to ameliorate the risk of inadvertent slippage of the can, with the attendant spilling of its beverage content, structure has been proposed in which a handle is permanently fastened to or integrally formed with the can or vessel. Although generally satisfactory in use, that type of "mug" structure is relatively expensive in manufacture and renders the saleability somewhat uneconomical.

SUMMARY OF THE INVENTION

Accordingly, it is a primary object of the present invention to overcome the drawbacks and disadvantages encountered in prior art beverage-containing cans which are utilized as drinking vessels, by providing a vending can which is readily convertible into a safely used drinking vessel, and which incorporates novel structure particularly adapting the can to the latter use.

Another object of the present invention lies in the provision of a novel and unique detachable holder or handle onto which the can may be mounted so as to provide a drinking vessel combining the structural and functional features of a drinking mug with the economies and convenience of a vending container.

Still another object of the present invention lies in the provision of a beverage-containing can which is convertible into a drinking vessel, and which is adapted to be combined with a decorative detachable gripping handle forming a holder for the vessel so as to afford the functions and structure of a drinking mug.

BRIEF DESCRIPTION OF THE DRAWINGS

These and other objects of the present invention will become readily apparent to those skilled in the art upon consideration of the specification in view of the accompanying drawings, in which:

FIG. 1 is a perspective view of a combined drinking vessel and liquid-dispensing container according to the present invention;

FIG. 2 is a top plan view thereof;

FIG. 3 is an elevational view, partly in section, of a detachable holder or gripping handle adapted to be utilized with the container of FIG. 1;

FIG. 4 is a top plan view of the detachable holder shown in FIG. 3;

FIG. 5 is an enlarged fragmentary sectional view along line 5—5 in FIG. 2;

FIG. 6 is an elevational view, in perspective, of a second embodiment of a detachable holder or gripping handle adapted to be utilized with the container of FIG. 1; and

FIG. 7 is a bottom plan view of the detachable holder shown in FIG. 6.

DETAILED DESCRIPTION

Referring now in detail to the drawings, and particularly FIGS. 1, 2 and 3, there is illustrated a beverage-filled container 10. The beverage contained therein may be alcoholic or non-alcoholic, carbonated or non-carbonated, as desired for its particular vending purpose.

The container 10 includes a cylindrical portion 11, a bottom closure 12, and a top closure 13, so as to provide an essentially fluid-sealed construction. Moreover, the container 10 may be formed of a suitable metallic material commonly utilized in the production of can, although other materials readily lend themselves to the invention.

The top closure 13 includes a flat surface portion 14 having spirally-shaped weakening lines 15 formed therein in order to facilitate the ready removal of the flat surface portion 14 through manipulation of a pull tab 16. This will provide ready access to the beverage contained within container 10, and permit the latter to be utilized as a drinking vessel. In order to obviate the danger of the lip of a drinker being cut by any sharp or burred metallic edges which may be formed along the separation edges formed by the removal of top portion 14, as illustrated in FIG. 5, surface 14 is formed so as to be recessed downwardly into container 10. In order to obtain the foregoing recessed configuration, the closure 13 includes a depending cylindrical wall structure 17 which is extended outwardly and downwardly and then aint bent inwardly, as shown at 18, so as to provide an overlapping sealed annular engaging surface with an outwardly bent flange portion 19 formed along the upper edge of the cylindrical portion 11 of container 10. The surface 14 preferably is recessed downwardly from the upper edge 20 forming a rim structure for the container, having a preferable height of 9 millimeters or three-eighths of an inch to thereby provide a safe drinking rim which eliminates the risk of the lip or tongue of the drinker contacting any possibly injurious sharp edges formed upon opening of the container by the removal of the surface portion 14.

As illustrated in FIG. 1, at least the cylindrical portion 11 of container 10 may have ornamental indicia
embossed thereon. Thus, for example, when the container 10 is filled with beer, the ornamental indicia may simulate the design of a traditional Bavarian mug. Alternatively, the cylindrical portion 11 may be smooth-faced and have ornamental indicia printed thereon, or may include suitable printed labels encompassing the container.

When it is desired to utilize the container 10 as a drinking mug during its conversion into a drinking vessel, a detachable container or gripping handle 22 may be provided, as illustrated in the embodiments of FIGS. 3 to 7 of the drawings.

Referring in particular to FIGS. 3 and 4, a detachable holder 22 is formed of a suitable bottom or lower container support member 24, the latter of which includes an annular flange 26 having an upstanding wall portion 28 adapted to encompass the bottom edge of a suitable container 10. The flange 26 may have a central aperture 20 which will permit the egress of any beverage spilled from container 10 and which may flow down the sides thereof. The support member 24 also includes a horizontally extending arm portion 32 projecting from the annular flange 26 and which is preferably formed integrally therewith.

A vertically extending gripping handle 34 is fastened to the free end of arm 32 by means of suitable fasteners (not shown). The upper end of gripping handle 34 has fastened thereto a horizontally extending support member or arm 36, the latter of which, at the free end thereof, includes a claw-shaped portion 38 having a generally inverted U-clamp arrangement or configuration. The claw-shaped portion extends into a projecting member or tab 40 which is upwardly inclined. The intermediate portion of arm 36 may be of reduced thickness or cross-section, as shown at 42, in order to permit vertical deflection thereof upon manipulation of tab member 40. Preferably, the length or height of gripping handle 34 is determined whereby the distance between the container-supporting surface of flange 26 of the lower support 24 and the inner surface 44 of inverted U-clamp 38 essentially corresponds to the height of container 10.

In order to provide an assembled mug structure, a container 10 is positioned so that its lower closure portion 12 is received within and supported on annular flange 26 of the lower support 24. Concurrently, the upper arm 36 is deflected upwardly by manual manipulation of tab member 40 thereby permitting the upper rim 20 of the container to be positioned below the inverted U-clamp 38. Upon positioning of the rim 20 below the recess defined by the U-clamp 38, member 40 is released, thereby allowing the arm 36 to move downwardly in response to its inherent resilient properties, so as to provide clamping engagement between container rim 20 and the arm 36, and maintaining the container 10 in a gripped relationship between the upper and lower support members 36 and 24 of the holder 22. The upper surface portion 14 of container 10 may now be removed along its weakening lines 15 by pulling tab member 16, thereby converting the beverage-containing can into a drinking mug having the handle 22 mounted thereto.

In order to provide an aesthetic and commercial appeal, at least the gripping handle 34 of the holder 22 may be formed with suitable ornamental embossing simulating, for example, a Bavarian beer-type mug handle which, in conjunction with the decorative can 10, will provide a decorative beer mug. Alternatively, rather than provide ornamental embossing on handle portion 34, the latter may have indicia printed or engraved thereon, or may be provided with a label having suitable indicia printed thereon. Moreover, if desired, at the upper end of handle portion 34, a decorative crown 46 may be fastened or glued thereto, thereby enhancing the appearance and appeal of the handle and of the entire mug assembly.

As shown, the upper and lower support members 36 and 24 may be formed of metal or plastic, and the gripping handle 34 may similarly be formed of metallic or plastic material. If desired, in order to increase the rigidity and strength of the handle 22, the gripping portion 34 may be constituted of a central metallic pin or support rod encompassed by a suitable plastic material, the latter of which may be of a decorative or ornamental configuration and have a suitable coloring imparted thereto.

A second embodiment of a detachable holder 50 is illustrated in FIGS. 6 and 7 of the drawings. This holder, which functions similarly to holder 22, includes a lower container support member 52, the latter having an essentially ring-shaped bottom plate 54 adapted to support the bottom edge of a container 10 on its upper flat surface 56. An arm portion 58 is integrally formed with plate 54 and extends radially outwardly thereof.

In order to position the bottom edge or rim of container 10 on the surface 56 of plate 54, the latter is provided with a pair of arcuate upstanding flanges 60 along the segment of its outer edge on either side of arm portion 58. Adjacent each of the upstanding flanges 60, the surface 56 has formed therein a raised bead 62, which may be punched into the material of plate 54 by means of a suitable tool or punch press. The edge of container 10 is designed to be positioned between the flanges 60 and beads 62 on plate surface 56 so as to be restrained from axial movement along the surface.

A vertically extending gripping handle 64 is fastened to the free end of arm portion 58 by means of suitable fasteners (not shown). The fasteners may, for example, be a bolt or screw, extending through the longitudinal axis of the handle 64. The upper end of gripping handle 64 has fastened thereto a horizontally extending support arm 66, the latter of which, at the free end thereof, is formed into a claw-like member 68 adapted to grip the upper edge or rim of a container 10.

The claw-like member 68 has a pair of spaced depending flanges 70 positioned one each on either side of a center flange 72 which is radially offset relative to the flanges 70 so as to define therebetween a curved passageway or lip-and-tongue arrangement for insertion of end clamping engagement with the upper edge of container 10. The arm 66, as well as bottom plate 54 may be made of sheet metal having been stamped into the required finished shape, or of a suitable plastic material.

The gripping handle 64 may be provided with decorative embossing or indicia similar to that of handle 34 in the embodiment of FIGS. 3 and 4.

In order to position a container 10 in the detachable holder 50, the upper edge or rim of the container may be located in the curved passageway of holder 50, as shown at flanges 70 and 72. The length of arm 66 is determined so that the curved passageway is located vertically above the area defined between flanges 60 and beads 62 on the surface 56 of plate 54. The lower edge of the container
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10 is then slid along surface 56 and snapped into position between flanges 60 and beads 62. In order to facilitate the foregoing, at least one of the arms 58 or 66 should be of resilient or elastically deformable construction.

The upper arm 66 may be formed, for example, of material stamped out of the inner space defined by circular plate 54 and arm 58 as shown by the phantom lines in FIG. 7.

Although the container 10 and holders 22 and 50 are herein illustrated as being embossed with ornamental features representative of a traditional Bavarian beer mug, this is only for illustrative purposes, and numerous other designs and decorative styles readily lend themselves to the invention.

Additionally, the holders 22 and 50 may be constructed in various sizes and shapes to conform with its intended use with different types of containers 10, depending upon the kind of beverage to which it is applied.

While there has been shown what is considered to be the preferred embodiments of the invention, it will be obvious that modifications may be made which come within the scope of the disclosure of the specification.

What is claimed is:

1. A drinking vessel and vending container for liquids, comprising, in combination:
   a. a cylindrical liquid-containing member having substantially flat bottom closure means, and substantially flat openable top closure means, said top closure means being recessed within said cylindrical member and forming therewith an annular rim means; and
   b. detachable handle means for said container, said detachable handle means comprising:
      1. a lower container-supporting member, said supporting member having an annular flat-bottomed flanged portion positioned below and annularly encompassing the lower end of said container for supporting the bottom thereof while forming a container resting surface, said flat-bottomed flanged portion having at least one central through-aperture for permitting passage of liquid therethrough; and a horizontally extending arm projecting from said annular flanged portion;
      2. an upper container-supporting member, said supporting member having a claw-shaped end portion adapted to clampingly engage said annular rim means on said container; and a horizontally extending arm projecting from said end portion, said arm being in vertical alignment with the arm of said lower supporting member; and
      3. a vertical gripping handle extending between said upper and lower arms in spaced relationship with said cylindrical container member, said gripping handle being fastened to respectively said upper and lower arms adjacent the free projecting ends thereof.

2. A container as claimed in claim 1, wherein said upper supporting member is resiliently deformable in at least the vertical direction so as to facilitate ready engagement and disengagement between the claw-shaped end portion thereof and the rim means on said container.

3. A container as claimed in claim 1, said claw-shaped end portion of said supporting member comprising an inverted U-clamp adapted to engage said rim means; and a projection extending from said U-clamp for manual release of said container from said upper supporting member.

4. A detachable handle for a drinking container formed of a generally cylindrical configuration and having flat upper and lower closure members, and at least the upper closure member being recessed to form an annular upstanding rim about said container; said handle comprising:
   a. a lower container-supporting member, said supporting member having an annular flat-bottomed flanged portion for peripherally encompassing and supporting the lower end of a container while forming a flat container resting surface, said flat-bottomed flanged portion having at least one central through-aperture for permitting passage of liquid therethrough; and a horizontally extending arm projecting from said annular flanged portion;
   b. an upper container-supporting member, said supporting member having a claw-shaped end portion adapted to clampingly engage the rim on a container; and a horizontally extending arm projecting from said end portion, said arm being in vertical alignment with the arm of said lower supporting member; and
   c. gripping means extending substantially vertically between said upper and lower arms, said gripping means being fastened to respectively said upper and lower arms adjacent the free projecting ends thereof.

5. A handle as claimed in claim 4, wherein said upper supporting member is resiliently deformable in at least the vertical direction so as to facilitate ready engagement and disengagement between the claw-shaped end portion thereof and the rim means on said container.

6. A handle as claimed in claim 4, said claw-shaped end portion of said upper supporting member comprising an inverted U-clamp; and a projection extending from said U-clamp facilitating manual manipulation of said upper supporting member.

7. A drinking vessel and vending container and handle assembly for liquids, comprising, in combination:
   a. a cylindrical liquid-containing member having substantially flat bottom closure means, and substantially flat openable top closure means, said top closure means being recessed within said cylindrical member and forming therewith an annular rim means; and
   b. a detachable handle means for said container, said detachable handle means comprising:
      1. a lower container-supporting member, said supporting member having an annular ring-shaped, centrally apertured flat portion for supporting at least the rim portion about the lower end of said container; a horizontally extending arm projecting from said annular flanged portion; a pair of upstanding flanges being formed on said flat portion on either side of said horizontally extending arm; and a pair of raised beads being formed on the upper surface of said annular flat portion in aligned spaced relationship with said flanges, the lower edge of said container adapted to be positioned intermediate said flanges and said beads;
      2. an upper container supporting member, said supporting member having a lip and tongue-
shaped end portion adapted to clampingly engage the upper annular rim of said container; and
a horizontally extending pressure arm projecting from said end portion, said arm being in vertical alignment with the arm of said lower supporting member; and
3. a vertical gripping handle extending between said upper and lower arms in spaced relationship with said cylindrical container member, said gripping handle being fastened to respectively said upper and lower arms adjacent the free projecting ends thereof.

8. An assembly as claimed in claim 7, the lip and tongue-shaped end portion of the upper support member being formed from a portion removed from the lower container-supporting member.

9. An assembly as claimed in claim 7, said upper container supporting member or pressure arm being resiliently deformable in at least the vertical direction so as to facilitate ready engagement and disengagement between the lip and tongue-shaped end portion and the upper rim of the container.

10. A detachable handle means for a drinking container formed of a generally cylindrical configuration and having flat upper and lower closure members, and at least the upper closure member being recessed to form an annular upstanding rim about said container;

said handle means comprising:
a. a lower container-supporting member having an annular flat portion having two small flanges and two raised beads in spaced relation with said flanges for supporting the lower end of a container; and a horizontally extending arm projecting from said annular flat flanges and lobes containing portion;
b. an upper container-supporting member having a lip and tongue-shaped end portion adapted to clampingly engage the rim on said container; and a horizontally extending arm projecting from said end portion, said arm being in vertical alignment with the arm of said lower supporting member; and
c. gripping means extending substantially vertically between said upper and lower arms, said gripping means being fastened to respectively said upper and lower arms adjacent free projecting ends thereof.

11. A handle as claimed in claim 10, at least said gripping means having ornamental embossing provided thereon.

12. A handle as claimed in claim 10, at least said gripping means having ornamental indicia provided thereon.

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