United States Patent

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[54] **POURING VESSEL**

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[52] **U.S. Cl.** .....**215/100 A**, 16/114 A, 220/85 H, 220/85 K, 224/40 A, 294/27 H, 294/33

[51] **Int. Cl.** **B65d 23/10**, A47j 45/07

[58] **Field of Search** .....215/100 A; 220/85 H, 85 K, 220/94 R; 294/87.2, 27 R, 27 H, 31.2, 33; 16/110 A, 114 R, 114 A; 224/45 R, 45 A, 45 P; 222/465, 467

[56] **References Cited**

UNITED STATES PATENTS

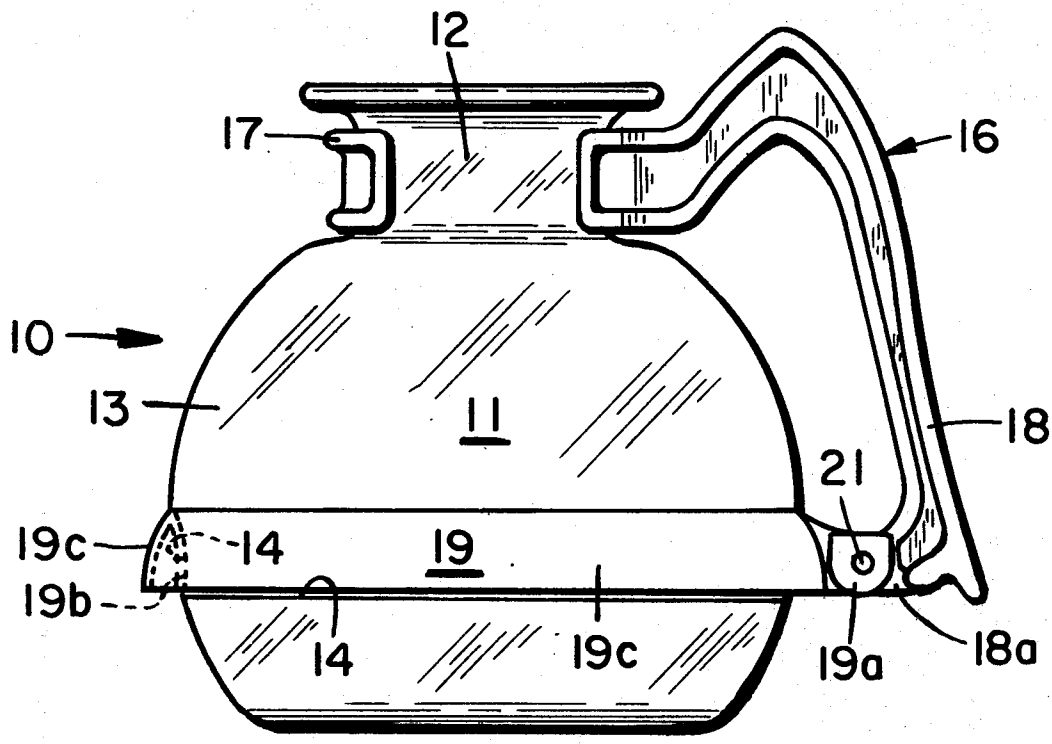
601,988	4/1898	Smalley	215/100 A
845,777	3/1907	Grossman	220/85 K
2,063,805	12/1936	Goetting	294/31.2
2,075,217	3/1937	Milburn	224/45 A
2,088,387	7/1937	Rice, Jr. et al.	224/45 A
2,307,145	1/1943	Mattoon	16/114 A
2,942,828	6/1960	Kondrat	248/145.6

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[57] **ABSTRACT**

A pouring vessel, carafe or beverage decanter including a container or vessel having a neck portion, a body portion having a peripheral groove or channel adjacent a region of the largest circumference of the vessel, a resilient annular band fitting circumferentially relatively snugly in the peripheral groove or channel of the vessel and having an outer wall extending outwardly beyond the largest circumference of the vessel, and a handle assembly having a resilient band snugly encompassing at least a semicircular part of the neck portion of the vessel and a handle having a lower end juxtaposed the annular band and pivotally connected thereto.

12 Claims, 7 Drawing Figures



Patented Sept. 5, 1972 3,688,936

2 Sheets-Sheet 1

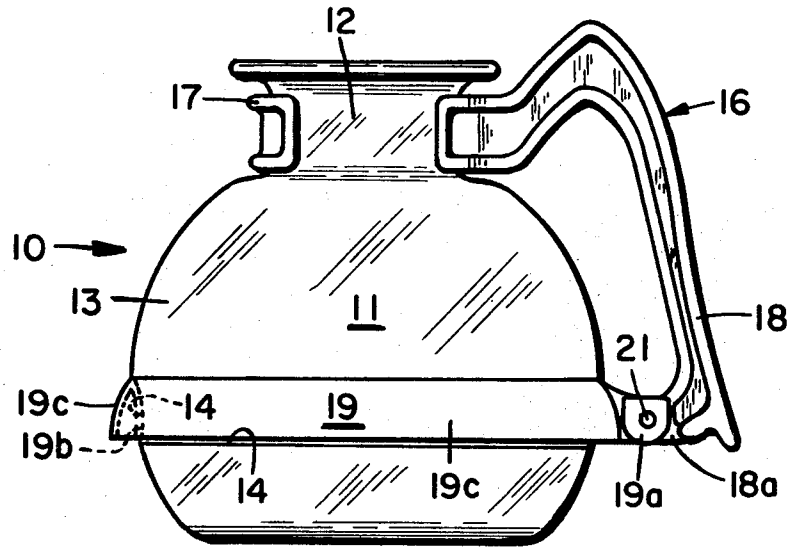


Fig. 1

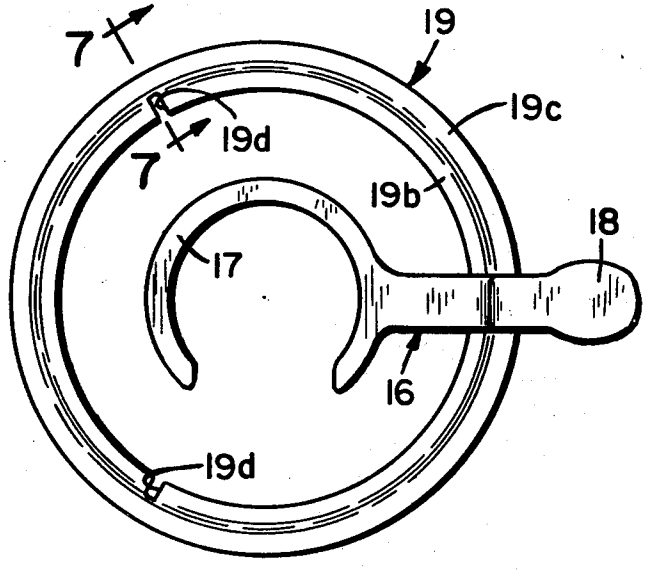


Fig. 2

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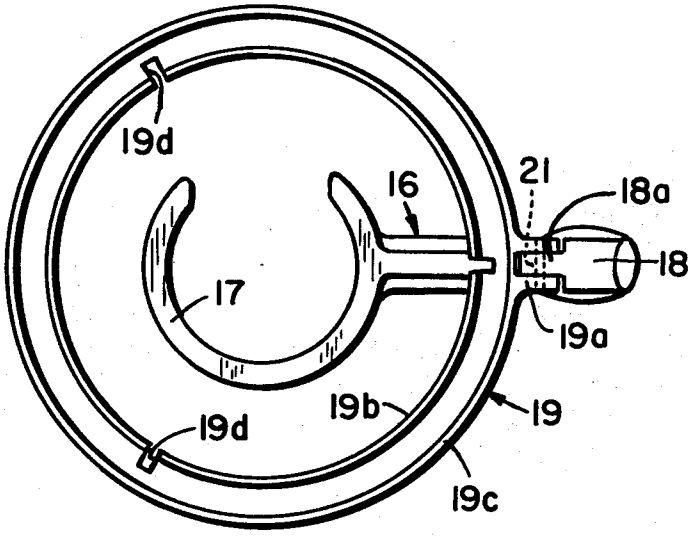


Fig. 3

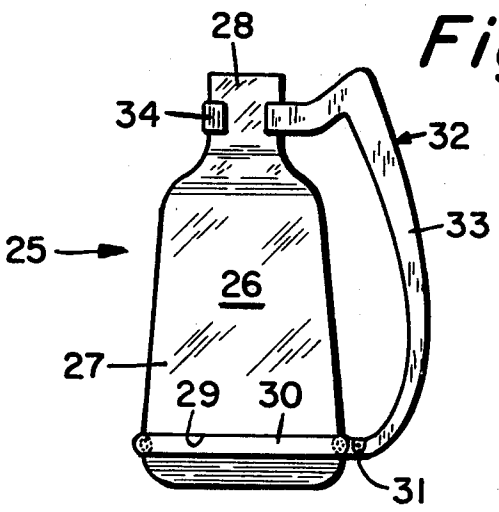


Fig. 4

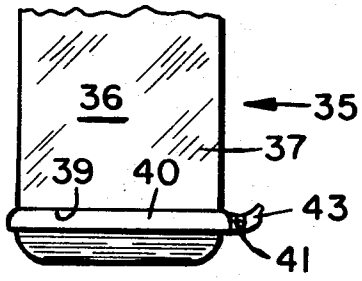


Fig. 5

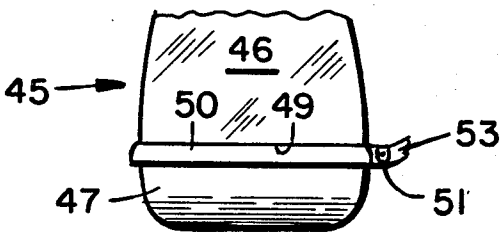


Fig. 6

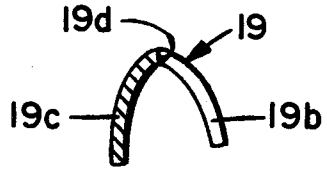


Fig. 7

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POURING VESSEL

BACKGROUND OF THE INVENTION

In certain types of pouring vessels such as beverage decanters, carafes, and coffee makers or pots of a frangible material, such as a plastic glass or other vitreous material for example, a relatively large amount of breakage of said vessels is experienced especially in establishments such as hospitals, busy restaurants, etc., where such vessels are subjected to rough usage and handling due to the large number of people who are, or must be served or catered to in relatively short periods of time. Vessels of the type mentioned usually include handles for ease of using or manipulating of the vessels for their intended purpose and, when one of such vessels is damaged as by being cracked or broken, the handles must usually be discarded along with the damaged vessel since such handles are often irremovably attached to their respective vessels or are connected therewith in a manner such that it is not economically worth the time and effort of removal of handles from damaged vessels even when it is possible for such handles to be so removed and reattached to replacement vessels. Accordingly, it is the object of the present invention to provide a pouring vessel, decanter or carafe incorporating a handle assembly which can be readily attached to a vessel or container and, in the event of damage to or of the vessel per se, can be readily removed from such damaged vessel and readily reattached to a replacement vessel.

It is another object of the present invention to include with said pouring vessel, and incorporated handle assembly, a feature which will reduce to a substantial extent the possibility of damage to the pouring vessel when the handle assembly is incorporated therewith.

Other objects and characteristic features of the invention will become apparent as the description proceeds.

SUMMARY OF THE INVENTION

In accomplishing the above objects of the invention there is provided a pouring vessel, beverage decanter or carafe which includes a beverage container or vessel per se having a neck portion, a body portion having a peripheral groove or channel extending thereabout in the vicinity of or adjacent the region of the largest circumference of said body portion, a resilient annular ring surrounding said vessel with at least a circumferential part of the inner wall of such ring fitting circumferentially and relatively tightly or snugly within said channel or groove and at least a circumferential part of the outer wall of said ring circumferentially extending outwardly beyond said largest circumference of said body portion of said decanter. Said pouring vessel further comprises a handle assembly including a curved resilient band which snugly encompasses said neck portion of said vessel for a distance preferably slightly greater than half the distance about said neck portion and a handle portion whose lower end extends downwardly into juxtaposition with said annular ring and is pivotally connected thereto.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will best be understood with reference to the accompanying drawings in which;

FIG. 1 is an elevational view of a pouring vessel embodying the present invention;

FIG. 2 is a top plan view of a resilient annular ring and a handle assembly which forms part of the pouring vessel of FIG. 1 but in which the beverage container or vessel portion itself is omitted for purposes of clarity;

FIG. 3 is a bottom plan view of said annular ring and handle assembly of FIG. 2;

FIG. 4 is an elevational view of a pouring vessel having a different body configuration than the pouring vessel of FIG. 1 and employing an annular ring of a different cross-sectional configuration to illustrate a second embodiment or modification of the invention;

FIG. 5 is an elevational view of the lower part only of a pouring vessel having a further different body configuration than the pouring vessels of FIGS. 1 and 4 but which may also be used in the practice of the invention disclosed;

FIG. 6 is a fourth elevational view illustrating the lower part only of a pouring vessel of still a different body configuration and which may also be used in practicing the invention disclosed;

FIG. 7 is a cross-sectional view of a preferred type of resilient annular ring employed in the invention disclosed, such view being taken generally along line 8—8 of FIG. 2 but on an enlarged scale.

Similar reference characters refer to similar parts in each of the figures of the drawings.

PREFERRED EMBODIMENTS OF THE INVENTION

Referring first to FIG. 1 in detail, there is shown a pouring vessel 10 such as a beverage decanter or carafe and including a liquid or beverage container or vessel 11 per se of a glass or other vitreous and somewhat frangible material, such vessel comprising a neck portion 12 which diverges downwardly and outwardly into a lower main body portion 13 shown as having substantially a generally overall well-known configuration of a large center segment of a sphere. However, as pointed out in more detail hereinafter, the overall configuration of the body portion 13 of the vessel such as 11 is not necessarily critical to the invention. Body portion 13 of vessel or decanter 11 further includes or has a peripheral groove or channel 14 (FIG. 1) extending circumferentially about such body portion adjacent a region of the largest or maximum circumference thereof and for a purpose hereinafter discussed.

Vessel 11 further includes or incorporates a handle assembly 16 (FIGS. 1, 2 and 3) including or comprising a curved resilient band, that is, an arcuate band 17 of a resilient material and having an arcuate length which encompasses at least a semicircumference of the periphery of said neck portion 12 of vessel 11. Such band 17 is under a compressive force when on such neck portion so as to snugly grip the encompassed neck portion of the vessel such as 11. That is to say, band 17 preferably has an arcuate length greater than a semicircumference of the outer surface of neck portion 12 of vessel 11 as shown in FIG. 1 and the inner surface of such band has a curvature generally conforming to the curvature of said outer surface but of a lesser radius than the curvature of such outer surface prior to being attached to or installed about said neck portion 12 as hereinafter described. In still other words, band 17 has

a curvature geometrically similar to and, as shown in FIG. 1, preferably greater in curved length than a semicircular portion of the outer periphery of neck portion 12 of vessel 11, and such band is resiliently biased so that, prior to being positioned on neck portion 12 of vessel 11 as hereinafter discussed, the inner surface of band 17 is of shorter radii than the radii of neck portion 12 of vessel 11. Handle assembly 16 further comprises a downwardly extending handle portion 18 which is preferably formed integrally with band 17 and whose lower end 18*a* is juxtaposed or is in juxtaposition with the aforementioned peripheral groove or channel 14 illustrated in FIG. 1 as being provided or embodied in the outer periphery or circumference of body portion 13 of vessel 11. Handle assembly 16 may, for example, be formed of a suitable plastic material and, when vessel 11 is a vessel which is to be heated, such as a coffee maker for example, such plastic material must, of course, be a heat resistant material.

A resilient annular ring or annular band 19 of a resilient material and which, for example, may be made of the same material as handle assembly 16, includes an outwardly extending portion 19*a* (FIGS. 1 and 3) which is pivotally connected to said lower end 18*a* of handle portion 18 of handle assembly 17 as by a suitable pivot pin 21 which fits relatively snugly through complemental holes provided in said portions 18*a* and 19*a* but permits pivotal motion of said portions relative to each other. Annular band 19 preferably has substantially an inverted V-shaped cross-sectional configuration such as illustrated in FIG. 7 (see also the dotted lines in FIG. 1) and the inner annular wall 19*b* of ring or band 19 is circumferentially shaped to substantially correspond to the previously mentioned annular groove or channel 14 provided in body portion 13 of vessel 11 but of somewhat smaller circumference so that it must be somewhat stretched for movement of the ring upwardly over the bottom of body portion 13 of vessel 11, as hereinafter further discussed, but which springs back or recovers its shape readily to enter channel 14 with at least a circumferential part of the inner annular wall 19*b* or ring 19 fitting circumferentially snugly within said channel. If found necessary or expedient to do so, a series of notches such as 19*b* (FIGS. 2, 3 and 7) may be provided in wall 19*b* of ring 19 to facilitate ease of movement of the ring into channel 14 in vessel 11. The outer annular wall 19*c* of ring 19 is circumferentially shaped so that at least a circumferential part of such outer annular wall extends circumferentially outwardly beyond said largest circumference of vessel 11 when the ring is disposed, as illustrated in FIG. 1, with wall 19*b* thereof fitted in channel 14 in vessel 11 as mentioned above. Such arrangement of outer wall 19*c* of ring 19 provides an annular bumper or protective ring of a resilient material extending about vessel 11 in the region or area of its largest circumference to protect such vessel, in such region or area, from bumping, scoring or scratching thereof since such largest circumferential area or region of vessel 11 is the part of the vessel which is most likely to be so harmed or which is most vulnerable to breakage thereof due to rough or careless handling of the vessel, as is believed readily apparent.

In assembling a pouring vessel such as 10 and including the liquid or beverage container or vessel such as 11, the ring or band such as 19 is pivotally connected to handle assembly 16 by pivot pin 21 and originally extends in a downward direction. The ends of band 17 of handle assembly 16 are then sprung open or apart and neck portion 12 of vessel 11 is inserted between said ends, and into and against the inner peripheral wall of band 17. The force used to spring the ends of band 17 apart or open is then released or relieved and band 17 is thus permitted to spring back or return towards its original configuration and snugly encompass the outer periphery of neck portion 12 of vessel 11 as illustrated in FIG. 1. Ring or band 19 is then pivoted about pivot pin 21 and moved upwardly over the bottom of vessel 11 towards groove or channel 14 in such vessel. The inner wall 19*b* of ring 19 contacts the outer periphery of vessel 11 prior to reaching channel or groove 14 but the resiliency and cross-sectional configuration of the band permits sufficient stretching or deformation of inner wall 19*b* of band 19 so that such band can be pushed upwardly along the outer peripheral surface of vessel 11 until wall 19*b* of band 19 enters channel or groove 14 and returns towards its original configuration to snugly contact at least a portion of the surface of the outer wall of vessel 11 which defines the inner limits of groove or channel 14 in such vessel.

As previously mentioned and as illustrated in FIG. 1, the annular outer surface of outer wall 19*c* of band 19 extends outwardly beyond the maximum circumference of body portion 13 of container or vessel 11 and the pouring vessel such as 10 is thus substantially protected, by said outer wall 19*c*, in the region of the vessel which would otherwise be most vulnerable to bumping, scoring or scratching, etc., resulting in possible breakage of container or vessel 11. However, in the event of breakage of vessel or container 11 of the pouring vessel, beverage decanter or carafe such as 10, the handle assembly 16 and annular band 19 can again be pivoted about pivot pin 21 to prepare such parts for assembly with another vessel or container such as 11 in the same manner as discussed above. Thus, in hospitals, restaurants or other dining facilities where a quantity of pouring vessels such as 10 may be used and may receive a considerable amount of rough usage and, therefore, breakage thereof, the only replacement parts which necessarily need to be stocked to any appreciable amount would be the containers or vessels such as 11, per se, since a handle assembly such as 16 and its associated ring or band such as 19 can be repeatedly reapplied to and reused on each of a series of replacement containers or vessels such as 11.

Although the preferred embodiment of the invention is that shown and described above in conjunction with FIGS. 1, 2 and 3 of the drawings, it is pointed out that the containers or vessel parts, per se, of pouring vessels, beverage decanters or carafes embodying the invention may have an overall configuration other than that shown in FIG. 1, and bands or rings having a cross-sectional configuration differing from that of ring 19 may also be used in practicing the invention disclosed. For example, referring to FIG. 4 of the drawings, there is shown a pouring vessel or carafe 25 comprising a vessel or container 26, per se, having a main body portion 17 whose sides slope upwardly and inwardly toward a relatively long neck portion 28. Body portion 27 of vessel 26 embodies or has a peripheral groove or channel

such as 29 extending about the outer periphery of such body portion adjacent the largest outer circumference thereof, and a ring or band 30 of a resilient material having a cross-sectional or closed curvilinear configuration, such as a round or oval hollow tube, is pivotally connected as by a pivot pin 31 to the lower end of a handle portion 33 of a handle assembly 32 which also includes a neck portion such as 34 of a resilient material and shaped to fit snugly about neck portion 28 of vessel 26 in a manner similar to that in which band 17 of handle assembly 16 encompasses neck portion 12 of vessel 11 in FIG. 1. The inner surface of the wall of band or ring such as 30 fits snugly within groove or channel 29 of container or vessel 26 and the outer surface of the wall of band or ring 30 extends outwardly beyond the largest outer circumference of vessel 26 for a similar purpose as that described in conjunction with the embodiment of the invention of FIG. 1.

Referring to FIG. 5 of the drawings, there is shown only the lower part or body portion 37 of a vessel or container 36 of another pouring vessel 35 embodying the invention. However, for purposes of simplicity of the drawing and brevity of further description the upper neck portion of the vessel such as 36 and its encompassing band are not shown since they may be similar to the corresponding parts of either of the embodiments of the invention shown in FIGS. 1 and 4, previously discussed. It is, however, pointed out that vessel or container 36 has substantially vertical or straight sidewalls as compared to the sloping or curved sidewalls of the vessels shown in FIGS. 4 and 1, respectively. The modification of the invention shown in FIG. 5 also includes a peripheral channel or groove 39 extending circumferentially about body portion 37 of vessel 36 and within which there is snugly disposed a resilient ring 40 which is pivotally connected by a suitable pivot pin such as 41 to the lower end of a handle portion 43 of a handle assembly which portion may, as an example only, be similar to handle portion 33 of assembly 32 shown in FIG. 4. The outer surface of the wall of ring 39 also extends outwardly beyond the largest circumference of body portion 37 of vessel 36 of pouring vessel 35.

FIG. 6 of the drawings illustrates, similar to FIG. 5, a further modification of the invention in which a pouring vessel, carafe or beverage decanter 45 also embodying the invention includes a container or vessel 46 having a main body portion 47 which has only slightly curved sidewalls as compared to portion 13 of vessel 11 shown in FIG. 1. However, body portion 47 also includes a peripheral channel or groove 49 embodied in the outer wall of such body portion adjacent the largest circumference thereof, and a ring 50 of a resilient material is snugly disposed in such groove or channel and is pivotally connected as by a suitable pivot pin 51 to the lower end of a handle portion 53 of a handle assembly, which portion may, as an example only, be also similar to handle portion 33 of assembly 32 shown in FIG. 4. The outer surface of the wall of ring 50 also extends outwardly beyond the largest circumference of body portion 47 of vessel 46 of pouring vessel 45.

It should be pointed out that, although the resilient material of which the handle assemblies such as 16 and 32 of FIGS. 1 and 4, respectively, and those of the other embodiments of the invention illustrated in FIGS. 5 and 6, are preferably formed of a suitable resilient plastic material as previously mentioned, such handle assemblies, including the neck encompassing band portions such as 17 and 34 of such assemblies, can be made and shaped of a suitably resilient metal material which may be covered with a rubber-like material if desired. In any event, under such conditions, at least the inner surfaces of the band portions such as 17 and 34 of the handle assembles should be provided with a resilient plastic or rubber-like material to prevent scoring or scratching of the neck portions of the vessels about which such bands are disposed. Said material can be attached to said inner surfaces of said band portions such as 17 and 34 by a suitable adhesive for example.

Although there is herein shown and described only several embodiments or modifications of a pouring vessel embodying the invention, it will be understood that various changes and other modifications may be made therein within the purview of the appended claims without departing from the spirit and scope thereof.

I claim:

1. In combination, a beverage decanter including,
A. a neck portion,
B. a peripheral channel adjacent a region of the largest circumference of the decanter,
C. a resilient annular ring surrounding said decanter with at least a circumferential part of the inner annular wall of said ring fitting circumferentially snugly within said channel of the decanter and with at least a circumferential part of the outer annular wall of such ring circumferentially extending outwardly beyond said largest circumference of the decanter,
D. a handle assembly comprising a resilient band encompassing at least a semicircumference of the periphery of said neck portion of said decanter and normally being under a compressive force so as to snugly grip said encompassed neck portion, and a downwardly extending handle portion having a lower end juxtaposed said annular ring, and
E. means pivotally connecting said lower end of said handle portion with said annular ring.

2. A decanter in accordance with claim 1 and in which said annular ring has substantially an inverted V-shaped cross-sectional configuration.

3. A decanter in accordance with claim 1 and in which said annular ring has substantially a closed curvilinear configuration.

4. In combination, a beverage decanter including,
A. a neck portion,
B. a peripheral channel adjacent a region of the largest circumference of the decanter,
C. an annular ring of a resilient material surrounding said decanter with at least a circumferential part of the inner annular wall of said ring fitting circumferentially snugly within said channel of the decanter and with at least a circumferential part of the outer annular wall of such ring circumferentially extending outwardly beyond said largest circumference of the decanter,
D. a handle assembly comprising a curved resilient longitudinal band having an arcuate length greater than a semicircumference of the outer surface of said neck portion of said decanter, the inner surface of such band normally having a curvature

conforming to the curvature of said outer surface and of a lesser radius than the curvature of such outer surface such band being resiliently deformable to increase its radius in response to deforming forces applied thereto, and a downwardly extending handle portion having a lower end juxtaposed said annular ring, and

E. means pivotally connecting said lower end of said handle portion with said annular ring.

5. A decanter in accordance with claim 4 and in which said annular ring has substantially an inverted V-shaped cross-sectional configuration.

6. A decanter in accordance with claim 4 and in which said annular ring has substantially a closed curvilinear configuration.

7. In combination,

A. a pouring vessel having an upper neck portion diverging into a lower main body portion having a selected maximum circumference adjacent to and about which there extends a peripheral groove,

B. an annular band of a resilient material disposed in said groove with at least a portion of the annular inner surface of such band snugly contacting at least a portion of the surface of the wall defining the limits of said groove and with the annular outer surface of such band extending outwardly beyond said maximum circumference of said lower main body portion of said vessel,

C. a handle assembly for said vessel including an arcuate longitudinal band of a resilient material and having a curvature geometrically similar to and greater in curved length than a semicircumferential portion of the outer periphery of said neck portion of said vessel and encompassed by said band such band being resiliently biased so that its inner surface is normally of shorter radii than the radii of said portion of said vessel, and a handle portion extending downwardly with its lower end in juxtaposition with said annular band, and

D. pivot means connecting said annular band with said lower end of said handle portion of said handle assembly.

8. A pouring vessel in accordance with claim 7 and in which such vessel is a carafe.

9. A pouring vessel in accordance with claim 7 and in which said annular ring has substantially an inverted V-shaped cross-sectional configuration.

10. A pouring vessel in accordance with claim 7 and in which said annular ring has substantially a closed curvilinear configuration.

11. A pouring vessel in accordance with claim 9 and in which such vessel is a carafe.

12. A pouring vessel in accordance with claim 10 and in which such vessel is a carafe.

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