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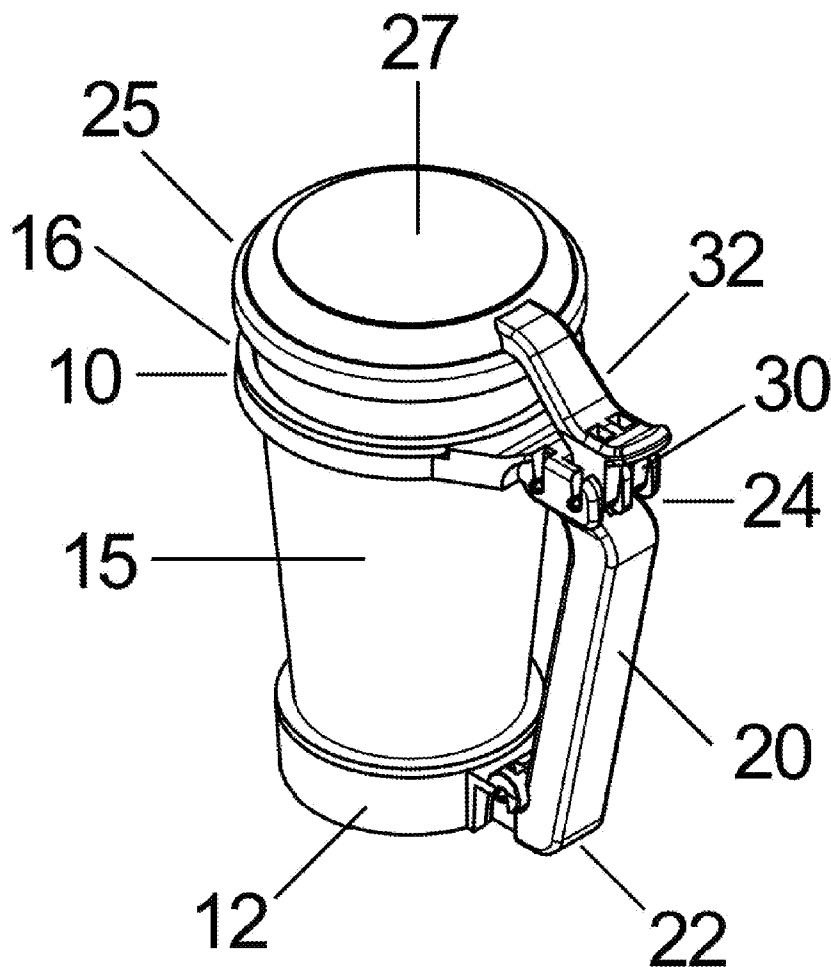
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(57)

ABSTRACT

A handle and lid combination for a drinking receptacle has at least one upper ring adapted to retain sides of the receptacle, a coaster base for supporting a drinking receptacle, a handle having an upper portion and a lower portion, wherein the upper ring extends from the upper portion, and the coaster base extends from the lower portion, a lid adapted to extend over the top of the drinking vessel, and a hinge pivotally connecting the lid to the upper ring. The coaster base may grip the bottom of the drinking receptacle and provide support to the drinking receptacle. In an embodiment, the upper ring and coaster base have an interior lining of rubber or plastic with a high coefficient of friction. In an embodiment, the lid, the ring and the coaster base are each generally coaxial.



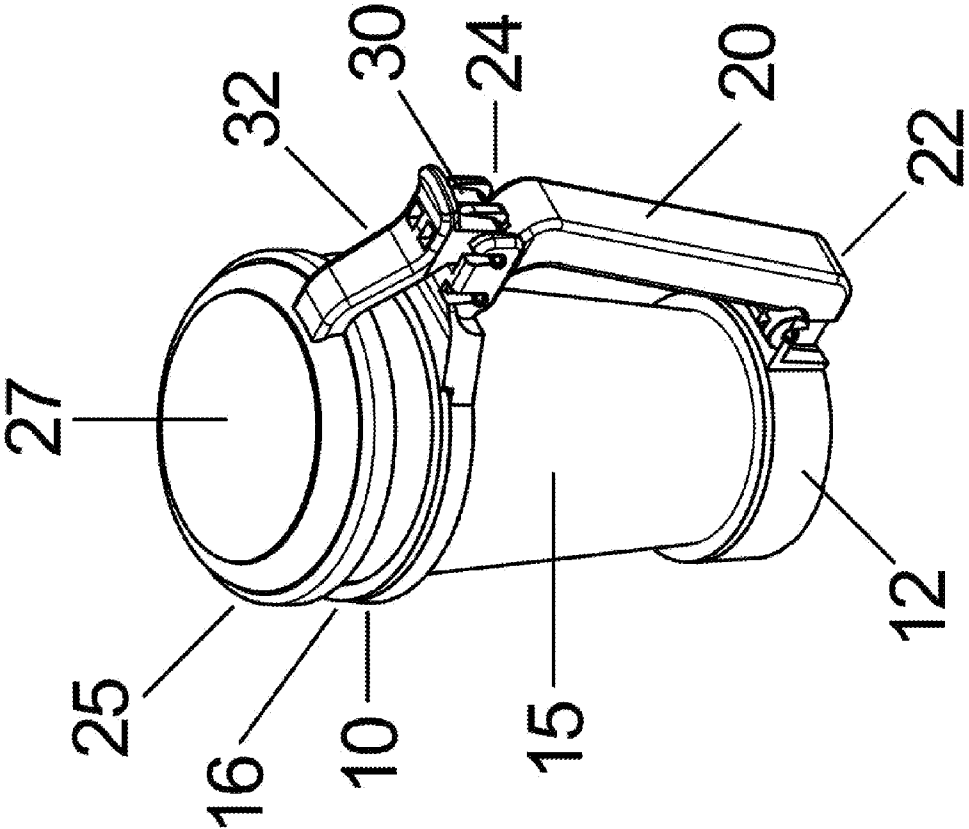


Fig. 1a

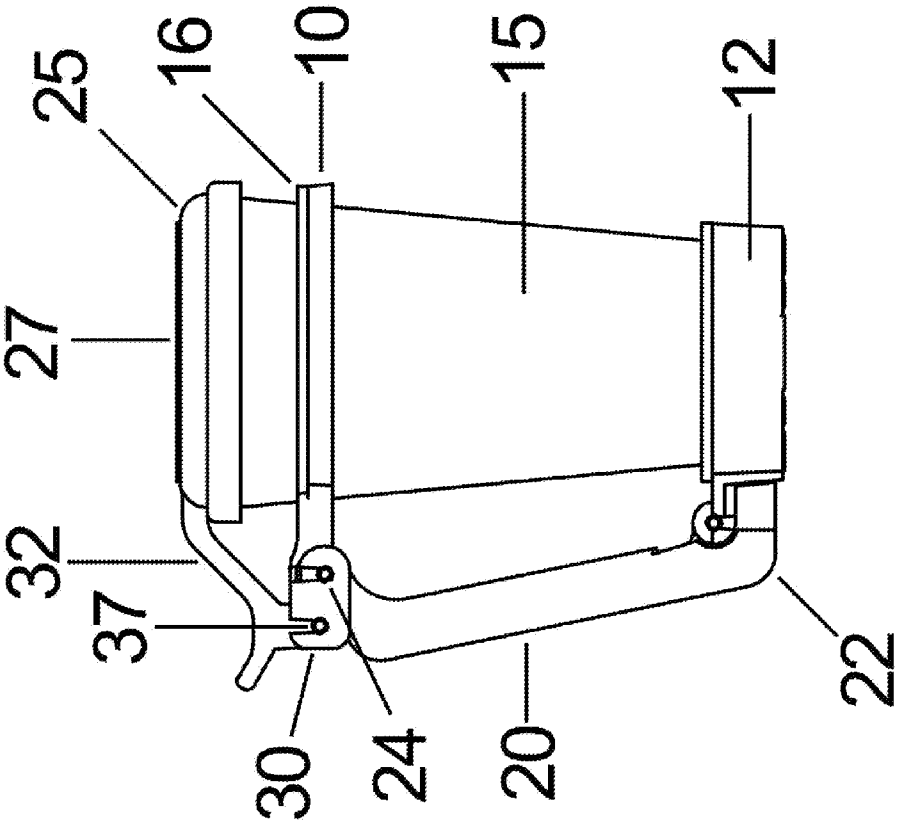


Fig. 1b

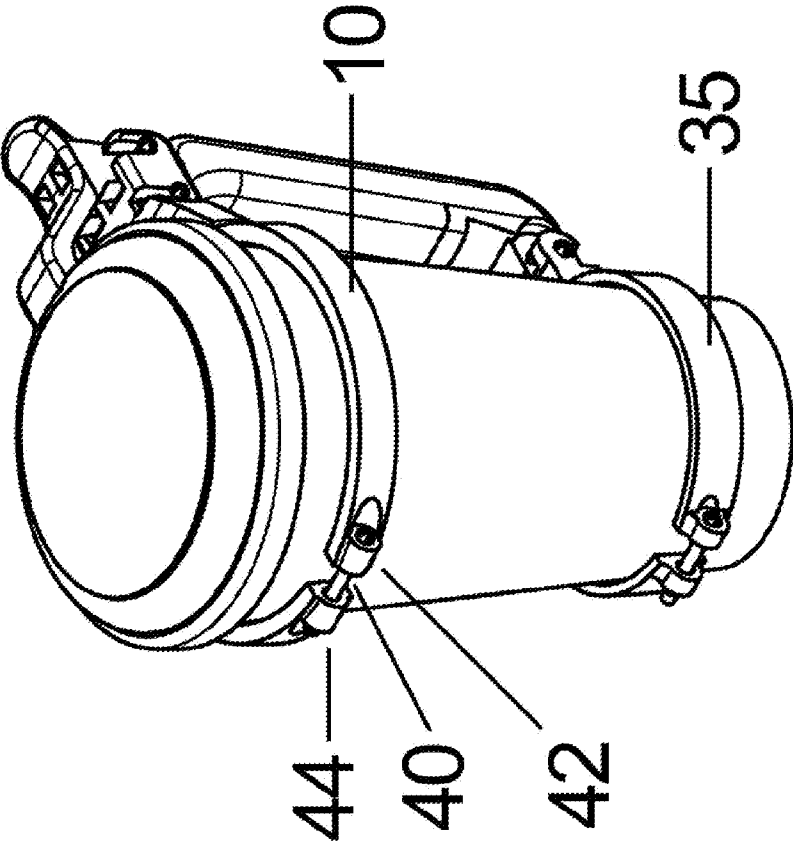


Fig. 2a

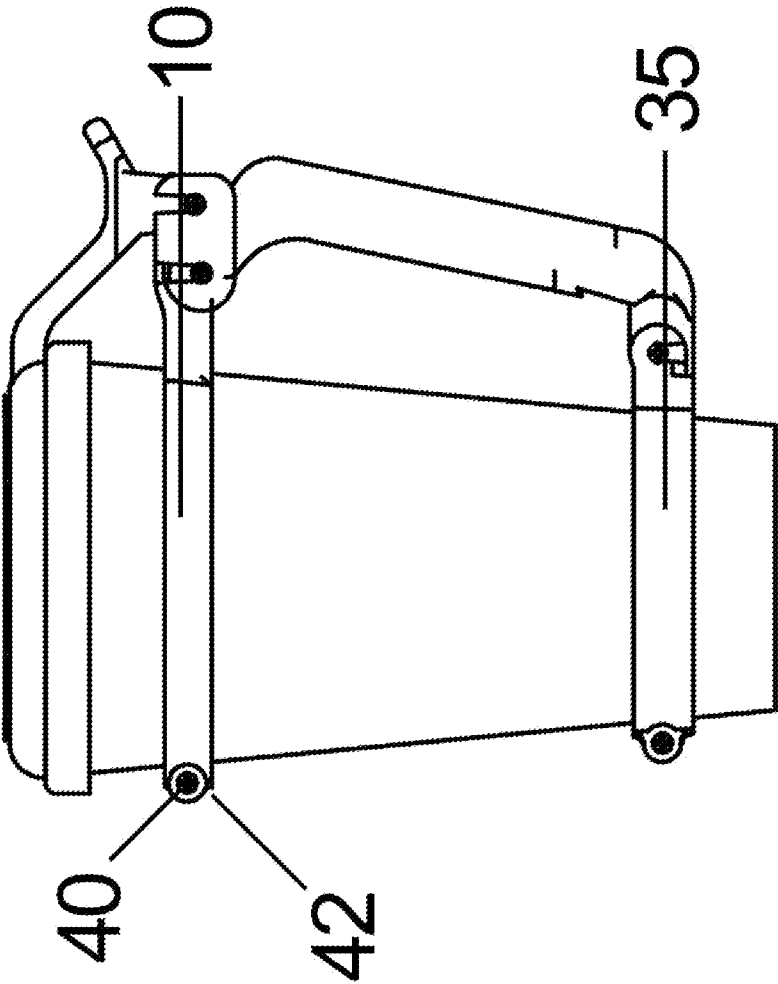


Fig. 2b

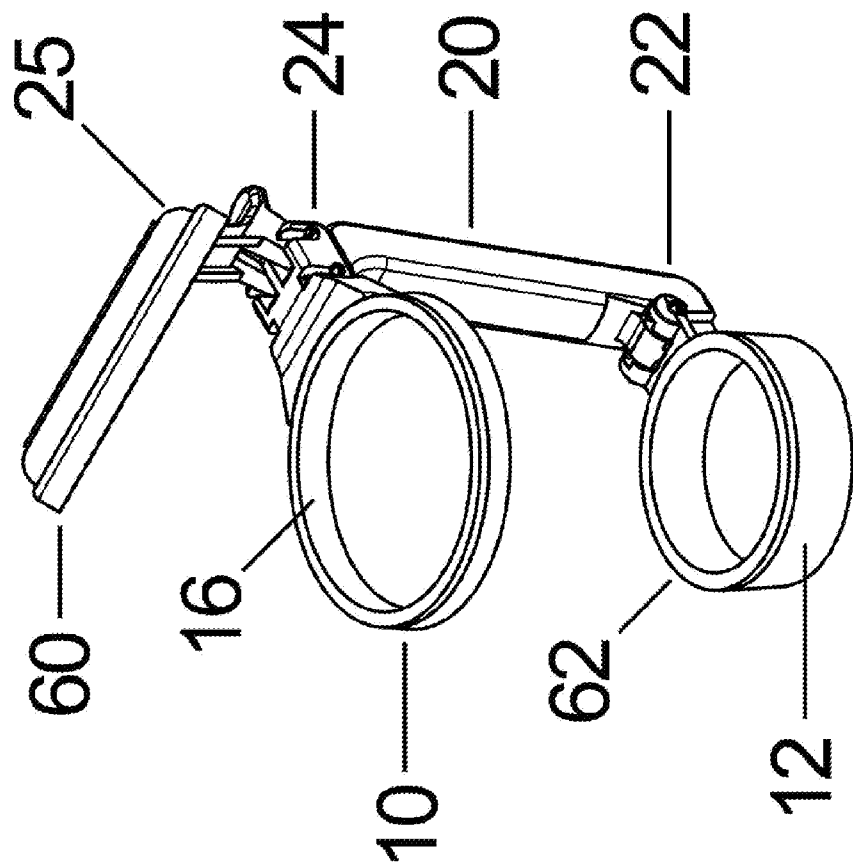


Fig. 3

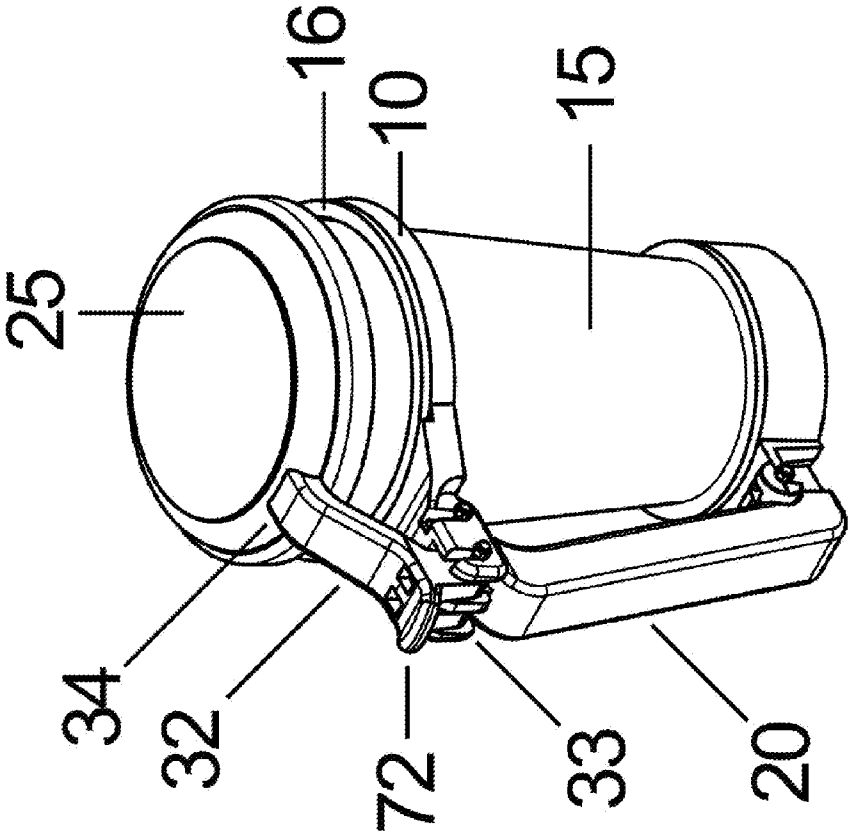


Fig. 4

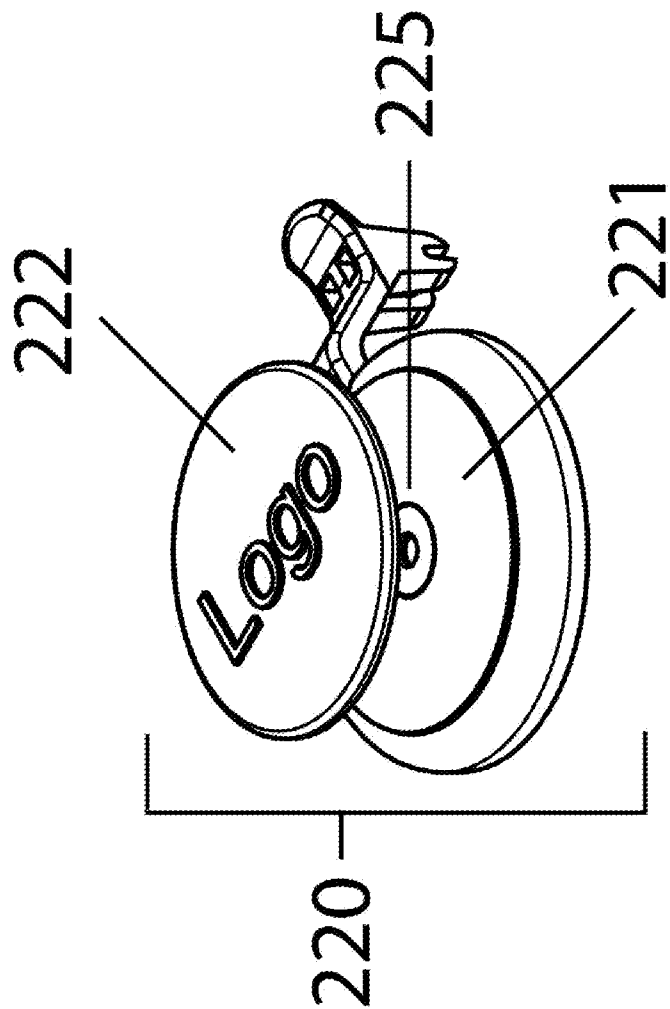


Fig. 5

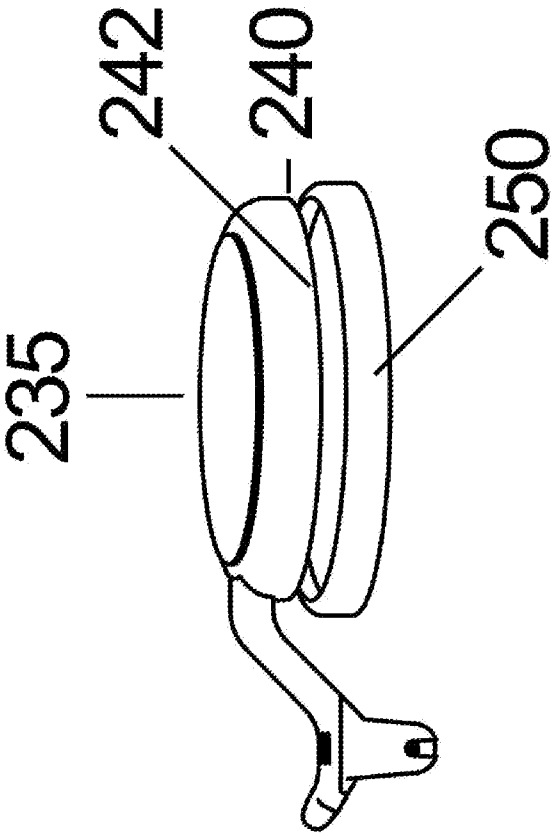


Fig. 6

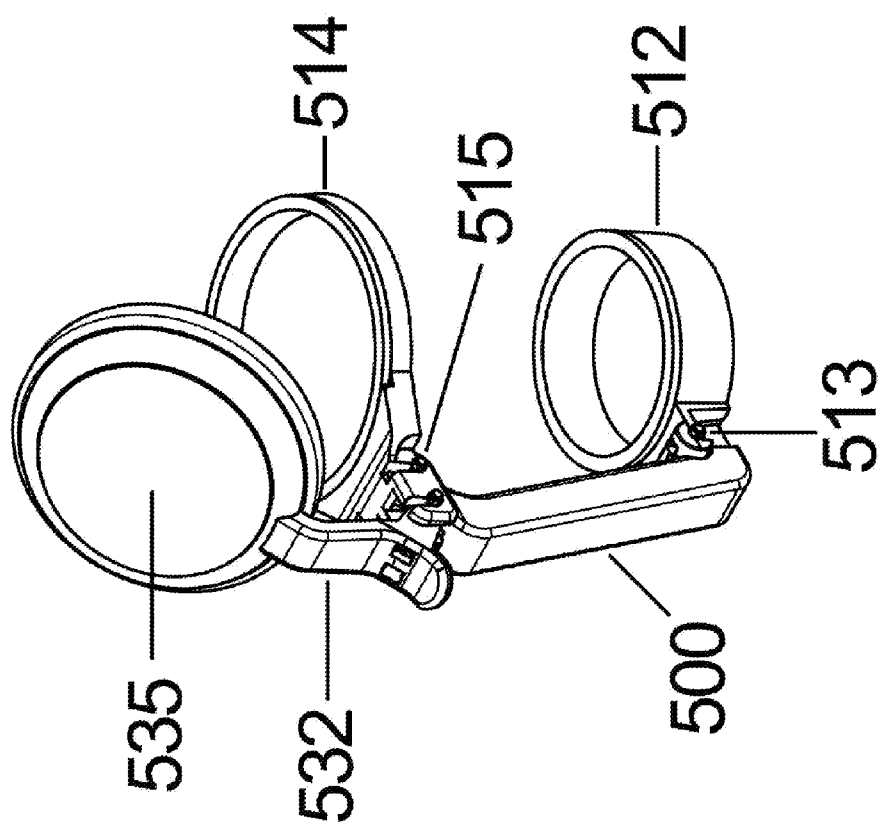


Fig. 7a

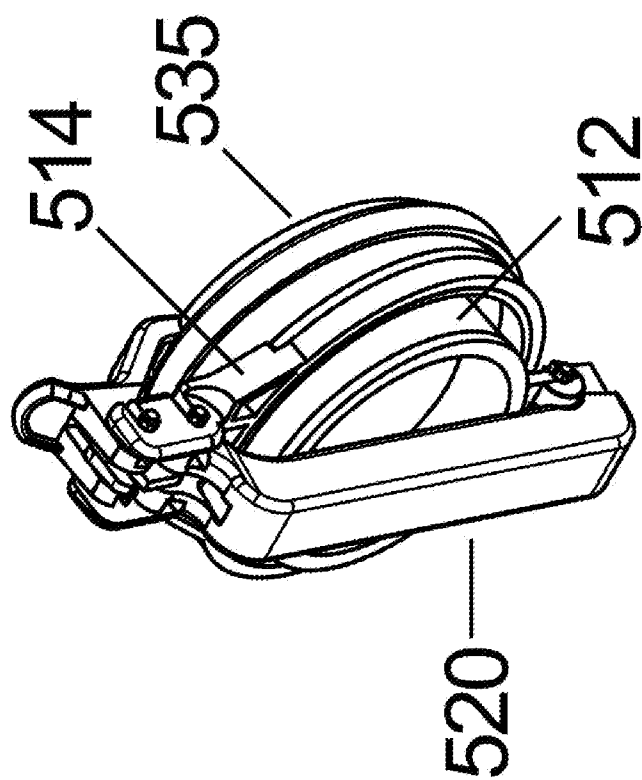


Fig. 7b

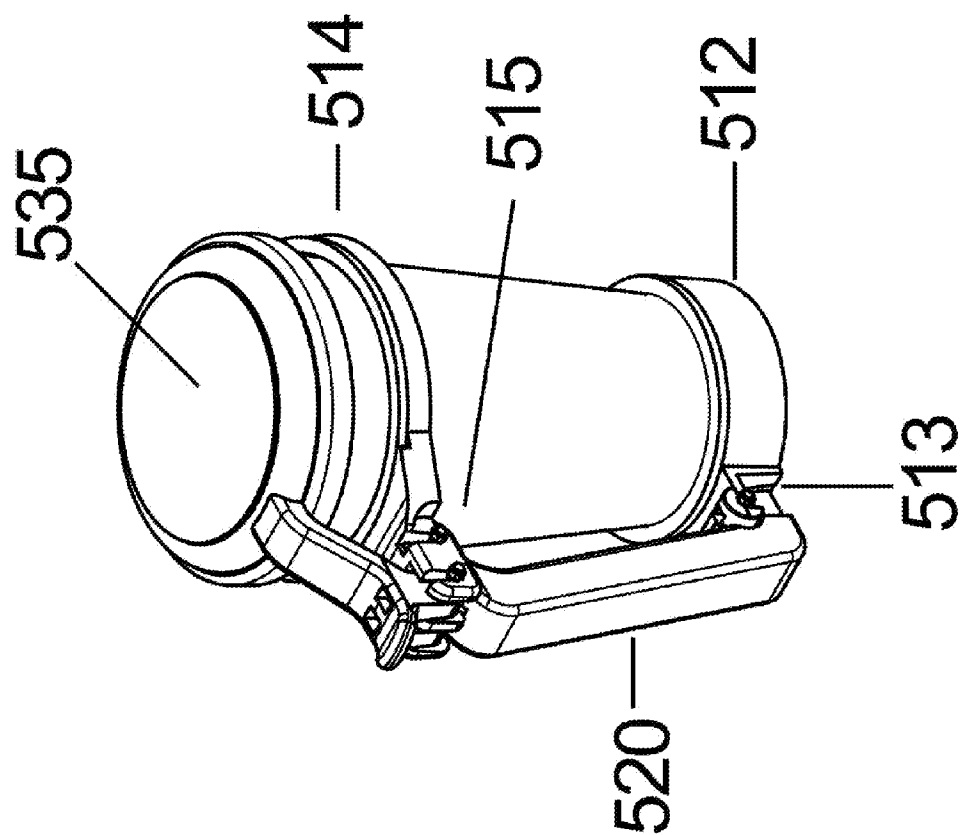


Fig. 7c

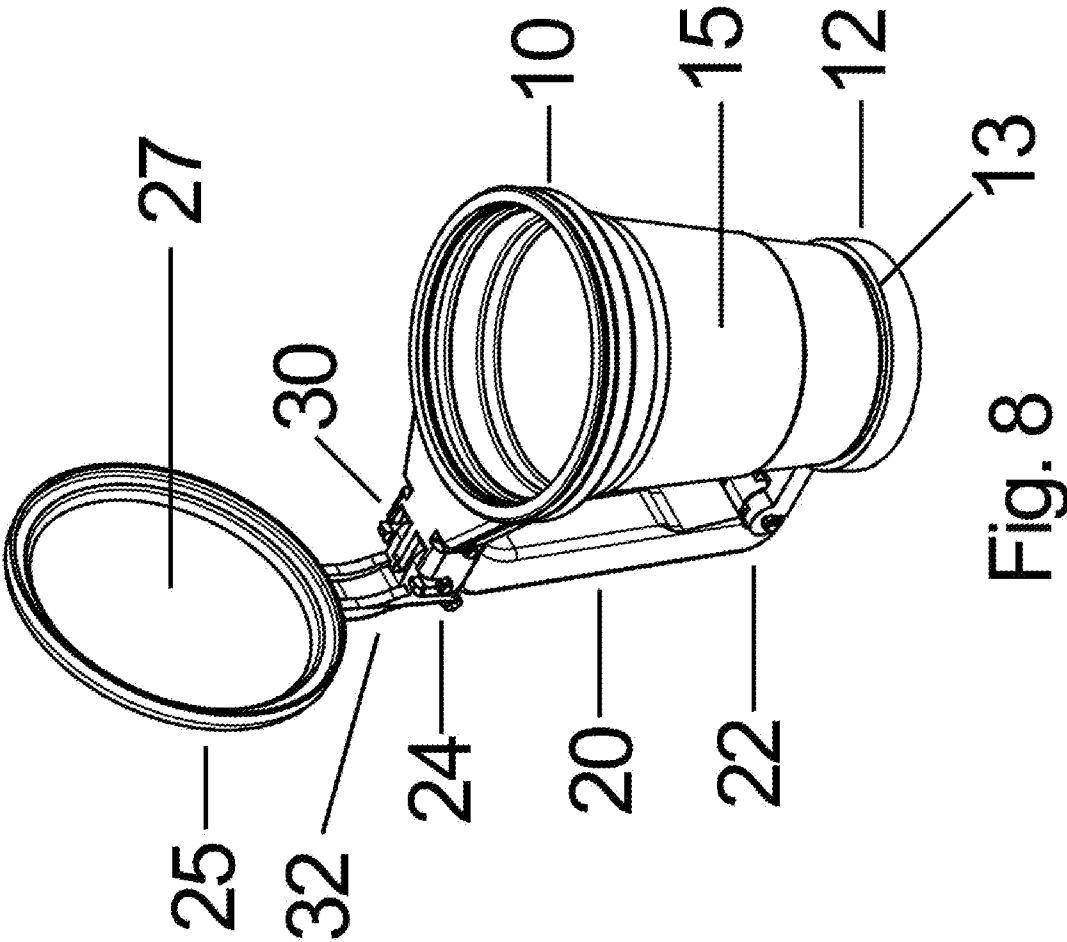


Fig. 8

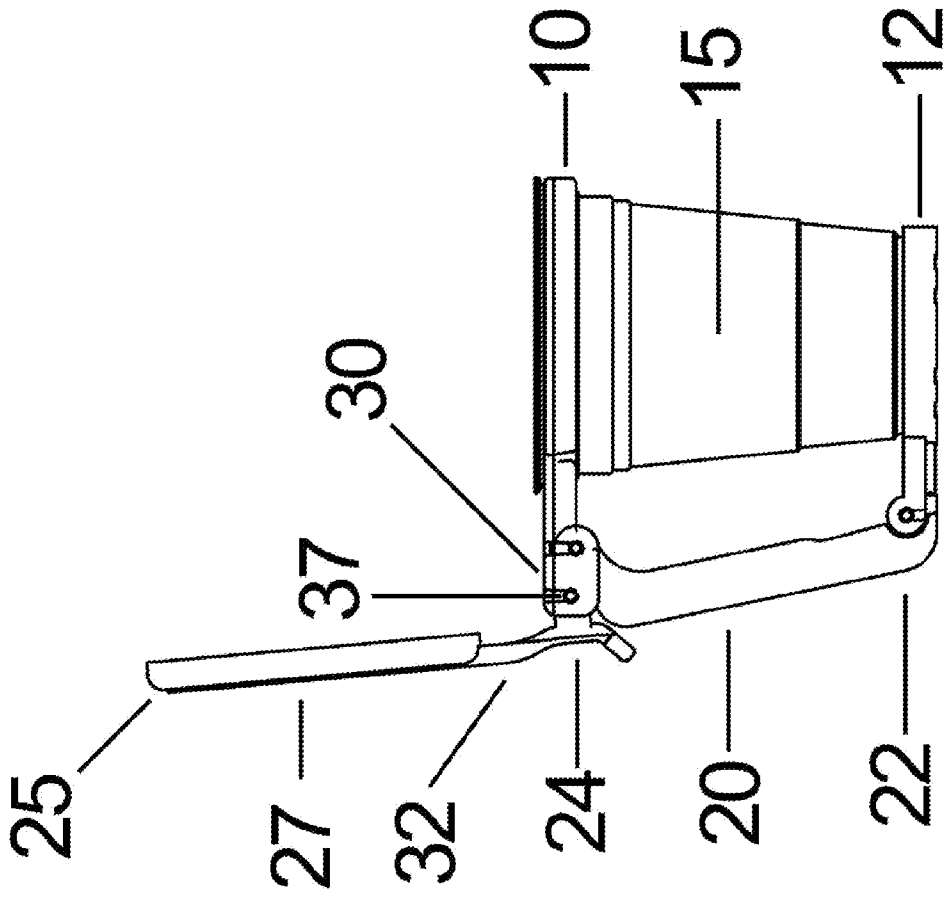


Fig. 9

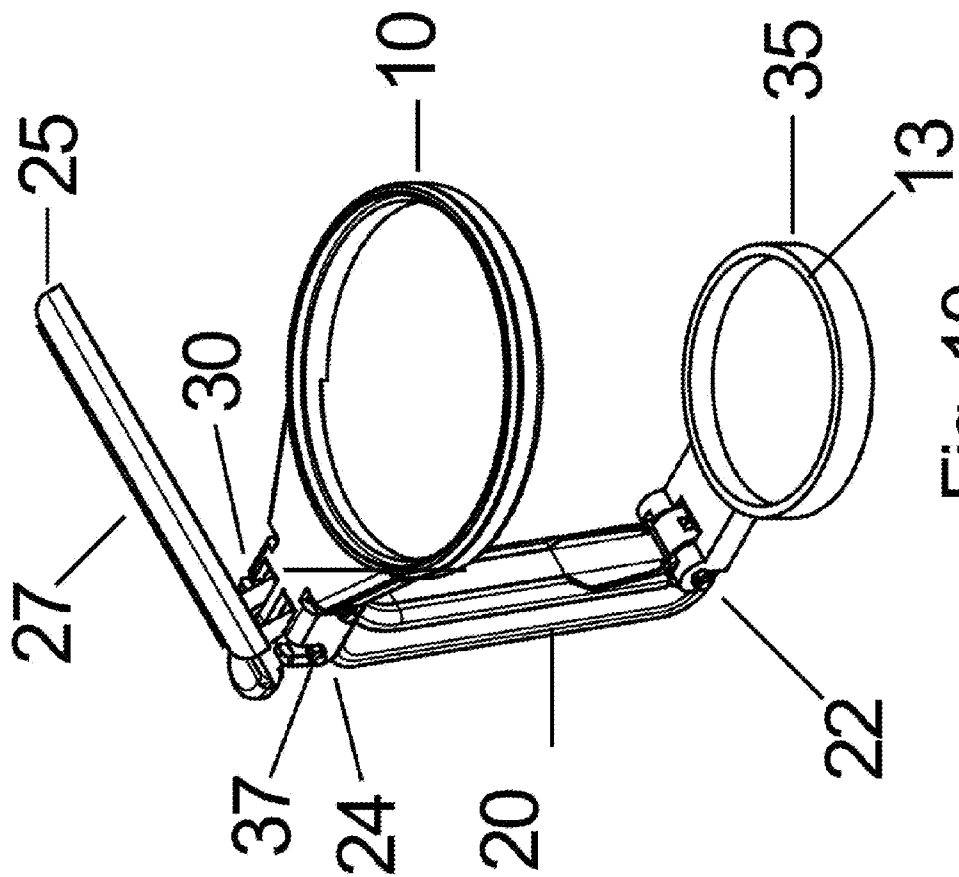
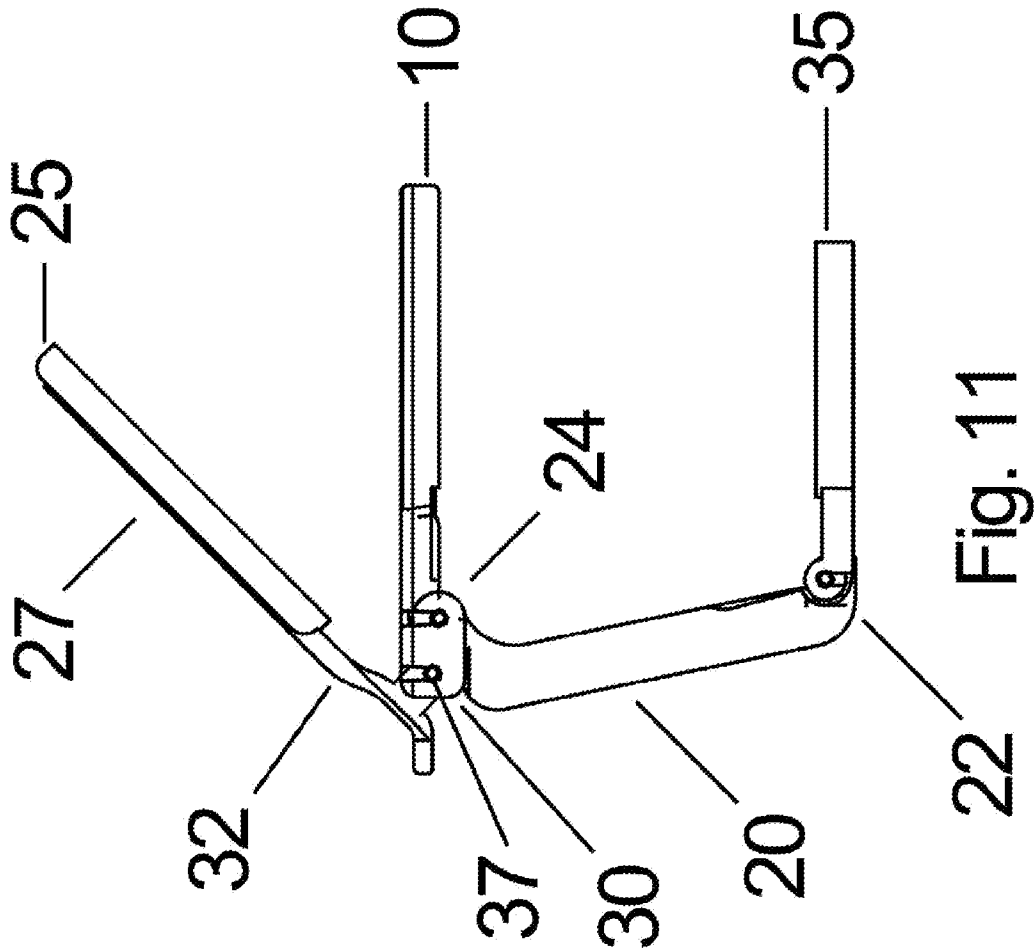


Fig. 10



HANDLE AND A LID FOR A DRINKING RECEPTACLE

CROSS-REFERENCE TO RELATED APPLICATION(S)

[0001] The present application claims priority to U.S. Provisional Patent Application No. 62/180,985 filed on Jun. 17, 2016, entitled “Handle and a Lid for a Drinking Receptacle” the entire disclosure of which is incorporated by reference herein.

BACKGROUND OF THE INVENTION

1. Field of the Invention

[0002] The present invention relates to the field of retrofitting drinking receptacles with a handle and a lid.

2. Description of Related Art

[0003] Handled drinking receptacles, such as beer steins, have been used for centuries for consuming beverages. Steins, in particular, are generally known for their elaborate ornamentation and hinged lids, and the receptacles or vessels are often made of heavy materials such as clay, stoneware, pewter and porcelain. The lids cover the top of the glass and prevent the entry of foreign particles into the glass, and limiting spilling of the vessel. The lids were added to steins during and after the Black Plague as a sanitary measure, and around that time Germany, for example, passed laws requiring vessels to have lids.

[0004] Due to the weight, cost and impracticality of traditional steins, their utility has diminished in modern times. More commonly today, pint glasses, or similar receptacles, are used for drinking beer. Pint glasses are typically used to serve beer, but are also commonly used for consuming non-alcoholic beverages. Steins are also more difficult to clean due to the lid.

[0005] Collecting drinking glasses, and most notably pint glasses, is an increasingly popular way for individuals to express their interests in beer brands or to commemorate their visits to popular tourist destinations. Pint glasses are often adorned with logos, which are either screen-printed or engraved on the side of the glass. Originally, steins also served this purpose, to be personalized or unique for their owners, and steins that are manufactured today are often decorated with various designs.

[0006] Although commonly used and collected, pint glasses have certain disadvantages. Most notably, pint glasses commonly build up condensation on their exterior when filled with a cold liquid, making the glass slippery and more susceptible to being dropped and broken. Some customers with ailments or disabilities, may have more difficulty holding a glass without a handle. Further, a user generally grips a pint glass around its circumference, inhibiting the display of printing and/or etching on the exterior of the glass.

[0007] Additionally, pint glasses do not have lids, making them susceptible to airborne contaminants and bugs, and most notably, “splash out” that occurs when a user is jolted and/or loses his/her balance, or “cheers” with another patron. Lids are frequently used for disposable coffee cups but are often not available for beer, and travel mugs and coffee mugs block the drinks aroma, distorting/lessening the

taste. It would be highly beneficial to be able to add a handle and lid to an existing glass when desired.

[0008] Drink spiking is the act of adding drugs or alcohol to someone’s beverage without their permission. The motivations can include, but not limited to, theft, sexual assault or as a misguided prank. It is recommended that a person always keep control of their drink. A glass with a lid increases that control and reduces the opportunity of someone slipping a drug into the drink; producing a safer experience for the consumer.

[0009] Some modern drinking receptacles are equipped with an integrated handle, like a mug. However the integration of the handle makes the drinking receptacle cumbersome for stacking and storage, as the receptacles cannot be stacked inside one another. Furthermore, the integration of a handle into drinking receptacle results in additional and unnecessary waste if the receptacle is broken, as the entire receptacle, inclusive of the handle, must be discarded.

[0010] In addition, people cannot take their own mug into a bar or restaurant and must use the glassware the location provides. It would be beneficial to take the glassware provided and temporarily add a lid and handle.

[0011] Based on the foregoing, there is a need in the art for an apparatus that retrofits a drinking receptacle with a handle and a lid. Said apparatus may then be removed from the receptacle and used for other receptacles, and can be easily folded into a portable size when not in use on a receptacle. A lid on a beverage reduces spilling and keeps out unwanted material. It is especially beneficial that the apparatus works with any number of common receptacles that may be in use at public establishments.

SUMMARY OF THE INVENTION

[0012] A handle and lid combination for a drinking receptacle has at least one upper ring adapted to retain sides of the receptacle, a coaster base for supporting a drinking receptacle, a handle having an upper portion and a lower portion, wherein the upper ring extends from the upper portion, and the coaster base extends from the lower portion, a lid adapted to extend over the top of the drinking vessel, and a hinge pivotally connecting the lid to the upper ring. The coaster base may grip the bottom of the drinking receptacle and provide support to the drinking receptacle.

[0013] In an embodiment, the upper ring and coaster base have an interior lining of rubber or plastic with a high coefficient of friction to grip the vessel more securely. The handle may be generally C-shaped. In an embodiment, the lid, the ring and the coaster base are each generally coaxial. The lid may be positioned on an arm extending up and away from the hinge, and the hinge is pivotally connected to the arm.

[0014] The shape of the arm may be L-shaped, C-shaped, angular or curved, and the arm may extend the lid to coincide with and cover the top of the receptacle. The lid is connected to the ring. The ring and coaster base are each connected to the handle by a removable fastener, and are separable from the handle.

[0015] A lip at the edges of the lid adapted to engage with a top of the drinking receptacle may be present. The lip material may be selected from the group consisting of silicone, foam, rubber, plastic and metal.

[0016] The coaster base may be mounted to the handle by a hinge, wherein the base is pivotable against the lower portion of the handle. The ring may be mounted to the

handle by a hinge, wherein the ring is pivotable against the upper portion of the handle. The lid may be pivotable against the ring when the ring is against the handle. In an embodiment, in a folded position the ring is folded against the handle, the coaster base is folded against the handle, and the lid is folded against the ring.

[0017] A handle and lid combination for a disposable cup has at least one upper ring adapted to retain sides of the cup, one or more lower rings connected to the lower terminus clamp the lower portion of the cup, a handle having an upper portion and a lower portion, wherein the upper ring extends from the upper portion, and the coaster base extends from the lower portion, and a lid adapted to extend over the top of the cup, and a hinge pivotally connecting the lid to the upper ring. The one or more lower rings may be adapted to engage a lower circumferential indent on a disposable cup.

[0018] The lower ring may be mounted to the handle by a hinge, wherein the base is pivotable against the lower portion of the handle, and the upper ring may be mounted to the handle by a hinge, wherein the ring is pivotable against the upper portion of the handle, and the lid may be pivotable against the upper ring when the upper ring is against the handle. In a folded position the ring may be folded against the handle, the coaster base is folded against the handle, and the lid is folded against the ring.

DESCRIPTION OF FIGURES

[0019] FIG. 1a shows a rear perspective view of the handle and lid system, according to an embodiment of the present invention;

[0020] FIG. 1b shows a side elevation view of the handle and lid system, according to an embodiment of the present invention;

[0021] FIG. 2a shows a side elevation view of the handle and lid system, according to an embodiment of the present invention;

[0022] FIG. 2b shows a perspective view of the handle and lid system, according to an embodiment of the present invention;

[0023] FIG. 3 shows a right perspective view of the handle and lid system without a receptacle, according to another embodiment of the present invention;

[0024] FIG. 4 shows a left perspective view of the handle and lid system, according to another embodiment of the present invention;

[0025] FIG. 5 shows an exploded view of the lid, according to another embodiment of the present invention;

[0026] FIG. 6 shows a detail elevation view of the lid, according to another embodiment of the present invention;

[0027] FIG. 7a shows a left perspective view of a collapsible handle and lid combination in an expended position, according to an embodiment of the present invention;

[0028] FIG. 7b shows a left perspective view of a collapsible handle and lid combination in a collapsed position, according to an embodiment of the present invention;

[0029] FIG. 7c shows a left perspective view of a collapsible handle and lid combination in an open position with a receptacle therein, according to an embodiment of the present invention;

[0030] FIG. 8 shows an elevation view of perspective view of the cup frame, according to an embodiment of the present invention;

[0031] FIG. 9 shows an elevation view of the cup frame, according to the present invention;

[0032] FIG. 10 shows a perspective view of the cup frame, with the cup removed, according to an embodiment of the present invention; and

[0033] FIG. 11 shows an elevation view of the cup frame, with the cup removed, according to an embodiment of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[0034] Preferred embodiments of the present invention and their advantages may be understood by referring to the accompanying figures, wherein like reference numerals refer to like elements.

[0035] With reference to FIGS. 1a and 1b, an embodiment of the present invention has at least one upper ring 10 for retaining, and a coaster 12 for supporting a drinking receptacle 15. The at least one upper ring 10 and the coaster base 12 are each connected at the rear by a handle 20 having an upper terminus 24 and a lower terminus 22. The receptacle 15 rests on the coaster base 12. The coaster base 12 grips the bottom of the glass and provides most of the support to the drinking vessel. The upper ring 10 grips the side of the glass somewhat, but is positioned there mostly for support and to reduce the movement of the glass. In an embodiment the coaster is made of plastic and rubber and is not made to collect or absorb liquid. In an embodiment the ring 10 has an interior lining 16 of rubber or plastic with a high coefficient of friction to grip the vessel 15 more securely.

[0036] In one embodiment the handle 20 is generally C-shaped or L-shaped. The lower terminus 22 is connected to the coaster, and the upper terminus 24 is connected to the at least one ring. A lid 25 is connected by a hinge 30 to the ring 10 at or near the upper terminus 24 to extend over the top of the receptacle 15, the center 27 of the lid 25 oriented generally coaxially with the ring 10 along axis A passing through the center of the base 12, the receptacle 15, the ring 10 and the lid 25. In one embodiment, the lid is positioned on an arm 32 extending up and away from the hinge 30. The arm 32 is L-shaped, or C-shaped, and may be angular or have a curvature, and extends the lid 25 to coincide with and cover the top of the receptacle 15.

[0037] An alternative embodiment of the present invention has a generally C-shaped or L-shaped handle having an upper terminus 24 and a lower terminus 22, wherein the upper portion of the receptacle is retained by at least one ring 10 connected to the upper terminus 24, and one or more lower rings 35 connected to the lower terminus clamp the lower portion of the receptacle.

[0038] In an embodiment, the ring(s), coaster, and/or the lid are removably connected to the handle using one or more fasteners, such as a pin, a dowel, or a screw that are inserted through corresponding apertures in the handle and the ring(s), coaster, and/or the lid to releasably connect the respective elements to the handle. The hinge 30 has a pin 37 that connects the ring 10 with arm 32, which may be removed to permit separation of the handle 20 portion and lid 25 portion. The upper terminus 24 is connected to the upper ring 10 by a pin or screw fastener, wherein when the fastener is removed the upper terminus 24 and upper ring 10 may be separated. Similarly, the lower terminus 22 is connected to the base 12 and/or lower ring(s) 35 by a pin or screw, wherein removal of the fastener enabled separation and removal of the lower terminus 22 and/or base 12. This last may be used, for example, where a base 12 is substituted

for a lower ring **35** to securely retain a longer, thinner glass. Although specific fasteners have been mentioned, one skilled in the art would understand and appreciate that other releasable fasteners could be used without deviating from the scope of the present invention. When engaged with a drinking receptacle, the at least one ring, the coaster, and/or the lid are axially aligned with the drinking receptacle.

[0039] With reference to FIGS. **2a** and **2b**, in an embodiment, the upper and lower ring(s) **10**, **35** is/are constructed of a sturdy, yet resilient material, such as plastic, allowing the at least one ring to receive, and securely engage with, drinking receptacles of varying circumferences without requiring manual adjustment. In a further embodiment, the ring(s) **10**, **35** is/are adjustable to accommodate drinking receptacles of various circumferences/widths. As an example, some figures show rings that are formed by joining multiple ring sections using screws. A screw **40** may be inserted or screwed into an aperture of a first section **42**, and is then threaded into a selected aperture of an adjoining section **44** to join the sections together and give the ring **10**, **35** the appropriate diameter. Adjustments are made to the circumference of the ring(s) by tightening and/or loosening the screws **40**.

[0040] With reference to FIG. **3**, the handle is shown separated from the receptacle or glass therein and with a base **12** and upper ring **10**. The base **12** extends from the lower terminus and retains the bottom of a glass or receptacle **15** (not shown), while the upper ring extends from the upper terminus **24** and has a fixed diameter. In an embodiment the ring **10** has an interior lining **16** of rubber or plastic with a high coefficient of friction to grip the receptacle (not shown) more securely. The upper ring **10** and interior lining **16** are sized in accordance with standard receptacle sizes to permit the glass to be placed through the upper ring **10** and interior lining **16**, so that it rests on the base **12**. The lid **25** is then correctly oriented to fit over, or engage with, the rim of the glass. The lid **25** may have a lip **60** that is slightly larger in diameter to the rim of the receptacle (not shown) that sealingly engages with the rim of the glass to prevent splashing out of the liquid contained therein. In one embodiment, the base **12** has an interior lining of rubber or plastic **62** to accommodate the bottom of the receptacle and prevent the receptacle from moving around within the base **12**.

[0041] With reference to FIG. **4**, in an embodiment, a lid arm **32**, having a first end **33** and a second end **34**, extends upwardly and curves from a point at or near the upper portion of the handle to a point generally in the direction of the opening of a drinking receptacle retained within the ring(s). The first end **33** is hingedly connected to the top ring **10** described above and the second end is attached to the lid **25**. A lip **72** extends from near the first end **33** in a direction generally away from the lid **25**, for a user's thumb to apply downward pressure thereon. When downward and/or outward force is applied to the protrusion, the lid **25** pivots open on the hinge and permits access to the contents of the receptacle **15**. In an embodiment, the first end of the lid arm is fixedly connected to the ring, either as a single, integrated component or by using one or more pins, screws or dowels for attachment to the handle, whereas the lid arm is hinged between the first end and the second end instead of at the first end.

[0042] In an embodiment and with reference to FIG. **5**, the lid has a removable addition **222** within the lid's surface

221. The addition **222** is releasably connected to the lid using a magnetic snap **225** or some other mated fitting known to one reasonably skilled in the art. In a preferred embodiment, the removable addition **222** connects with the lid surface **221** by a magnetic snap, wherein the insert is ferrous, and the lid **220** contains one or more magnets, which enables the addition **222** to be easily replaced by the user depending on mood or event. The addition **222** may be marked with advertising or graphics, and may be exchanged based on the user's preferences.

[0043] With reference to FIG. **6**, in a further embodiment, a lid lip **250** is connected to the underside of the base **240** of the lid **235**, extending around the circumference **242** at or near the edge of the lid **235**. The lip **250** is configured to engage with a drinking receptacle opening when the lid **235** is closed. In one embodiment, the lip **250** is constructed of a non-porous, compressible material such as rubber, closed-cell foam or silicone to increase sealing, aid in the prevention of bacterial growth and prevent chipping or breaking of the receptacle when closing the lid **235**. Alternatively, the lip **250** may be plastic or metal and may have a rubber or foam liner for better sealing with the opening of the receptacle.

[0044] With reference to FIG. **7a-7c**, a foldable embodiment of the handle and lid combination is shown. The lower coaster **512** to the handle and upper ring mount **514** are pivotable on hinges **513**, **515** respectively, along with the arm **532**, such that they may fold together against the handle to provide a smaller form factor. Specifically, the lower coaster folds up against the handle, the upper ring **514** and lid **535** folds down over the lower coaster **512**.

[0045] With reference to FIGS. **8** and **9**, an embodiment of the present invention has at least one upper ring **10** for retaining, and a coaster **12** for supporting a disposable cup **15**. The at least one upper ring **10** and the coaster base **12** are each connected at the rear by a handle **20** having an upper terminus **24** and a lower terminus **22**. The cup **15** rests on the coaster base **12**. The coaster base **12** grips the bottom of the glass and provides most of the support to the cup **15**. In an embodiment, the coaster based has a cavity (not shown) to accommodate and engage with the bottom of the cup **15**. The upper ring **10** is positioned around the cup **15** for support and to reduce the movement of the cup **15**. In an embodiment the coaster is made of plastic and is not made to collect or absorb liquid.

[0046] In an embodiment, the cup is a thin plastic, disposable cup with a circumferential indent (not shown) at or near its base, and the coaster base **12** comprises an annular ring **13**, which engages with the circumferential indent to releasably retain it. In this embodiment, the annular ring is slightly smaller in diameter than the base of the cup and fits securely into the circumferential indent.

[0047] In one embodiment the handle **20** is generally C-shaped or L-shaped. The lower terminus **22** is connected to the coaster, and the upper terminus **24** is connected to the at least one ring **10**. A lid **25** is connected by a hinge **30** to the ring **10** at or near the upper terminus **24** to extend over the top of the receptacle **15**, the center **27** of the lid **25** oriented generally coaxially with the ring **10** along axis **A** passing through the center of the base **12**, the receptacle **15**, the ring **10** and the lid **25**. In one embodiment, the lid is positioned on an arm **32** extending up and away from the hinge **30**. The arm **32** is L-shaped, or C-shaped, and may be angular or have a curvature, and extends the lid **25** to coincide with and cover the top of the receptacle **15**.

[0048] An alternative embodiment of the present invention has a generally C-shaped or L-shaped handle having an upper terminus 24 and a lower terminus 22, wherein the upper portion of the receptacle is retained by at least one ring 10 connected to the upper terminus 24, and one or more lower rings 35 connected to the lower terminus clamp the lower portion of the receptacle.

[0049] In an embodiment, the ring(s), coaster, and/or the lid are removably connected to the handle using one or more fasteners, such as a pin, a dowel, or a screw that are inserted through corresponding apertures in the handle and the ring(s), coaster, and/or the lid to releasably connect the respective elements to the handle. The hinge 30 has a pin 37 that connects the ring 10 with arm 32, which may be removed to permit separation of the handle 20 portion and lid 25 portion. In an embodiment, the lid 25 is adapted to engage with and seal the top of the cup 15, and in another embodiment the lid 25 is adapted to engage with the ring 10. The upper terminus 24 is connected to the upper ring 10 by a pin or screw fastener, wherein when the fastener is removed the upper terminus 24 and upper ring 10 may be separated. Similarly, the lower terminus 22 is connected to the base 12 and/or lower ring(s) 35 by a pin or screw, wherein removal of the fastener enabled separation and removal of the lower terminus 22 and/or base 12. This last may be used, for example, where a base 12 is substituted for a lower ring 35 to securely retain a longer, thinner glass. Although specific fasteners have been mentioned, one skilled in the art would understand and appreciate that other releasable fasteners could be used without deviating from the scope of the present invention. When engaged with a drinking receptacle, the at least one ring, the coaster, and/or the lid are axially aligned with the drinking receptacle.

[0050] With reference to FIGS. 10 and 11, the handle and lid combination is shown without a cup 15 (not shown) or vessel therein.

[0051] The invention has been described herein using specific embodiments for the purposes of illustration only. It will be readily apparent to one of ordinary skill in the art, however, that the principles of the invention can be embodied in other ways. Therefore, the invention should not be regarded as being limited in scope to the specific embodiments disclosed herein, but instead as being fully commensurate in scope with the following claims.

1. A handle and lid combination for a drinking receptacle, comprising:

- a. at least one upper ring adapted to retain sides of the receptacle;
- b. a coaster base for supporting a drinking receptacle;
- c. a handle having an upper portion and a lower portion, wherein the upper ring extends from the upper portion, and the coaster base extends from the lower portion;
- d. a lid adapted to extend over the top of the drinking vessel; and
- e. a hinge pivotally connecting the lid to the upper ring.

2. The combination of claim 1 wherein the coaster base grips the bottom of the drinking receptacle and provides support to the drinking receptacle.

3. The combination of claim 1 wherein the upper ring and lower coaster have an interior lining of rubber or plastic with a high coefficient of friction to grip the vessel more securely.

4. The combination of claim 1 wherein the handle is generally C-shaped.

5. The combination of claim 1 wherein the lid, the ring and the coaster base are each generally coaxial.

6. The combination of claim 1 wherein the lid is positioned on an arm extending up and away from the hinge, and the hinge is pivotally connected to the arm.

7. The combination of claim 6 wherein the shape of the arm is selected from the group consisting of L-shaped, C-shaped, angular or curved.

8. The combination of claim 6 wherein the arm extends the lid to coincide with and cover the top of the receptacle.

9. The combination of claim 1 wherein the lid, ring and coaster base are each connected to the handle by a removable fastener, and are separable from the handle.

10. The combination of claim 1 further comprising a lip at the edges of the lid adapted to engage with a top of the drinking receptacle.

11. The combination of claim 1 wherein the lip is made from a material selected from the group consisting of silicone, foam, rubber, plastic and metal.

12. The combination of claim 1, wherein the coaster base is mounted to the handle by a hinge, wherein the base is pivotable against the lower portion of the handle, and the ring is mounted to the handle by a hinge, wherein the ring is pivotable against the upper portion of the handle, and the lid is pivotable against the ring when the ring is against the handle.

13. The combination of claim 12, wherein in a folded position the ring is folded against the handle, the coaster base is folded against the handle, and the lid is folded against the ring.

14. A handle and lid combination for a disposable cup, comprising:

- a. at least one upper ring adapted to retain sides of the cup;
- b. a coaster base for supporting a drinking receptacle;
- c. a handle having an upper portion and a lower portion, wherein the upper ring extends from the upper portion, and the coaster base extend from the lower portion;
- d. a lid adapted to extend over the top of the cup; and
- e. a hinge pivotally connecting the lid to the upper ring.

15. The combination of claim 15 wherein the one or more lower rings are adapted to engage a circumferential indent on a disposable cup base.

16. The combination of claim 15, wherein the coaster base is mounted to the handle by a hinge, wherein the base is pivotable against the lower portion of the handle, and the upper ring is mounted to the handle by a hinge, wherein the ring is pivotable against the upper portion of the handle, and the lid is pivotable against the upper ring when the upper ring is against the handle.

17. The combination of claim 15, wherein in a folded position the ring is folded against the handle, the lower ring is folded against the handle, and the lid is folded against the ring.

* * * * *