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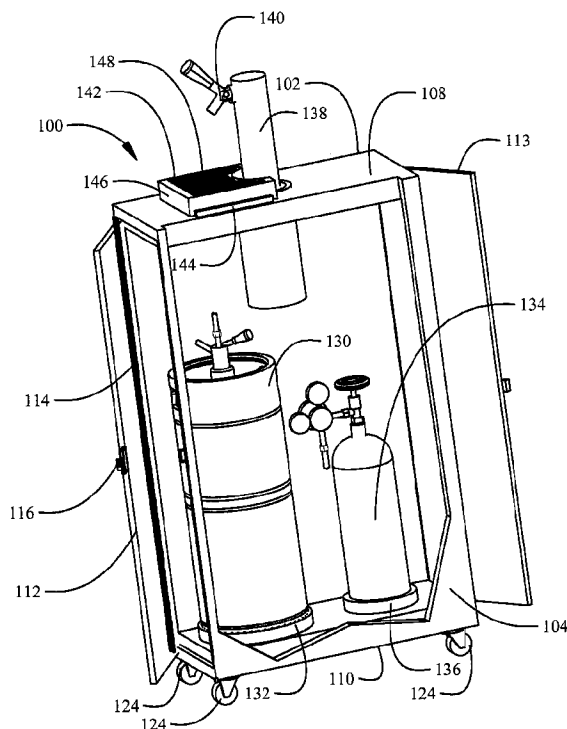
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(54) Titre : SYSTEME DE DISTRIBUTION DE BOISSON GAZEUSE ISOLE ADAPTABLE DESTINE A UN CHARIOT DE CUISINE

(54) Title: ADAPTABLE INSULATED GALLEY CART CARBONATED BEVERAGE DELIVERY SYSTEM



(57) Abrégé/Abstract:

A galley cart carbonated beer dispensing system employs a housing defining a cavity. A door is coupled to the housing and configured to be moved between a closed position and an open position. A keg is received in the cavity and a carbonation cylinder is received in the cavity and connected to the keg. A spigot is supported on a dispensing tower extending from a top of the housing and connected to the keg. The dispensing tower is retractable into the cavity.

ABSTRACT OF DISCLOSURE

A galley cart carbonated beer dispensing system employs a housing defining a cavity. A door is coupled to the housing and configured to be moved between a closed position and an open position. A keg is received in the cavity and a carbonation cylinder is received in the cavity and connected to the keg. A spigot is supported on a dispensing tower extending from a top of the housing and connected to the keg. The dispensing tower is retractable into the cavity.

ADAPTABLE INSULATED GALLEY CART CARBONATED BEVERAGE DELIVERY SYSTEM

BACKGROUND INFORMATION

Field

Embodiments of the disclosure relate generally to the galley cart systems for transportation vehicles and more particularly to a galley cart holding a beverage keg and carbonation cylinder and having a retractable dispensing tower.

Background

Galley carts employed for food service in transportation vehicles such as aircraft and trains. The galley carts may be insulated to maintain contents at a desired cooler temperature. Beer is typically served from galley carts in aircraft and trains in bottled or canned form. Patrons often prefer draft beer.

SUMMARY

Exemplary embodiments provide a galley cart carbonated beer dispensing system having a housing defining a cavity. A door is coupled to the housing and configured to be moved between a closed position and an open position. A keg is received in the cavity and a carbonation cylinder is received in the cavity and connected to the keg. A spigot is supported on a dispensing tower extending from a top of the housing and connected to the keg. The dispensing tower is retractable into the cavity.

Accordingly, in an embodiment, there is described a galley cart carbonated beverage dispensing system comprising: a housing defining a cavity; a first mounting ring configured to support a beverage keg in the cavity; a second mounting ring configured to support a carbonation cylinder in the cavity, wherein the carbonation cylinder is configured to be connected to the beverage keg; and, a spigot supported on a dispensing tower retractably extending from a top of the housing and configured to be connected to the beverage keg, said dispensing tower extending from a support

element telescopically engaged in a receiver and having a position engagement system adapted to fix the support element in the receiver at an extended position of the dispensing tower and releasable for vertical translation of the support element into the receiver to position the dispensing tower in a retracted position, said top of the
5 housing having a slot adapted to receive the spigot in the retracted position.

In another embodiment, there is described a galley cart carbonated beverage dispensing system comprising: a housing defining a cavity; a keg received in the cavity; a carbonation cylinder received in the cavity and connected to the keg; and, a spigot supported on a dispensing tower extending from a top of the housing and
10 connected to the keg, said dispensing tower extending from a support element telescopically engaged in a receiver and having a position engagement system adapted to fix the support element in the receiver at an extended position of the dispensing tower and releasable for vertical translation of the support element into the receiver to position the dispensing tower in a retracted position in the cavity, said top
15 of the housing having a slot adapted to receive the spigot in the retracted position.

In a still further embodiment, there is described a galley cart carbonated beverage dispensing system comprising: a housing defining a cavity; a first mounting ring configured to support a beverage keg in the cavity; a second mounting ring configured to support a carbonation cylinder in the cavity; a spigot supported on a
20 dispensing tower extending from a top of the housing and configured to be connected to the beverage keg, said dispensing tower being retractable into the cavity and extending from a support element telescopically engaged in a receiver; and a position engagement system adapted to fix the support element in the receiver at an extended position of the dispensing tower and releasable for vertical translation of the support
25 element in the receiver positioning the dispensing tower in a retracted position wherein the receiver is cylindrical and the position engagement system comprises one of: stubs extending from the support element and received in vertical slots in the receiver, said support element rotatable to engage the stubs in detents proximate a top of the vertical slots; and a split clamp compressing slotted segments in a collar on the
30 receiver to engage the support element.

The embodiments provide a method for dispensing beer by mounting a beer keg a carbon dioxide (CO₂) cylinder in the galley cart. The CO₂ cylinder is connected to a tap on the keg and a supply tube connection is connected from the tap to a dispensing connection on a spigot. A dispensing tower carrying the spigot is extended
5 from a top of the galley cart and secured with a position engagement system in the extended position. Beer is then dispensed from the spigot.

In a further aspect, there is described a method for dispensing a carbonated beverage, the method comprising: mounting a beverage keg in a galley cart; mounting a CO₂ cylinder in the galley cart; connecting the CO₂ cylinder to a tap on the keg;
10 connecting a supply tube connection from the tap to a dispensing connection on a spigot; extending a dispensing tower carrying the spigot from a top of the galley cart, wherein the dispensing tower is extended from a support element telescopically engaged in a receiver; and securing the dispensing tower with a position engagement system in the extended position, wherein the position engagement system fixes the
15 support element in the receiver at an extended position of the dispensing tower and is releasable for vertical translation of the support element into the receiver to position the dispensing tower in a retracted position in the cavity, a top of the gallery cart having a slot adapted to receive the spigot in the retracted position.

There is also described a method for dispensing a carbonated beverage, the
20 method comprising: mounting a beverage keg in a galley cart; mounting a CO₂ cylinder in the galley cart; connecting the CO₂ cylinder to a tap on the keg; connecting a supply tube connection from the tap to a dispensing connection on a spigot; extending a dispensing tower carrying the spigot from a top of the galley cart, wherein the dispensing tower extends from a support element telescopically engaged in a
25 receiver; and securing the dispensing tower with a position engagement system in the extended position, the position engagement system being adapted to fix the support element in the receiver at the extended position of the dispensing tower and releasable for vertical translation of the support element in the receiver positioning the dispensing tower in a retracted position, wherein the receiver is cylindrical and the position
30 engagement system comprises one of: stubs extending from the support element and

received in vertical slots in the receiver, said support element rotatable to engage the stubs in detents proximate a top of the vertical slots; and a split clamp compressing slotted segments in a collar on the receiver to engage the support element.

BRIEF DESCRIPTION OF THE DRAWINGS

The features, functions, and advantages that have been discussed can be achieved independently in various embodiments or may be combined in yet other embodiments, further details of which can be seen with reference to the following
5 description and drawings.

FIG. 1 is a perspective view of an example a galley cart in which the described embodiments may be employed;

FIG. 2 is a cutaway perspective view of the galley cart of FIG. 1 with a portion of one side removed to show placement of internal components with the dispensing
10 tower in the extended position;

FIG. 3 is a detailed perspective view of the dispensing tower retraction and engagement system with the dispensing tower sectioned to reveal connection details;

FIG. 4 is a perspective view of the dispensing tower in the retracted position and the glass support and overflow sump in the stored position;
15

FIG. 5 is a detailed cutaway perspective view of the dispensing tower retraction and engagement system in the retracted position;

FIG. 6 is a perspective view of the dispensing tower in the retracted position and the cover plate installed;

FIG. 7A is a detailed perspective view of an alternative embodiment of the dispensing tower;
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FIG. 7B is a detailed perspective view of a second alternative embodiment of the dispensing tower; and,

FIG. 8 is a flow chart of a beer dispensing method enabled by the disclosed
25 embodiments.

DETAILED DESCRIPTION

The embodiments described herein provide a storage and dispensing system for a carbonated beverage, such as draft beer, that may be used in conjunction with
30 standard galley carts. More specifically, the embodiments described herein provide

a galley cart for use in a transportation vehicle that includes capability for dispensing draft beer while retaining a desired form factor for storage and operation in aircraft or other transportation vehicle galleys. An insulated half-size galley cart houses up to a sixth barrel beer keg (a.k.a., a **5.16** gallon (**20** liter) beer keg) and CO₂ cylinder for carbonation and employs a dispensing tower with a beer spigot connected to a keg tap, with the dispensing tower retractable into an interior cavity of the galley cart.

Referring to the drawings, FIG. **1** is a perspective view of a galley cart **100** which may be employed in the embodiments disclosed herein. In one aspect of this embodiment, the galley cart **100** includes a housing **102**. In the illustrated embodiment, the housing **102** has a first side **104**, a second side **106**, a top **108**, and a bottom **110**. The galley cart **100** further includes a first door **112** positioned on one end of the housing **102**, and, for certain embodiments, a second door (seen in subsequent figures) is positioned on an opposite end of the case **102**. Each of the doors **112** can further include one or more hinges **114** and a latch **116**. The hinges **114** pivotally attach the doors **112** to the housing **102**. The latch **116** can be configured to releasably engage corresponding receivers **118** attached to the housing **102** when the doors **112** are in closed positions as illustrated in FIG. **1**. The galley cart **100** may employ insulation in the housing **102** to maintain a desired temperature for internal components in the cart. Dry ice or other preconditioned cooling blocks may be employed for cooling.

By disengaging the latch **116** from the corresponding receiver **118**, the doors **112** can be opened outwardly providing access to an interior cavity **120** of the housing **102** as shown in FIG. **2**. Positioning the doors **112** at respective ends of the housing **102** allows flight attendants or service personnel to conveniently access components within the housing **102** from either end of the galley cart **100**. In other embodiments, the second door can be omitted if desired. Wheels or casters **124** allow the galley cart to be easily maneuvered within the service areas and aisles of the aircraft.

As seen in FIG. **2**, an industry standard sixth barrel beer keg **130** (beer industry standard **5.16** gallon keg) is restrained in a mounting ring **132** mounted on

the bottom **110** of the cart housing **102**. A carbonation cylinder such as pressurized gaseous CO₂ cylinder **134**, a standard **20** cubic foot (**566.3** liter) high pressure cylinder in an exemplary embodiment, is restrained in a second mounting ring **136**. Straps or clamps may be employed alternatively or in addition to the mounting rings
 5 to restrain the keg and cylinder within the housing. The sizing of the sixth barrel keg **130** and CO₂ cylinder **134** allow accommodation of those elements in an insulated half-size galley cart **100** having exterior dimensions of **12** inches (") x **40**" x **16**" (**30.5** centimeters (cm) x **101.6** cm x **40.5** cm).

A dispensing tower **138** having a spigot **140** extends upward from the top **108**
 10 of the housing **102** and a glass support and overflow sump **142** is received in supports **144** on the top **108** adjacent the tower **138** to support a glass for filling from the spigot **140** and to catch any overflow from the glass during filling. For the embodiment shown, the glass support and overflow sump **142** is a self-contained tray **146** and a mesh or screen top **148** which may be easily removed and inverted to
 15 drain any accumulated overflow. In alternative embodiments a drain from the sump to a larger container in the cart or overboard for connection to a supplement drain (or both) may be employed.

FIG. 3 shows the internal connections between the keg **130**, CO₂ cylinder **134** and spigot **140**. A regulator and pressure gage assembly **150** is attached to a
 20 supply valve **152** on the CO₂ cylinder **134**. An outlet tube connection **154** on the regulator and pressure gage assembly **150** provides CO₂ to an inlet tube connection **156** on a keg tap **158** through line **160** to pressurize the keg **130**. A supply tube connection **162** on the keg tap **158** provides beer through line **164** to a dispensing tube connection **166** attached to the spigot **140**. Lines **160** and **164** are truncated at
 25 the fittings and shown by centerline only for clarity of the remaining components.

The dispensing tower **138** is retractable into the cart housing **102**. The dispensing tower **138** extends from a support element **168** which is telescopically engaged in a cylindrical receiver **172**. A position engagement system employs radial engagement stubs **170** extending from the support element **168** received in vertical
 30 slots **174** in the cylindrical receiver **172** for vertical translation and connecting

horizontal detents **176** substantially at a top **177** of the vertical slots allowing rotation of the support element **168** to engage the detents to fix the dispensing tower in an extended position seen in FIGs. **1**, **2** and **3**. Opposite rotation of the support element **168** from the detents **176** to align the engagement stubs **170** with the vertical slots

5 **174** allows retraction of the dispensing tower into the cart housing **102** as seen in FIGs. **4** and **5**. A slot **178** extending from receiver **172** in the top **108** of the housing **102** receives the spigot **140** to allow complete retraction for the embodiment shown.

The dispensing tower **138** is rigidly attached to the support element **168** for the embodiment shown and rotates with the support element **168**. In alternative

10 embodiments, the support element **168** and dispensing tower **138** may be engaged in a slip fit arrangement to allow separate rotation of the support element **168** for engagement and disengagement from the detents **176**. The glass support and overflow sump **142** when engaged on the top **108** of the housing **102** covers the slot **178**. The glass support and overflow sump **142** is removable from the top **108** and

15 may be stored on a shelf or lateral supports **180** in the interior cavity **120** of the housing **102** as seen in FIG. **5** and a cover plate **182** installed over the slot **178** as seen in FIG. **6** to reduce overall height of the cart **100** for stowing. While shown as extending above the top **108**, the supports **144** may be recessed in the top with a relieved cavity to receive or partially receive the glass support and overflow sump

20 **142** and cover plate in alternative embodiments (as seen in FIG. **7**).

As seen in FIG. **7A**, a split clamp **184** may be employed as a first alternative position engagement system to engage the support element **168** of the dispensing tower **138** by compressing slotted segments **186** in a collar **188** of the cylindrical receiver **172**. In other alternative embodiments, the position engagement system

25 may employ removable pins or depressible buttons in the dispensing tower **138** to engage mating features in the collar **188** of the cylindrical receiver **172**. While disclosed in the first embodiment as cylindrical in shape the dispensing tower and support **168'** and receiver **172'** may be rectangular, as seen in FIG. **7B** (dispensing tower **138'**) or of other geometric form. Additionally while shown as a single

30 segment, the dispensing tower **138'** may employ multiple telescoping segments

138", also seen in FIG. 7B, with depressible buttons **190** received in detent holes **192**.

As shown in FIG. 8, the embodiments herein provide a method for portable beer dispensing by mounting a beer keg **130** in a galley cart **100**, step **802**, and mounting a CO2 cylinder **134** in the galley cart **100**, step **804**. The CO2 cylinder **134** is connected to a tap **158** on the keg **130** with a regulator and pressure gage assembly **150**, step **806**. A supply tube connection **162** from the tap **158** is connected to a dispensing tube connection **162** on a spigot **140**, step **808**. A dispensing tower **138** having the spigot **140** is extended from a top **108** of the galley cart **100**, step **810**, and a position engagement system secures the dispensing tower **138** in the extended position, step **812**. A glass holder and overflow sump **142** is received on the top **108** of the galley cart **100** under the spigot **140**, step **814**. Beer is then dispensed, step **816**. Upon completion of desired dispensing of beer, the glass holder and overflow sump **142** is removed from the top **108** of the galley cart **100**, step **818**, and may be emptied, step **820**, and stored in the interior cavity **120** of the galley cart **100**, step **822**. The position engagement system is released, step **824** and the dispensing tower **138** is retracted into the galley cart **100**, step **826**. A cover plate **182** may be installed to cover a spigot slot **178** on the galley cart top **108**, step **828**.

Having now described various embodiments in detail as required by the patent statutes, those skilled in the art will recognize modifications and substitutions to the specific embodiments disclosed herein. Such modifications are within the scope and intent of the present disclosure as defined in the following claims.

**EMBODIMENTS IN WHICH AN EXCLUSIVE PROPERTY OR PRIVILEGE IS FILED
ARE DEFINED AS FOLLOWS:**

1. A galley cart carbonated beverage dispensing system comprising:

5

a housing defining a cavity;

a first mounting ring configured to support a beverage keg in the cavity;

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a second mounting ring configured to support a carbonation cylinder in the cavity, wherein the carbonation cylinder is configured to be connected to the beverage keg; and,

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a spigot supported on a dispensing tower retractably extending from a top of the housing and configured to be connected to the beverage keg, said dispensing tower extending from a support element telescopically engaged in a receiver and having a position engagement system adapted to fix the support element in the receiver at an extended position of the dispensing tower and releasable for vertical translation of the support element into the receiver to position the dispensing tower in a retracted position, said top of the housing having a slot adapted to receive the spigot in the retracted position.

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2. The galley cart carbonated beverage dispensing system as defined in claim 1 further comprising a door coupled to the housing, the door configured to be moved between a closed position and an open position.

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3. The galley cart carbonated beverage dispensing system as defined in claim 2 further comprising a second door coupled to the housing.

30

4. The galley cart carbonated beverage dispensing system as defined in any one of claims 1 to 3 wherein the receiver is cylindrical and the position engagement system comprises stubs extending from the support element and received in vertical slots in the receiver, said support element rotatable to engage the stubs in detents proximate a top of the vertical slots.
- 5
5. The galley cart carbonated beverage dispensing system as defined in any one of claims 1 to 3 wherein the receiver is cylindrical and the position engagement system comprises a split clamp compressing slotted segments in a collar on the receiver to engage the support element.
- 10
6. The galley cart carbonated beverage dispensing system as defined in any one of claims 1 to 3 wherein the receiver and support element are rectangular, the position engagement system comprising depressible buttons received in detents.
- 15
7. The galley cart carbonated beverage dispensing system as defined in any one of claims 1 to 3 wherein the dispensing tower employs telescoping segments.
- 20
8. The galley cart carbonated beverage dispensing system as defined in claim 7 wherein the position engagement system comprises depressible buttons received in detents.
- 25
9. The galley cart carbonated beverage dispensing system as defined in any one of claims 1 to 8 further comprising a glass holder and overflow sump removably engaged on the top of the housing and covering the slot.
- 30
10. The galley cart carbonated beverage dispensing system as defined in claim 9 wherein the glass holder and overflow sump when removed from the top of the housing is received on lateral supports in the cavity.

11. The galley cart carbonated beverage dispensing system as defined in any one of claims 1 to 10 wherein the spigot has a dispensing tube connection in the dispensing tower and further comprising a line engaged between a supply tube connection on the keg tap and the dispensing tube connection.

12. A galley cart carbonated beverage dispensing system comprising:

a housing defining a cavity;

a keg received in the cavity;

a carbonation cylinder received in the cavity and connected to the keg;

and,

a spigot supported on a dispensing tower extending from a top of the housing and connected to the keg, said dispensing tower extending from a support element telescopically engaged in a receiver and having a position engagement system adapted to fix the support element in the receiver at an extended position of the dispensing tower and releasable for vertical translation of the support element into the receiver to position the dispensing tower in a retracted position in the cavity, said top of the housing having a slot adapted to receive the spigot in the retracted position.

13. The galley cart carbonated beverage dispensing system as defined in claim 12 further comprising a mounting ring on a bottom of the housing receiving the keg.

14. The galley cart carbonated beverage dispensing system as defined in claim 12 or 13 further comprising a second mounting ring on the bottom of the housing receiving the carbonation cylinder.
- 5 15. The galley cart carbonated beverage dispensing system as defined in any one of claims 12 to 14 further comprising a door coupled to the housing, the door configured to be moved between a closed position and an open position.
- 10 16. The galley cart carbonated beverage dispensing system as defined in claim 15 further comprising a second door coupled to the housing.
- 15 17. The galley cart carbonated beverage dispensing system as defined in any one of claims 12 to 16 wherein the receiver is cylindrical and the position engagement system comprises stubs extending from the support element and received in vertical slots in the receiver, said support element rotatable to engage the stubs in detents proximate a top of the vertical slots.
- 20 18. The galley cart carbonated beverage dispensing system as defined in any one of claims 12 to 16 wherein the receiver is cylindrical and the position engagement system comprises a split clamp compressing slotted segments in a collar on the receiver to engage the support element.
- 25 19. The galley cart carbonated beverage dispensing system as defined in any one of claims 12 to 16 wherein the receiver and support element are rectangular, the position engagement system comprising depressible buttons received in detents.
- 30 20. The galley cart carbonated beverage dispensing system as defined in any one of claims 12 to 16 wherein the dispensing tower employs telescoping segments.

21. The galley cart carbonated beverage dispensing system as defined in claim 20 wherein the position engagement system comprising depressible buttons received in detents.
- 5
22. The galley cart carbonated beverage dispensing system as defined in any one of claims 12 to 21 further comprising a glass holder and overflow sump removably engaged on the top of the housing and covering the slot.
- 10
23. The galley cart carbonated beverage dispensing system as defined in claim 22 wherein the glass holder and overflow sump when removed from the top of the housing is received on lateral supports in the cavity.
- 15
24. The galley cart carbonated beverage dispensing system as defined in any one of claims 12 to 23 wherein the spigot has a dispensing tube connection in the dispensing tower and further comprising a line engaged between a supply tube connection on the keg tap and the dispensing tube connection.
- 20
25. A method for dispensing a carbonated beverage, the method comprising:
- mounting a beverage keg in a galley cart;
- mounting a CO₂ cylinder in the galley cart;
- 25
- connecting the CO₂ cylinder to a tap on the keg;
- connecting a supply tube connection from the tap to a dispensing connection on a spigot;

extending a dispensing tower carrying the spigot from a top of the galley cart, wherein the dispensing tower is extended from a support element telescopically engaged in a receiver; and

5 securing the dispensing tower with a position engagement system in the extended position, wherein the position engagement system fixes the support element in the receiver at an extended position of the dispensing tower and is releasable for vertical translation of the support element into the receiver to position the dispensing tower in a retracted position in the
10 cavity, a top of the gallery cart having a slot adapted to receive the spigot in the retracted position.

26. The method as defined in claim **25** further comprising dispensing the beverage from the spigot.

15

27. The method as defined in claim **26** further comprising:

 upon completion of desired dispensing of the beverage, releasing the position engagement system; and

20

 retracting the dispensing tower into the galley cart.

28. The method as defined in any one of claims **25 to 27** further comprising receiving a glass holder and overflow sump on the top of the galley cart under the spigot.

25

29. The method as defined in claim **28** further comprising removing the glass holder and overflow sump from the top of the galley cart and emptying the overflow sump.

30

30. The method as defined in claim 29 further comprising storing the glass holder and overflow sump in the interior cavity of the galley cart.
31. The method as defined in claim 29 or 30 further comprising installing a cover plate to cover the spigot slot on the galley cart top.
32. A galley cart carbonated beverage dispensing system comprising:
- a housing defining a cavity;
 - a first mounting ring configured to support a beverage keg in the cavity;
 - a second mounting ring configured to support a carbonation cylinder in the cavity;
 - a spigot supported on a dispensing tower extending from a top of the housing and configured to be connected to the beverage keg, said dispensing tower being retractable into the cavity and extending from a support element telescopically engaged in a receiver; and
 - a position engagement system adapted to fix the support element in the receiver at an extended position of the dispensing tower and releasable for vertical translation of the support element in the receiver positioning the dispensing tower in a retracted position;
- wherein the receiver is cylindrical and the position engagement system comprises one of:
- stubs extending from the support element and received in vertical slots in the receiver, said support element rotatable to engage the stubs in detents proximate a top of the vertical slots; and

a split clamp compressing slotted segments in a collar on the receiver to engage the support element.

- 5 **33.** The galley cart carbonated beverage dispensing system as defined in claim **32**
 further comprising a door coupled to the housing, the door configured to be
 moved between a closed position and an open position.
- 10 **34.** The galley cart carbonated beverage dispensing system as defined in claim **33**
 further comprising a second door coupled to the housing.
- 15 **35.** The galley cart carbonated beverage dispensing system as defined in any one
 of claims **32 to 34** wherein the dispensing tower employs telescoping
 segments.
- 36.** The galley cart carbonated beverage dispensing system as defined in any one
 of claims **32 to 35** wherein the position engagement system comprises
 depressible buttons received in detents.
- 20 **37.** A method for dispensing a carbonated beverage, the method comprising:
- mounting a beverage keg in a galley cart;
- mounting a CO₂ cylinder in the galley cart;
- 25 connecting the CO₂ cylinder to a tap on the keg;
- connecting a supply tube connection from the tap to a dispensing connection
 on a spigot;
- 30

extending a dispensing tower carrying the spigot from a top of the galley cart, wherein the dispensing tower extends from a support element telescopically engaged in a receiver; and

5 securing the dispensing tower with a position engagement system in the extended position, the position engagement system being adapted to fix the support element in the receiver at the extended position of the dispensing tower and releasable for vertical translation of the support element in the receiver positioning the dispensing tower in a retracted position,

10 wherein the receiver is cylindrical and the position engagement system comprises one of:

15 stubs extending from the support element and received in vertical slots in the receiver, said support element rotatable to engage the stubs in detents proximate a top of the vertical slots; and

 a split clamp compressing slotted segments in a collar on the receiver to engage the support element.

20

38. The method as defined in claim **37** further comprising dispensing the beverage from the spigot.

39. The method as defined in claim **38** further comprising:

25

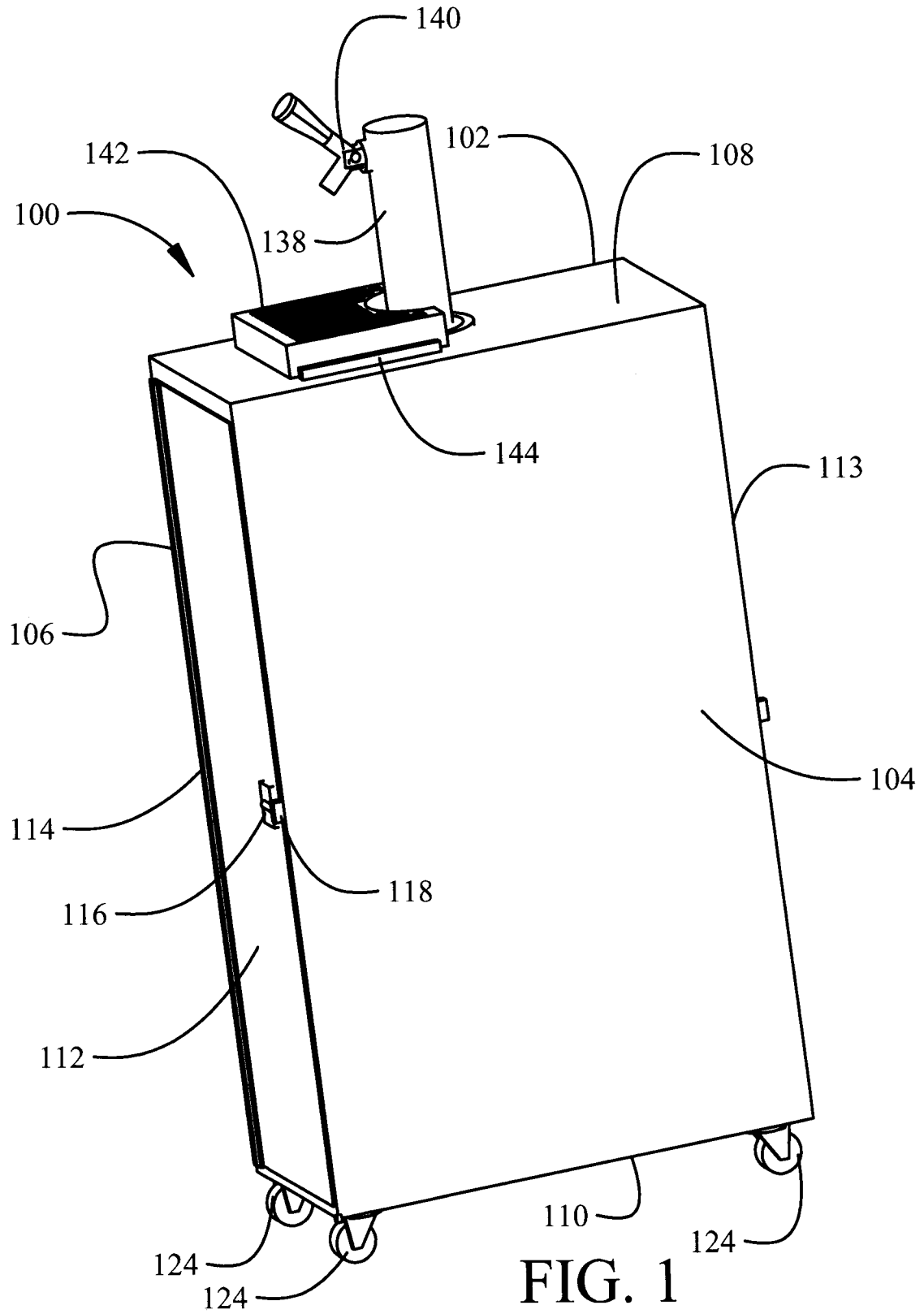
upon completion of desired dispensing of the beverage, releasing the position engagement system; and

retracting the dispensing tower into the galley cart.

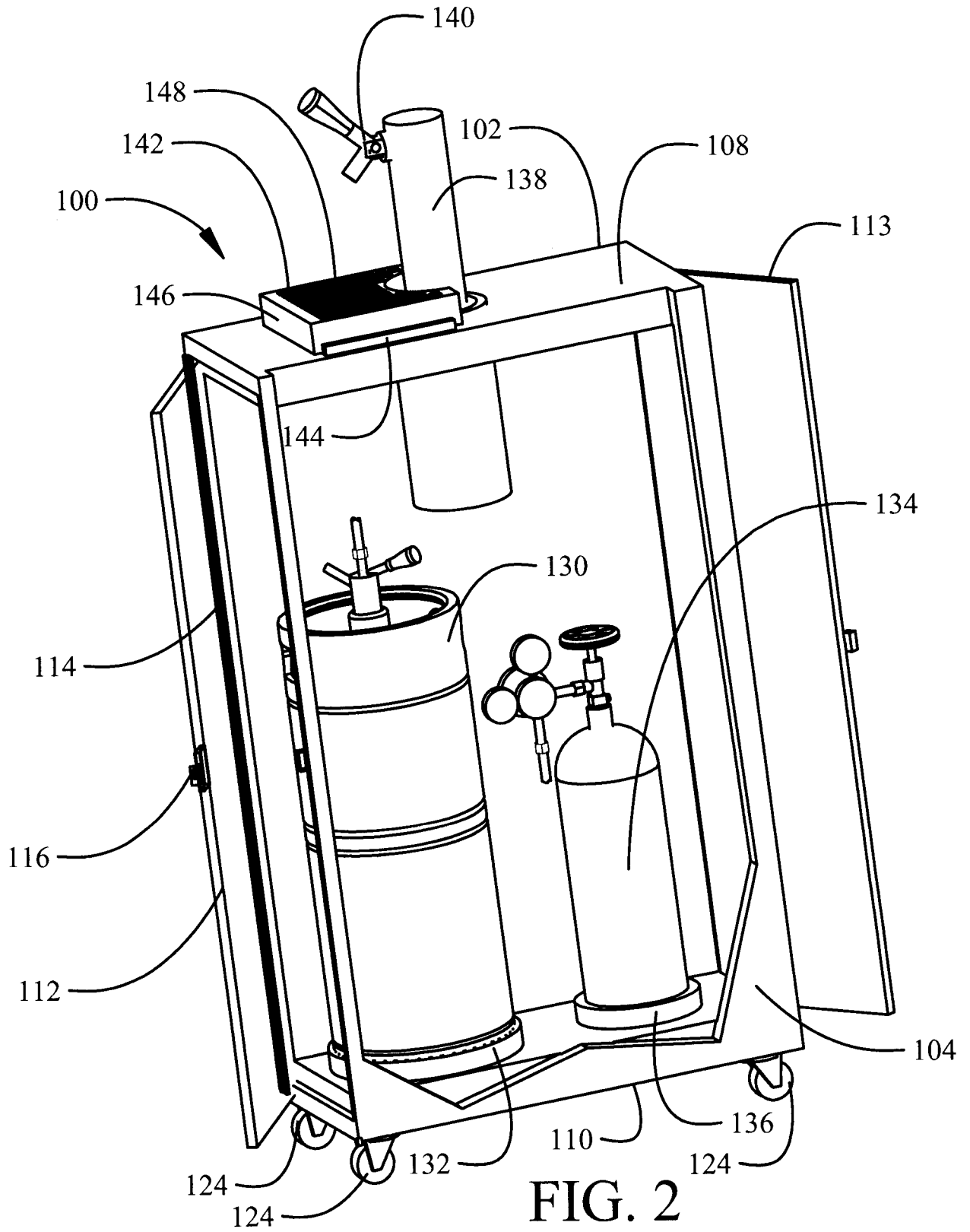
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- 40.** The method as defined in any one of claims **37 to 39** further comprising receiving a glass holder and overflow sump on the top of the galley cart under the spigot.
- 5 **41.** The method as defined in claim **40** further comprising removing the glass holder and overflow sump from the top of the galley cart and emptying the overflow sump.
- 10 **42.** The method as defined in claim **41** further comprising storing the glass holder and overflow sump in the interior cavity of the galley cart.
- 43.** The method as defined in claim **41 or 42** further comprising installing a cover plate to cover a spigot slot on the top of the galley cart.

1/9



2/9



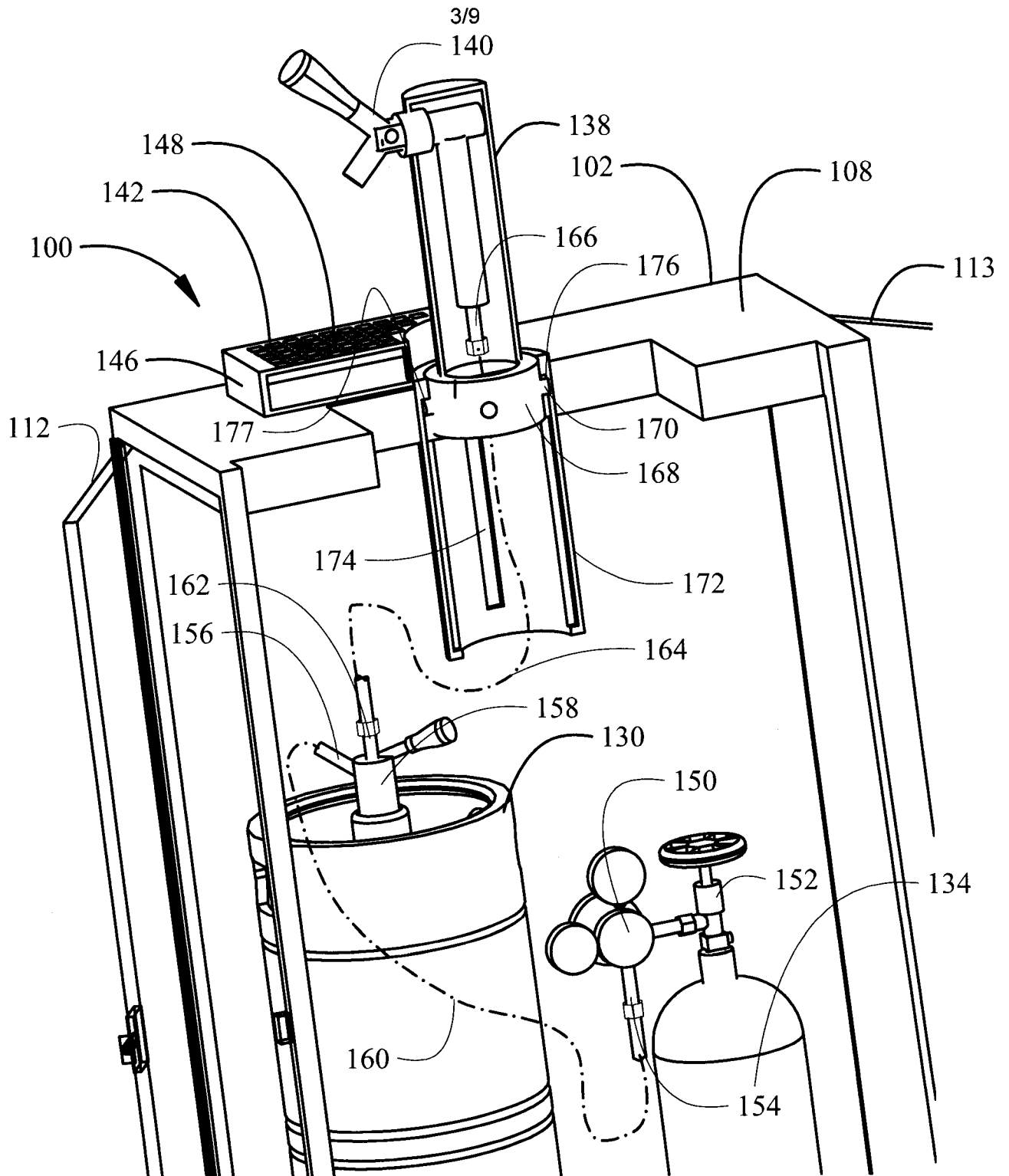


FIG. 3

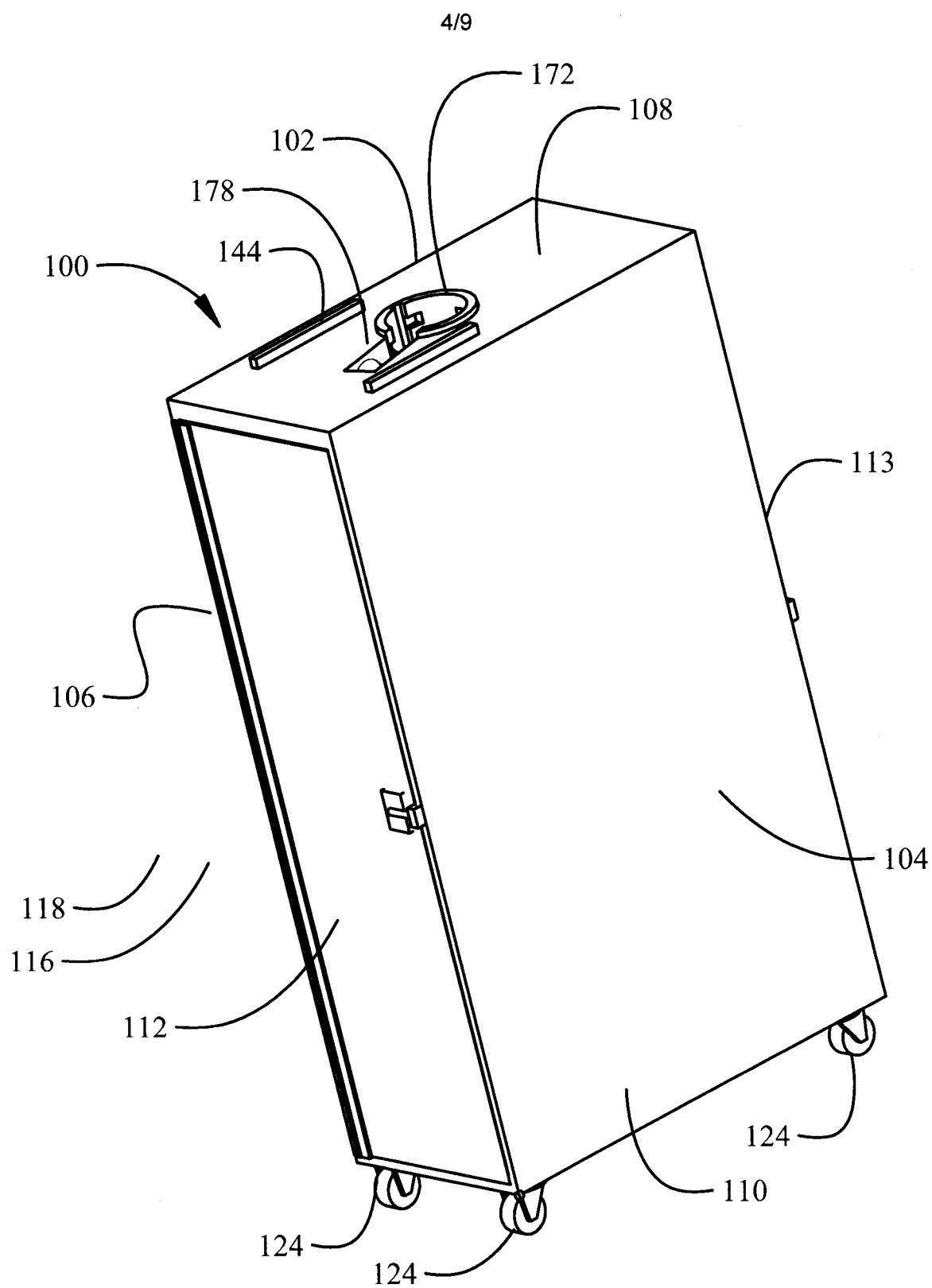


FIG. 4

5/9

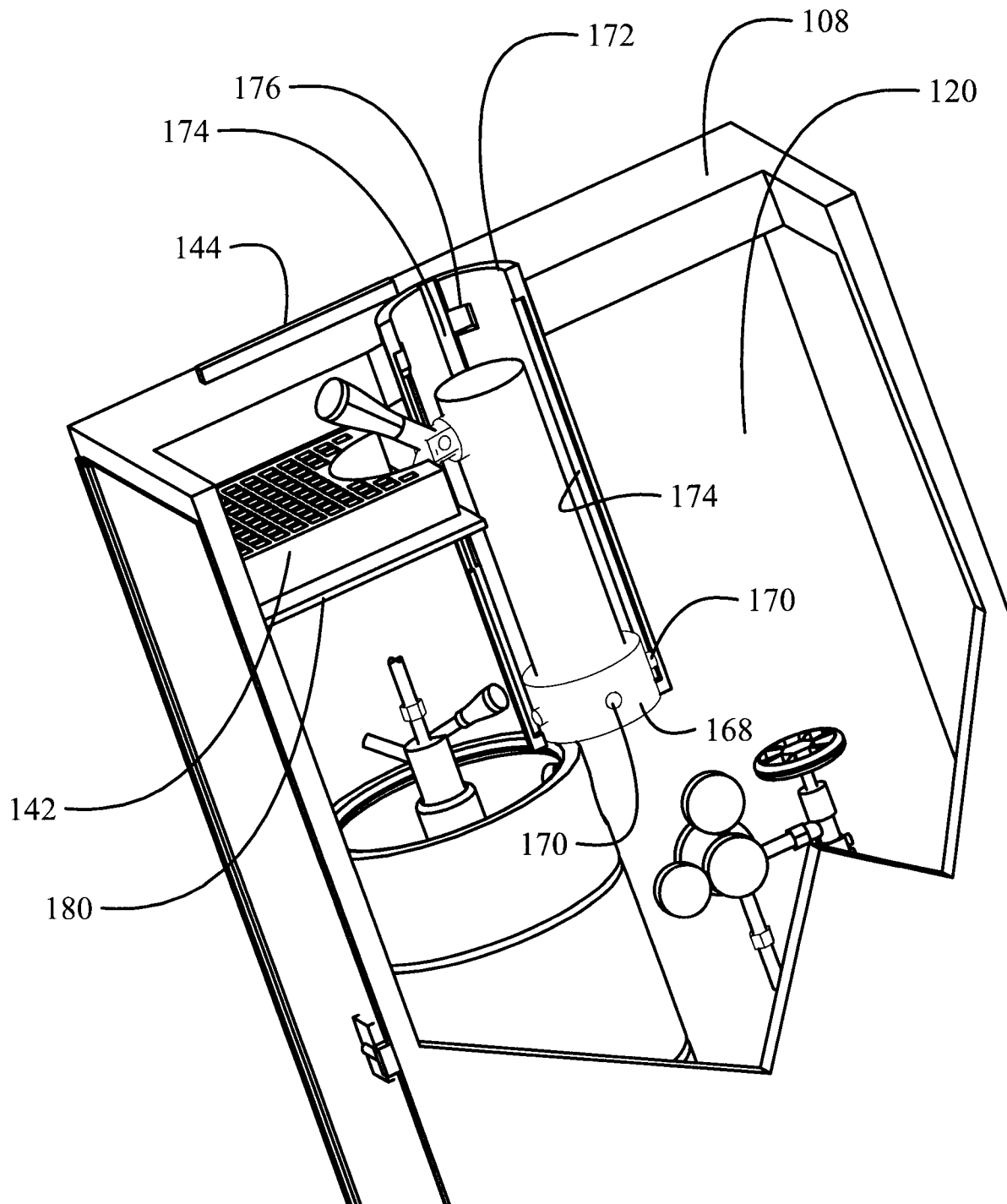


FIG. 5

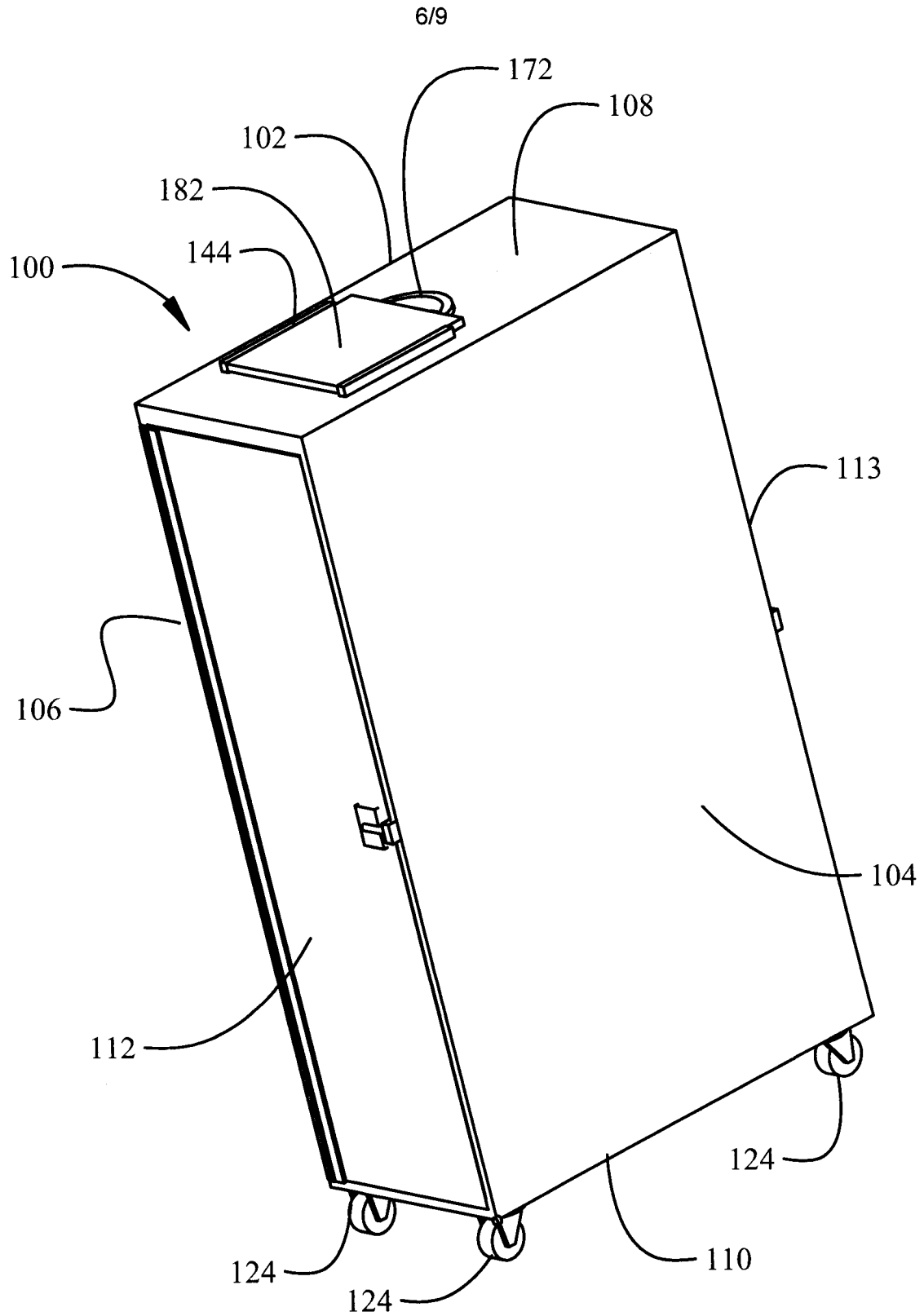


FIG. 6

7/9

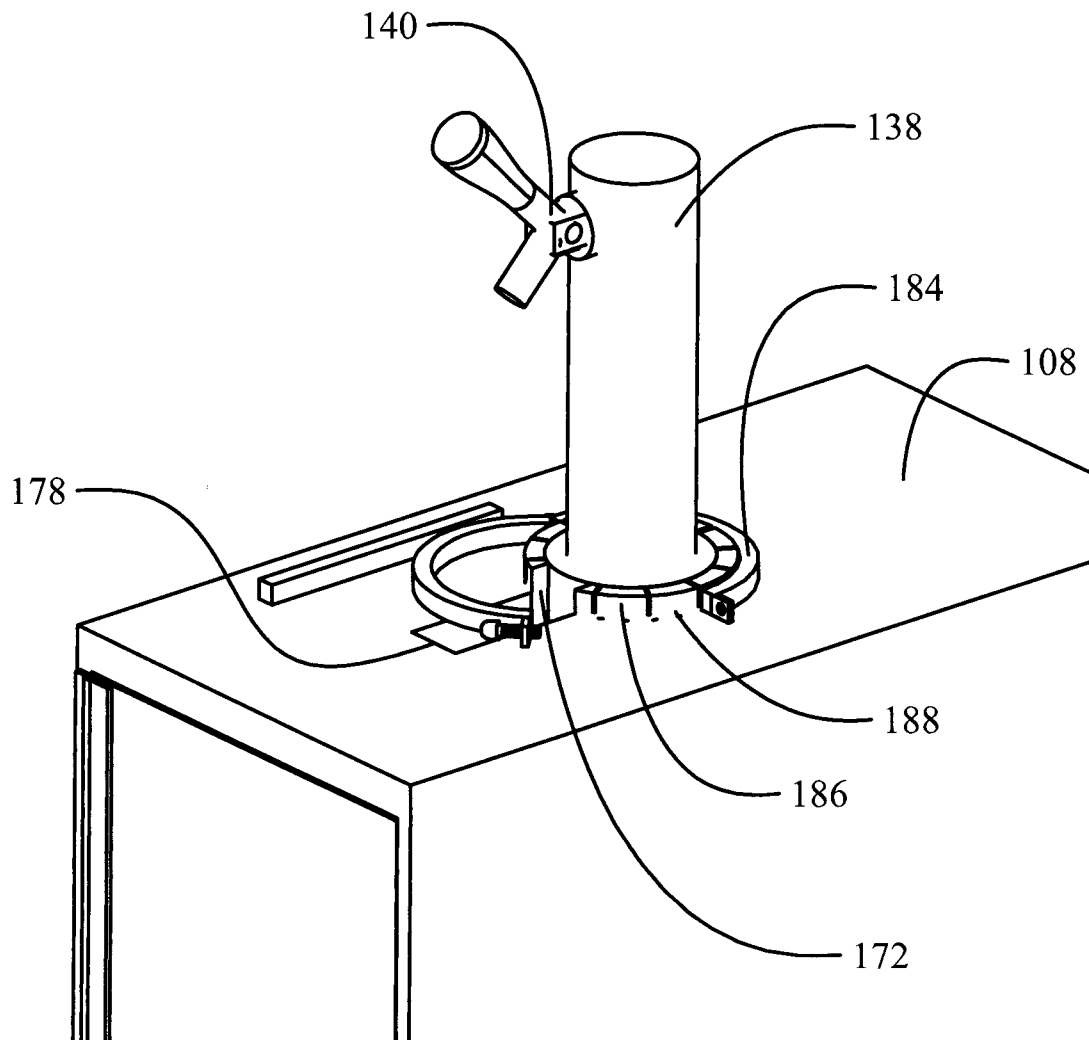


FIG. 7A

8/9

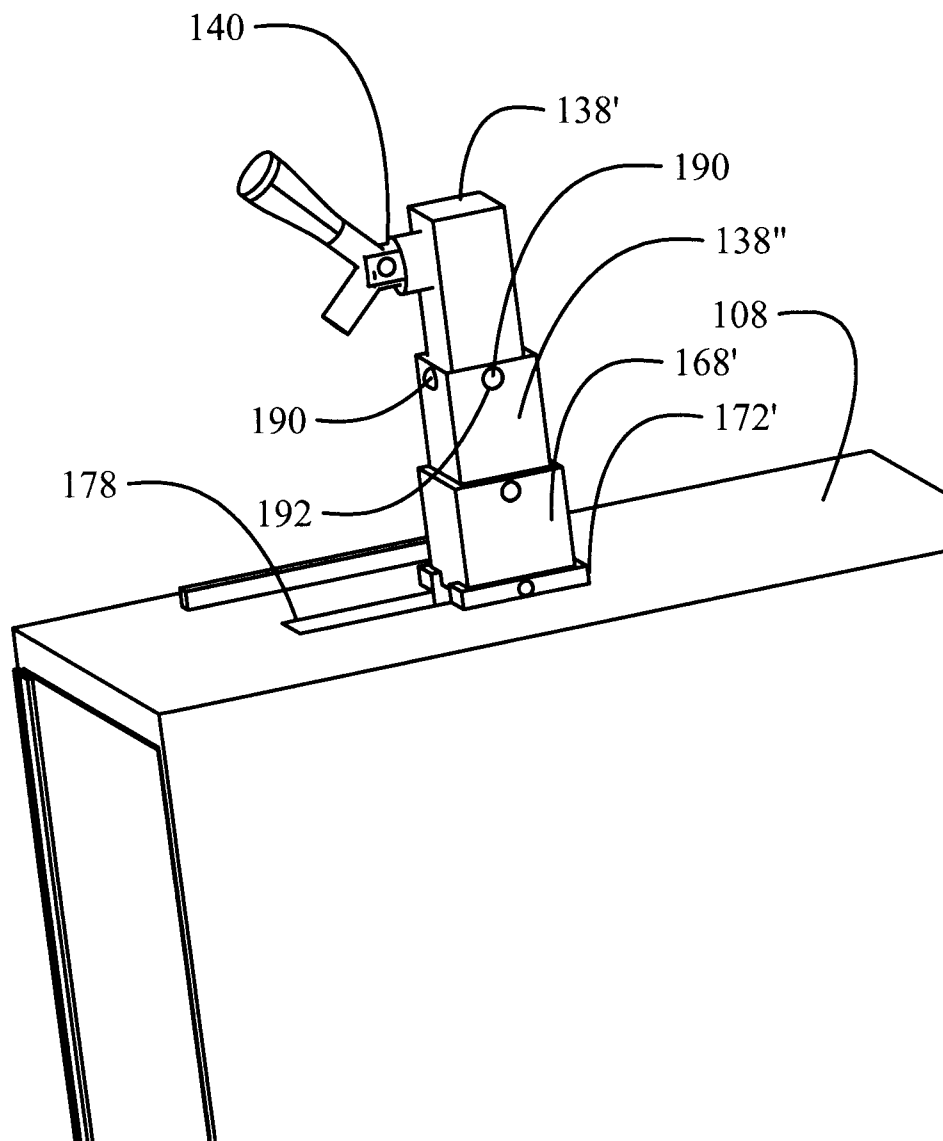


FIG. 7B

9/9

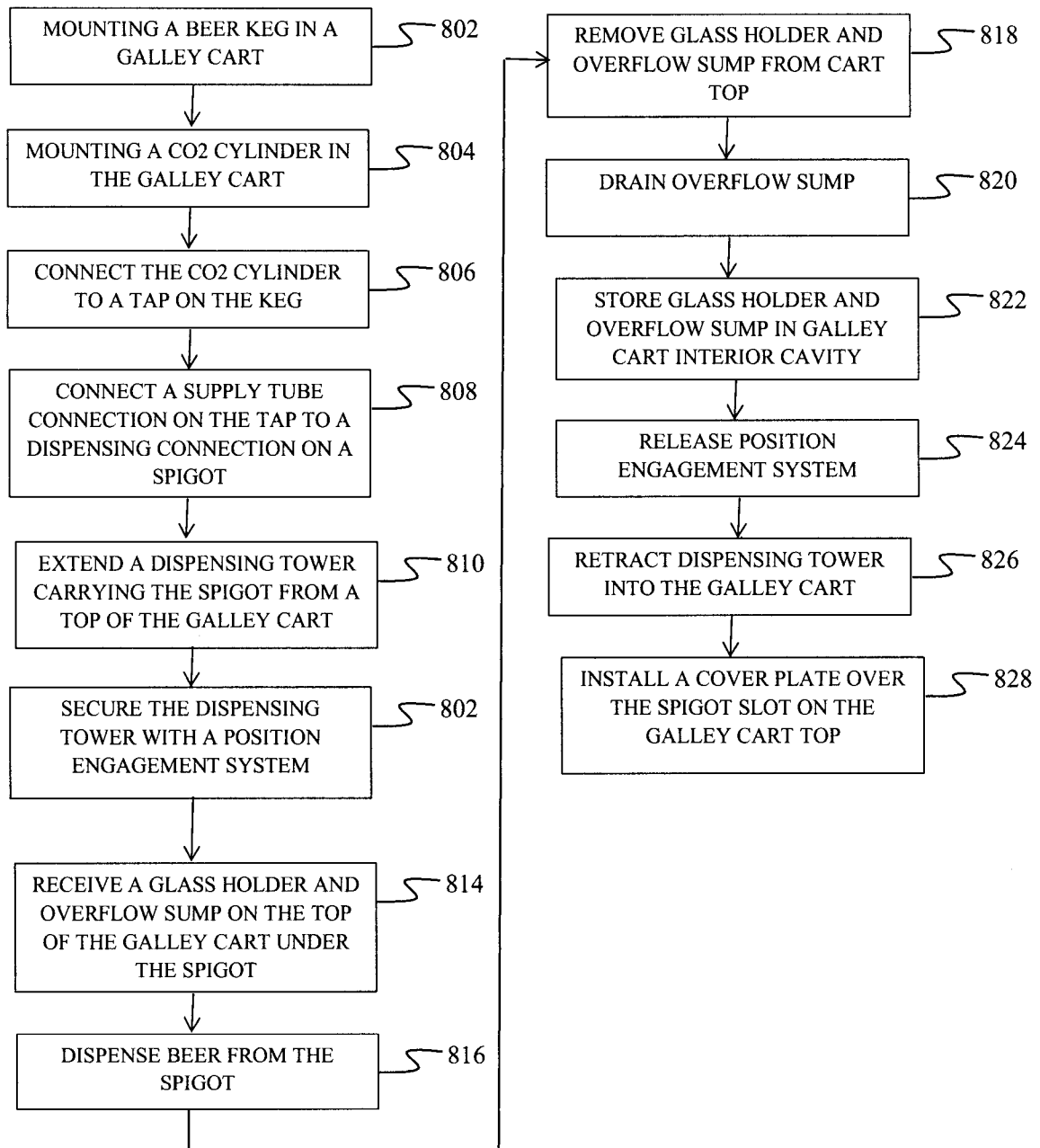


FIG. 8

