Jan. 28, 1964 G. W. BAYERS, JR 3,119,485

COIN-OPERATED VENDING MACHINE FOR ALCOHOLIC BEVERAGES

Filed Dec. 2, 1960 2 Sheets-Sheet 1

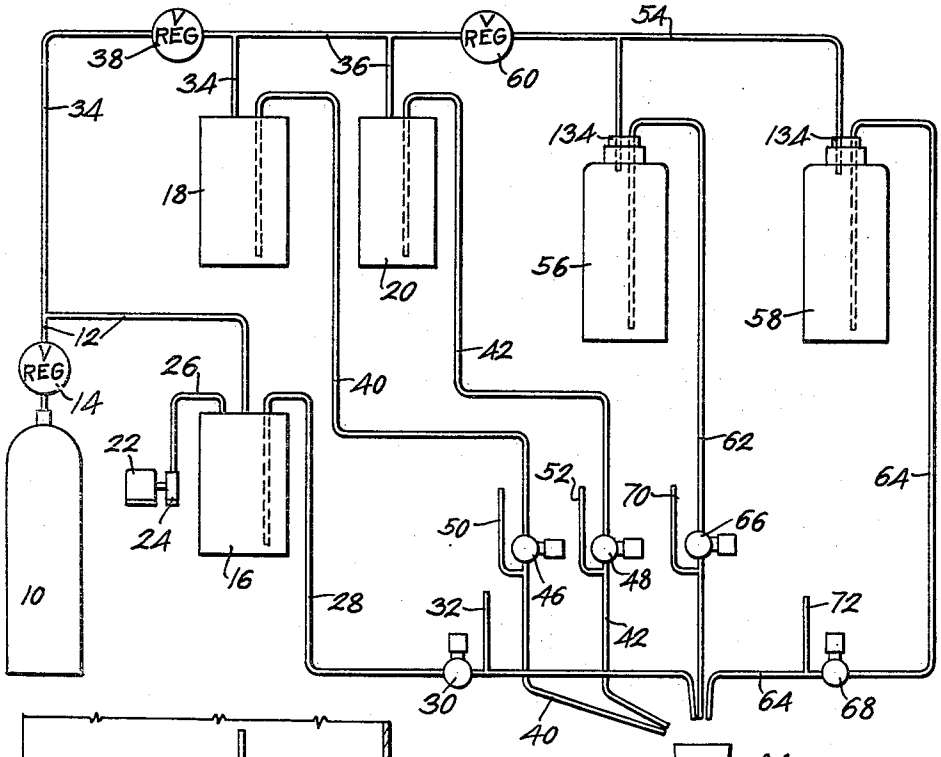


FIG. 1.

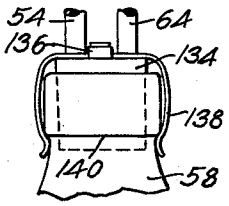


FIG. 5

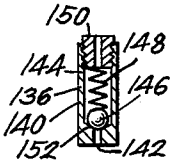


FIG. 6.

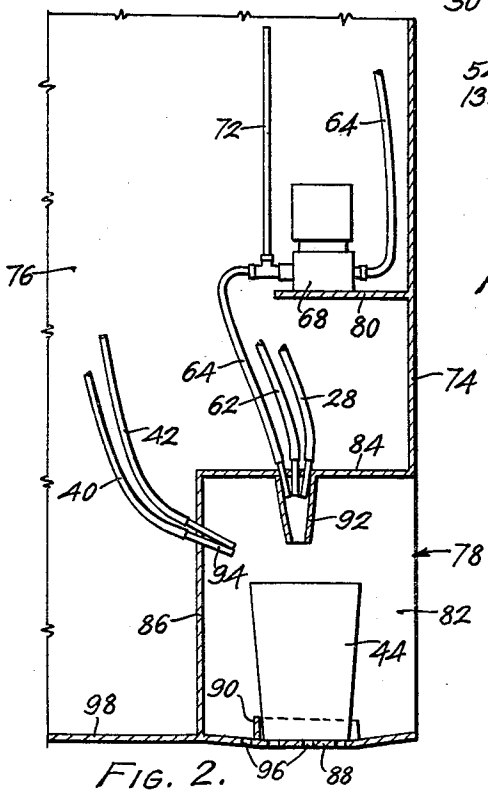


FIG. 2.

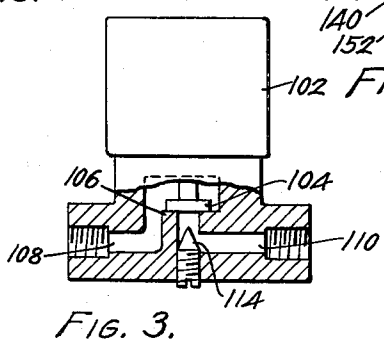


FIG. 3.

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COIN-OPERATED VENDING MACHINE FOR ALCOHOLIC BEVERAGES

Filed Dec. 2, 1960 2 Sheets-Sheet 2

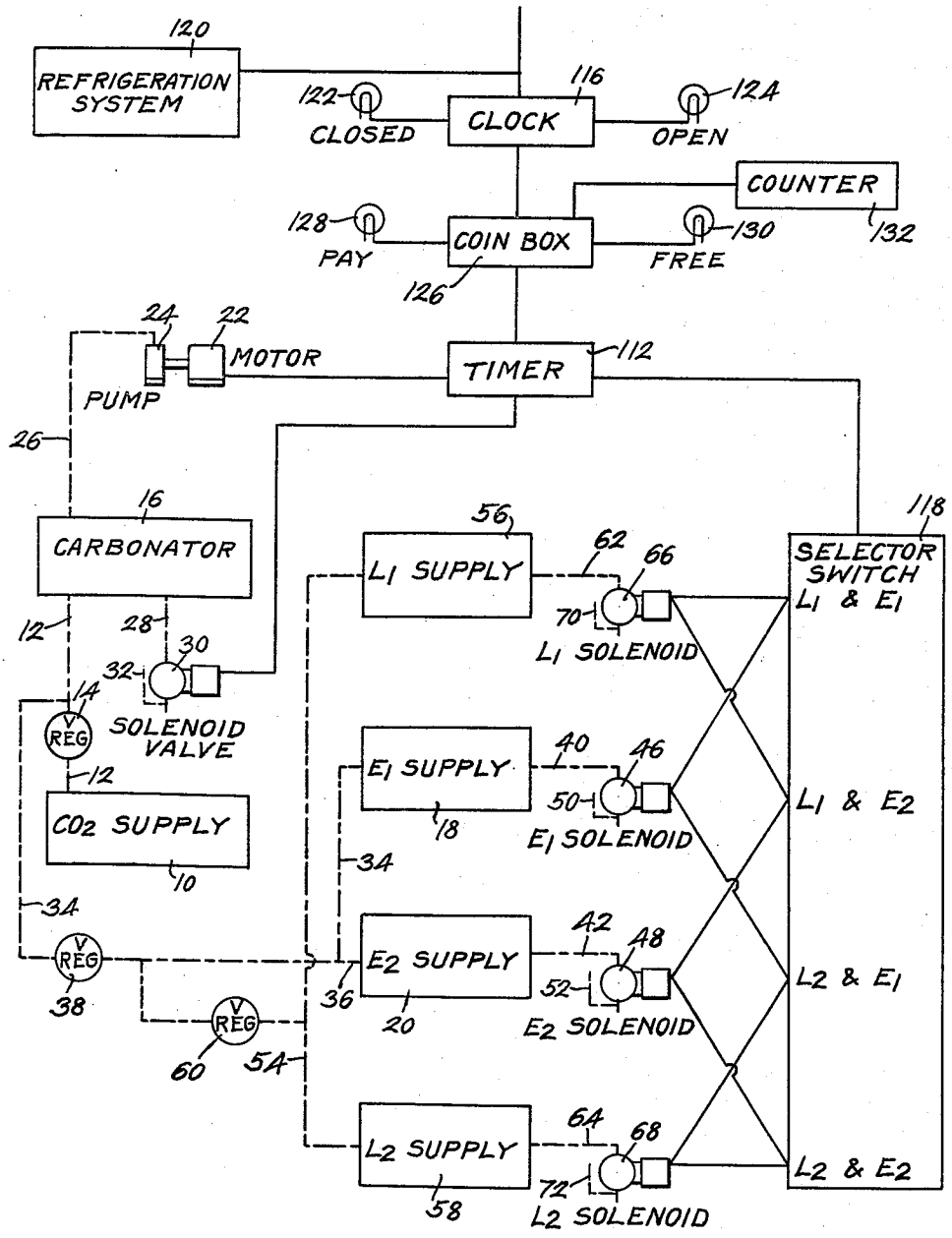


FIG. 4.

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3,119,485

COIN-OPERATED VENDING MACHINE FOR ALCOHOLIC BEVERAGES

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Filed Dec. 2, 1960, Ser. No. 73,339
8 Claims. (Cl. 194—13)

This invention relates to coin-operated beverage dispensing machines and, more specifically, to vending machines of the type described which are especially designed to deliver mixed alcoholic drinks of various kinds.

Beverage dispensing machines designed for coin-controlled operation have been known and used for many years as an untended source of supply of coffee, cola drinks, other carbonated beverages of one type or another, milk, cocoa, etc.; however, up to the present time, no machine of this type has been available commercially that is suitable for use as a dispenser for mixed alcoholic beverages. The prior art machines do, of course, include many of the features that are necessary in an alcoholic drink dispenser such as, for example, a refrigerated cabinet, a coin-box operative upon the insertion of a pre-set sum in coins to close the delivery circuit, solenoid-operated metering valves adapted to deliver a pre-determined quantity of fluid in a given time interval, timer mechanisms controlling the interval during which the liquid is dispensed for each cycle of operation, and assorted switching mechanisms which function as selectors to control the particular mixture dispensed in response to the choice of the user, those that render the machine inoperative and return the coins if the machine is out of the beverage chosen, and various signal lights that indicate the several choices, the particular one chosen, whether the machine is operating or not, and if coins are required to operate it.

Before considering the specific limitations of the prior art machines which render them unsuitable for use as a dispenser for alcoholic drinks, it will be well to examine briefly the requirements of such a machine, some of which have a material effect on its design and mode of operation. The most significant factor is obviously that of preventing use of the machine by unauthorized persons, in particular, minors. It is equally apparent that the machine cannot be made to differentiate between those who are of age and those who are not unless some type of special key or other device could be distributed to authorized persons in advance which is somewhat impractical. About the only other solution, therefore, is to locate the machine in a public place like a hotel lobby or tavern in full view of employees who could prevent its use by minors and would be obligated to do so under penalty of the loss of their liquor license and also fix the machine so that it dispensed no non-alcoholic beverages thus eliminating the excuse for any under-age person to go near it. As for private parties such as those often held in hotel suites and the like by business organizations, while the problem of minors using the machine is not eliminated in any sense, this is certainly no more of a problem than it would be at any private party where the management has very little control over the guests or their actions unless they become objectionable to others. It is the latter situation, however, in which the alcoholic beverage dispensing machine of the present invention would find its greatest utility for a number of reasons.

First of all, the need for a bartender is eliminated which is oftentimes objectionable from the standpoints of additional expense, the presence of an outsider who might overhear confidential conversations, and the very real problem of having little or no control over the charges made for the drinks in terms of what was actually consumed. The only alternative is for the host to mix the drinks or have the guests do so which can become a

sizeable task, especially with a large gathering. On the other hand, a machine performing the function of a bartender eliminates all of the aforementioned difficulties. In this instance, the host would not want his or her guests to have to pay for their drinks so the machine would be set to dispense them free while some arrangement would be made concerning a per drink charge that would be assessed predicated upon the total number of drinks delivered as determined by a simple counting mechanism housed in the cabinet.

A beverage dispensing machine of this type would also have to be rendered inoperative during those hours when, by local ordinance, it is unlawful to sell alcoholic drinks. The need for some type of clock control regulating the hours when the machine can be used is especially significant in those instances where the unit would be available to the public at large.

Perhaps the most significant factor in the design of a dispenser for alcoholic beverages is the fact that the liquor laws do not permit liquor to be dispensed from anything other than its original container, i.e., transferred to specially designed bottles as reservoirs of the type ordinarily found in a beverage dispensing machine. This factor also precludes the use of pre-mixed drinks unless, of course, they are sold this way originally as is the case with certain cocktail mixes. Accordingly, the machine must be capable of accepting a tremendous variety of original alcoholic beverage containers and integrate them into the system while performing the additional function of mixing the drink in the required proportions immediately after the choice has been made by the customer.

One other problem is worthy of note. Many persons who drink alcoholic beverages become very discriminating in that they can instantly detect the presence of some foreign substance in their drink either by color or taste. This is especially true when the characteristics of the usual mixes for alcoholic beverages are considered. Cola mixes, while quite popular, are very sweet and also dark colored. As a result, even a drop or two in a light scotch or gin drink is a simple matter to detect. The same is, to a lesser extent, true of sweet soda in water or dry soda. This problem is amplified by reason of the fact that the mix is usually present in rather small quantities as most persons like a relatively strong drink made up mostly of ice and the alcoholic component rather than a lot of mix. Furthermore, machines for the dispensing of carbonated beverages customarily employ a carbonator and a concentrated syrup, the latter being so strong that a single drop is sufficient to discolor a drink and be noticeable to the taste.

Now, the prior art beverage dispensing machines of the type designed to deliver non-alcoholic beverages, fail to include a number of features that are critical in a similar machine for use with alcoholic liquids. First, no clock-control mechanism is customarily provided for rendering a dispensing machine for non-alcoholic beverages inoperative during certain hours. Secondly, these machines require the transfer of the liquids to be dispensed therefrom into specially constructed containers rather than being capable of utilizing the original ones. Third, no provision is made for preventing the contamination of a given mixed drink by the drip of either the mix or alcoholic component of the previous drink.

It is, therefore, the principal object of the present invention to provide a coin-controlled beverage dispensing machine of a type ideally suited for use in delivering alcoholic mixed drinks.

A second object is the provision of a dispensor of the type described which includs an over-riding clock control operative to completely inactivate the entire machine except for the refrigeration unit and certain of the signal

lamps during certain periods when it is illegal to serve alcohol.

Another object of the invention is to provide a coin-operated dispensing machine capable of accepting any of a number of several different types and styles of original alcoholic beverage bottles thus eliminating any necessity for transferring the contents thereof to other cointainers.

Still another object is the provision of a liquid beverage dispenser which is so designed that any combination of non-alcoholic mix and alcohol-containing liquid can be delivered at the option of the purchaser.

A further object of the invention is the provision of a refrigerated beverage dispenser that includes solenoid-operated metering valves that can be individually set to deliver different measured quantities of the particular liquid associated therewith during the time interval such valves are kept open by the timer mechanism controlling same.

Additional objects are to provide a dispensing mechanism of the type mentioned above that is relatively inexpensive, extremely versatile, simple to operate and service, substantially foolproof, and one that is decorative in appearance.

Other objects will be in part apparent and in part pointed out specifically hereinafter in connection with the description of the drawings that follows, and in which:

FIGURE 1 is a schematic view showing the carbon dioxide pressurizing source connected to pressurize the carbonator together with non-alcoholic syrups and alcoholic liquids, the latter being, in turn, connected to deliver their contents into a common receptacle;

FIGURE 2 is an enlarged fragmentary section showing the terminal ends of the delivery conduits as they emerge into the cup compartment;

FIGURE 3 is an enlarged detail, portions of which have been shown in section, illustrating the type of solenoid-operated metering valve that is used to control the delivery of the liquids contained in the unit;

FIGURE 4 is another schematic representation showing a simplified electrical diagram integrated with both the liquid and gaseous transfer systems;

FIGURE 5 is a fragmentary elevation showing the neck of the alcoholic beverage container equipped with a stopper adapted to release automatically and relieve the pressure inside the container in the event the check valve contained therein fails for any reason; and,

FIGURE 6 is a fragmentary section to an enlarged scale showing one type of ball check valve that could be used in the stopper.

Referring now to the drawings for a detailed description of the coin-operated alcoholic beverage dispensing machine of the present invention, and in particular to FIGURE 1 for this purpose, it will be seen that the pressure for the system is supplied from a carbon dioxide bottle **10** containing carbon dioxide under several hundred pounds pressure. The main supply conduit **12** leading from the supply bottle **10** contains a pressure regulator **14** adapted to drop the line pressure to approximately ninety pounds per square inch where it is fed to the carbonator **16**.

Carbonator **16** of the well-known type shown in my U.S. Patent No. 2,514,463 and which is designed to carbonate uncarbonated syrups or extracts E_1 and E_2 such as those contained in containers **18** and **20**. Actually, the carbonation takes place in the final receptacle wherein the carbonated water and extract are admixed. The details of construction and operation of the carbonator form no part of the present invention and can be had by referring to my patent above-identified. For present purposes it should suffice, therefore, to mention that a motor **22** is used to drive a pump **24** that is connected into the carbonator by means of conduit **26**. The outlet conduit **28** from the carbonator contains a solenoid-operated metering valve **30** which controls the delivery of the carbonated water into the cup. A branch line **32** open to the atmosphere is located downstream of the solenoid valve **30** adapted to prevent air locks in the discharge conduit that would otherwise prevent the liquid from draining completely and also make it extremely difficult to deliver a measured quantity.

Branch lines **34** and **36** from the carbon dioxide bottle **10** are connected into the extract tanks **18** and **20** through a second pressure regulator **38** which further reduces the line pressure to approximately twenty-five pounds per square inch. These extract tanks **18** and **20** can be filled with any of various mixes such as, for example, cola syrup, sweet soda syrup, ginger ale syrup, or any number of fruit juice concentrates like orange juice, lemon juice and grapefruit juice. Discharge conduits **40** and **42**, respectively, connect the extract tanks **18** and **20** into the cup compartment but not in a position to drain directly into cup **44** as will be explained presently in connection with FIGURE 2. Here again, solenoid-operated metering valves **46** and **48** are connected into discharge lines **40** and **42**, respectively, for purposes of controlling the delivery of the extract. Also, these same lines have the atmospheric bleed connections **50** and **52** connected downstream of the solenoid valves to insure complete draining as well as delivery of a full and accurate measure of extract.

Still another branch line **54** is connected to receive pressurizing carbon dioxide from the tank **10**, as from extract tank pressurizing line **36**, and deliver carbon dioxide to the liquor bottles **56** and **58** connected in parallel. These liquor bottles are the original ones in which the liquor was packaged so as to comply with Federal Laws prohibiting the transfer thereof from one container to another. Pressure regulator **60** reduces the pressure to about ten pounds per square inch for delivery to the liquor bottles. Liquor discharge lines **62** and **64** are provided with solenoid valves **66** and **68** as well as atmospheric bleed connections **70** and **72** as was the case with the extract and carbonator lines.

Now, before proceeding with a description of FIGURE 2, it will be well to explain the connection at the neck of the liquor bottles **56** and **58** that permits them to be used in the machine without having to transfer their contents to another receptacle which is so often the case in these machines. A tapered two-hole stopper is used which will fit into and form a substantially air-tight connection with the bottle necks of several different sizes of liquor bottles. The gas pressure line **54** is placed within one of the openings in the stopper and is sealed therein such that it terminated above the liquid level in the bottle. The discharge line **62** or **64**, on the other hand, are sealed within the other of the two stopper openings and extend considerably beneath the liquid surface, preferably all the way to the bottom so that all the liquid can be drained therefrom.

In FIGURE 2, a portion of the front wall **74** and the right side wall **76** of the cabinet have been illustrated as wall **74** contains the only novel feature insofar as the cabinet itself is concerned, namely, the cup receptacle which has been identified in a general way by numeral **78**. Otherwise, the cabinet is of conventional design having insulated walls adapted to prevent exterior heat from entering the refrigerated interior thereof. Usually, such cabinets have a hinged door providing access to the working parts and to replenish supplies. Also, especially in the present instance when the cabinet will contain liquor as well as substantial sums of money, it is important that it can be securely locked and protected against unauthorized entry even to the inclusion of a suitable alarm system.

In the particular form shown, the solenoid-operated metering valves are all arranged in a line on a platform **80** depending from the inside of the front wall **74**. Immediately beneath this platform is located the cup receptacle **78** which includes a pair of laterally spaced sides **82**, a top **84**, a back **86**, a bottom **88** and an arcuate stop **90** adapted to position the cup **44** directly beneath the nozzle **92** in the top but ahead of the terminal ends **94**

that emerge into the compartment through the back. Nozzle **92** houses the terminal ends of the discharge conduits from the carbonator and both liquor bottles, the liquids from which are directed into the open top of cup **44**. This arrangement depends to some extent on the alcoholic beverages selected for use in the machine. For example, scotch, bourbon and probably even the lighter rums can be fed directly into the nozzle **92** without any danger of the customer noticing one or two drops of one type of alcoholic beverage mixed in with his drink formed from another; however, if gin or vodka, which are both colorless, or even a dark rum, were used, contamination through discoloration would be a factor requiring that the colored liquids be dispensed from a different location at the sides or rear of the compartment as is the case with the extract discharge tubes **40** and **42**.

As far as the extract discharge tubes are concerned, assume that they deliver cola syrup and concentrated orange extract. The first of these liquids is quite dark and very sweet which means that a drop or two would easily be noticed in most gin drinks from the change in color and might even be detected by taste in a bourbon or scotch drink as well. Similarly, the orange extract, in addition to its deep orange color is milky and nearly opaque due to the presence therein of ground pulp. Accordingly, it is important that these extracts be isolated from the cup so that any drip resulting therefrom will not contaminate a later drink made from different components. This is accomplished quite simply by terminating the discharge ends **94** of these conduits well behind the rear edge of the cup as it lies positioned by the stop **90** directly underneath nozzle **92** and forcing the extract liquid out under substantial pressure so that it will shoot forward far enough to hit the cup. Thus, any post-operative gravity drip will fall short of the cup and be carried away to a waste reservoir (not shown) through the drain openings **96** in the bottom of compartments **78**. The twenty-five pound per square inch pressure applied to the extract containers **18** and **20** is to insure the fact that the extracts will shoot forwardly all the way to the cup. The liquor, on the other hand, falls directly into the cup thus requiring a lesser operating pressure.

Before leaving FIGURE 2 it would be advisable to mention that the liquor bottles **56** and **58**, extract containers **18** and **20**, and carbonator **16** are all preferably supported on intermediate wall **98** of the cabinet which usually overlies the refrigeration unit and certain other mechanical components housed in the bottom. In this position, the various liquids are forced by carbon dioxide pressure to the solenoid valves and on out to the cup compartment. Air intake lines **32**, **50**, **52**, **70** and **72** are each located within the refrigerated compartment **100** that houses the various liquids such that the ends thereof which are open to the atmosphere lie above the liquid level in the discharge conduits from which they branch. This, of course, prevents the liquid from escaping through the air intake lines rather than into the cup compartment.

FIGURE 3 of the drawing is representative of the type of solenoid-operated metering valves that are used to control the flow of the several liquids into the cup compartment. In the particular form shown, a solenoid **102** operates upon energization from the timer circuit associated therewith to raise valve element **104** off its seat **106** thus permitting liquid to flow from the intake passage **108** into discharge passage **110**. In the usual design all of these solenoid valves are identical and wired to a common timer mechanism **112** (FIGURE 4) which opens them for a predetermined fixed interval. This fact, of course, demands that some means be provided for controlling the volume of liquid delivered by each of the valves during this fixed interval. In other words, in each of the mixed drinks, a different measured quantity of liquor, extract and carbonated water will ordinarily be required. For example, each of the liquor solenoid-operated valves might be set to deliver one ounce of liquor in a given interval, the extract valves two ounces, and the carbonated water valves three ounces during the same period. It is even possible that more orange extract would be needed than cola extract because of variations in their respective concentrations.

Accordingly, each of the solenoid-operated valves is provided with a metering element **114** which is adjustable to restrict the outlet or discharge passage **110** to the degree required for controlling the volume of liquid dispensed during a pre-set time interval that the valve is open. If desired, the metering element can be calibrated in some fashion to indicate the quantities of the corresponding liquid dispensed at various settings.

Next, with reference to FIGURE 4 of the drawings, the basic operating sequence of the coin-operated alcoholic beverage dispensing device of the present invention will be set forth. No attempt has been made to show the circuitry in detail as it merely involves wiring standard components into the system in a manner to accomplish the desired end result which is well within the skill of the ordinary electrician and does not involve the exercise of the invention. Also, for purposes of a more complete understanding, the fluid and gas connections have been shown in dot-dashed lines, the electrical system having been illustrated with full lines. Before the machine can be operated, however, certain preliminary steps must be performed.

First of all, the timer mechanism **112** which usually includes an electrically-wound and spring-returned clock device operative to close a switch for a predetermined time interval must be set at some selected figure, say five seconds, during which the liquids that constitute the various mixed drinks will continue to flow when the solenoid valves associated therewith are energized. Next, each of the solenoid-operated metering valves must be adjusted to deliver a measured quantity of liquid during this five second interval. For simplicity, assume both liquor solenoid valves **66** and **68** are set to deliver one ounce in five seconds, the extract valves **46** and **48** two ounces of syrup and the carbonator solenoid valve **30** three ounces of carbonated water during this same time interval. Assume also that the clock **116** has been set to close the circuit and render the machine operative only during those hours when liquor can be served legally in accordance with local ordinances and the coin mechanism has been set to deliver any of the drinks for a total in coins of fifty cents.

Selection of the particular alcoholic beverages and extracts compatible therewith and which also require carbonation in accordance with the hook-up illustrated herein becomes the next preliminary step. Actually, the machine would probably be set up to dispense about three of the most common alcoholic beverages, namely, bourbon, scotch and gin or rum together with water, dry soda and sweet soda as mixes rather than trying to provide a dispenser for some of the more exotic cocktails and blends which are not very common. In such an arrangement, it is doubtful that all of the alcoholic beverages would be compatible with each and every mix which, of course, is no problem as the uncompatible combinations can just not be connected to provide a mixture thereof. For purposes of illustration, however, it will be more meaningful if combinations of carbonated water, two extracts and two alcoholic beverages are chosen that will intermix with one another and still illustrate the many possibilities that are available. Accordingly, assume that L_1 is gin which can be mixed with orange juice as extract E_1 and carbonated water to produce a common mixed drink. If rum is selected as L_2 it will likewise mix with the orange juice and carbonated water to provide a palatable mixture. The best choice remaining for the second extract E_2 would probably be a sweet soda extract which will mix with both rum and gin to provide a so-called rum or gin Collins; however, a cola extract as E_2 will better illustrate the problems associated with a dark-colored

syrup even though gin and cola is not one of the more common mixed drinks.

The choices having thus been made, the selector switch **118** must be marked accordingly so that the customer will know what he is purchasing. The top position of the switch would indicate gin and orange juice, the second gin and cola, the third rum and orange juice, and the bottom rum and cola. Finally, assume the customer has selected number four or rum and cola.

The refrigeration system **120** which keeps all the liquids inside the cabinet cold as long as the machine is connected into the line operates independent of clock **116** that otherwise controls all operations of the machine. Clock-mechanism **116** as shown includes a pair of signal lamps **122** and **124** connected thereto which indicate whether the machine is closed down or open for business. Also, when the clock places the machine in an inoperative state, the coin box will not function to accept a coin, thus ejecting same in accordance with common practice with vending machines. The clock in open position renders the coin box operative so that it will accept coins.

The coin box **126** is preferably of the more or less standard type that can be set to operate on any one of a number of different coins adding up to the same or different amounts depending upon how many accumulator units it contains, yet, can be set to operate free. Signal lamps **128** and **130** can be wired thereto so that the customer has visual indication of how it has been set, i.e., either coin-operated or free. A counter **132** is energized by the coin-box as soon as the coins are accepted or the switch controlled thereby closes to indicate a drink has been dispensed.

Timer **112** is a most important element of the system and is electrically connected to the coin-box **126** which functions to energize same as soon as a coin or combination thereof is accepted if on coin-controlled operation or energizes in response to actuation of the selector switch if set on free operation. This timer, in turn, energizes the carbonator motor **22**, carbonator solenoid-operated valve **30** and one of the liquor and extract valves by means of the selector switch depending upon the choice of the operator. In this particular instance with the selector set in position four at the bottom, solenoid valves **48** and **68** would be energized along with carbonator valve **30**.

As soon as the timer mechanism **112** closes the chosen solenoid circuits, carbonator **16** would deliver three ounces of carbonated water through valve **30** into the cup **44** by means of discharge conduit **28** energizing inside nozzle **92**. At the same time, solenoid valve **68** would open to dispense one ounce of rum into the cup from the same nozzle and discharge line **64**. Concurrently, valve **48** in open position would dispense two ounces of cola extract into the cup but from line **42** emerging through the rear of the cup compartment. Air-intake lines **32**, **52** and **72** would each facilitate delivery of their respective fluids in full measure into the cup by preventing air-blocks in the discharge lines.

Assuming that the next customer chose gin and orange juice by placing the selector switch in its top position, there would be no danger of contaminating the drink from the few drops of cola extract that might remain in tube **42** as these would not enter the cup but rather be carried away in the drain system. By the same token, all of the liquids in the entire system flow through separate conduits only to be mixed right in the cup thus substantially eliminating any discoloration or contamination problems altogether.

Finally, referring to FIGURES 5 and 6 of the drawings, the novel stopper mechanism by which the alcoholic beverage containers are prevented from rupturing under excessive gas pressure will now be set forth. The gas pressure fed to the alcoholic beverage containers is controlled by regulators **14**, **38** and **60** such as to not exceed approximately ten to fifteen pounds per square inch above atmospheric pressure; however, most of these containers are made of glass and means for preventing the introduction of a pressure sufficient to rupture them is preferably provided.

In the particular form shown, each of the alcoholic beverage containers is provided with a tapered rubber plug or stopper **134** containing three openings, one for the gas conduit **54**, a second for the liquid conduit **62** or **64**, and a third for relief valve **136**. Stopper **134** is placed in the neck of the bottle tightly enough to insure a substantially air-tight seal yet, at the same time, loose enough to pop out should the internal pressure exceed that which would normally be required to burst the bottle, namely, about twenty-five pounds per square inch above atmospheric pressure. A generally U-shaped leaf spring **138** fits over the top of the stopper and engages the sides of the neck, preferably underneath the shoulder **140** that is usually present, for purposes of holding the stopper in the bottle up to the point where the aforementioned critical pressure is reached.

As a further precaution, ball-check valve **136** or some other type of relief valve is provided in the stopper and adapted to relieve the pressure in the container at any time it exceeds approximately fifteen pounds per square inch. Obviously, check valve **136** and the pressure regulators are ordinarily adequate in and of themselves to prevent any excessive pressure build-up in the alcoholic beverage bottles and it is only the exceptional case in which these elements fail to operate as intended or the excessive pressure is applied so quickly that it cannot be taken care of by the relief valve that the spring **138** will release the stopper and allow same to pop out.

FIGURE 6 merely shows one type of simple ball check valve **136** that could be used in the stopper. It comprises merely a valve body **140** having a port **142** in one end opening onto an enlarged cavity **144** that contains the ball **146** and compression spring **148**. Spring **148** is maintained in place by apertured plug **150** threaded into the open end of the valve body as shown. Of course, the bottom of cavity **144** bordering port **142** is shaped to provide a seat **152** for the ball **146**.

Having thus described the several useful and novel features of the coin-controlled alcoholic beverage dispensing machine of the present invention, it will become apparent that the many worthwhile objectives for which it was designed have been achieved. Although but a single specific embodiment of the invention has been illustrated and described in connection with the accompanying drawings, I realize that certain changes and modifications therein may well occur to those skilled in the art within the broad teaching found herein; hence, it is my intention that the scope of protection afforded hereby shall be limited only insofar as said limitations are expressly set forth in the appended claims.

What is claimed is:

1. In combination in a beverage dispensing machine, a refrigerated cabinet, a source of carbon dioxide gas under pressure, at least two different alcoholic beverages in their original containers housed within the cabinet, at least two non-alcoholic beverages housed within the cabinet in separate containers, at least one of the non-alcoholic beverages being compatible with at least two of the alcoholic beverages, separate delivery conduits connected to receive fluid from each of the beverage containers and deliver same to a single receptacle, a normally-closed electrically-operated valve in each of the delivery conduits operative upon actuation to permit the flow of fluid therethrough, said delivery conduits including a branch conduit connected downstream of the associated electrically operated flow control valve and open to the atmosphere, said branch conduit providing means adapted to admit air to the delivery tube for purposes of insuring substantially complete drainage thereof, gas conduits connected to receive carbon dioxide from the source thereof and deliver same to each beverage container independently at a pres-

sure adapted to force the beverages through the associated delivery tube when the electrically-operated valve controlling the flow thereof is actuated and said non-alcoholic beverage delivery conduits having their discharge ends terminating short of the edge of the receptacle in order that any residual drippings will fall outside of the receptacle and adapted to dispense a beverage into the said receptacle only under a suitable positive pressure from said carbon dioxide source, a manually-operated selector switch electrically connected to each electrically-operated flow control valve, said switch having a first operative position electrically interconnecting the electrically-operated valves controlling the flow of one alcoholic beverage and one non-alcoholic beverage, a second operative position electrically interconnecting the electrically-operated valves controlling the flow of another alcoholic beverage and the first-mentioned non-alcoholic beverage, and a third operative position electrically interconnecting the electrically-operated valves controlling the flow of another non-alcoholic beverage and one of the alcoholic beverages, and clock-controlled timer means electrically connected to the selector switch and operative upon actuation to energize same in any one of its operative positions for a pre-determined time interval during which delivery of the selected mixture of alcoholic and non-alcoholic beverages take place, and coin-operated switch means electrically connected to the timer means and adapted to actuate the latter upon insertion of a pre-set sum in coins.

2. The combination as set forth in claim 1 in which means comprising a carbonator is housed within the cabinet and connected to receive carbon dioxide under pressure from the source thereof, said carbonator being adapted upon connection to a source of water, a motor and pump to deliver carbonated water, a delivery tube connected to receive carbonated water from the carbonator and deliver same to the receptacle, and a normally-closed electrically-operated valve connected into the delivery tube and adapted upon actuation to control the flow of carbonated water therethrough, said carbonated water flow control valve being electrically connected to the selector switch in a manner to be actuated thereby in at least one of its operative positions for the predetermined time interval the latter is energized by the timer means.

3. The combination as set forth in claim 2 in which at least one of the positions of the selector switch in which the carbonated water flow control valve is actuated is one

in which an alcoholic beverage compatible with carbonated water is dispensed and mixed therewith.

4. The combination as set forth in claim 2 in which at least one of the non-alcoholic beverages is uncarbonated although compatible with carbonated water, the carbonated water flow control valve is actuated and in at least one of the positions of the selector switch in which one of the uncarbonated non-alcoholic beverages is mixed with one of the alcoholic beverages.

5. The combination as set forth in claim 2 in which the carbonated water flow control valve is electrically connected to the selector switch in all operative positions thereof, the non-alcoholic beverages are all uncarbonated, and both the non-alcoholic and alcoholic beverages are compatible with carbonated water.

6. The combination as set forth in claim 1 in which the intake end of each of the delivery conduits is connected into the beverage container associated therewith such that it is immersed in the liquid contained therein, and the outlet end of each of the gas conduits is connected into the beverage container associated therewith such that it terminates above the level of the liquid contained therein.

7. The combination as set forth in claim 1 in which each of the alcoholic beverage containers is provided with a tapered stopper providing a substantially air-tight seal with the neck thereof, one of each of the gas delivery conduits being connected into the interior of the container through said stopper, and a relief valve connected into said stopper and adapted to relieve the pressure in the container when said pressure exceeds a pre-determined maximum.

8. The combination as set forth in claim 7 in which spring means interconnects the stopper and associated beverage container, said spring means being adapted to release said stopper upon the application of a predetermined maximum pressure to the latter from inside the bottle.

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