W. A. FREISE. DISTRIBUTING AND DISPENSING DEVICE.

(Application filed Apr. 6, 1901.)

(No Model.)

3 Sheets—Sheet I.

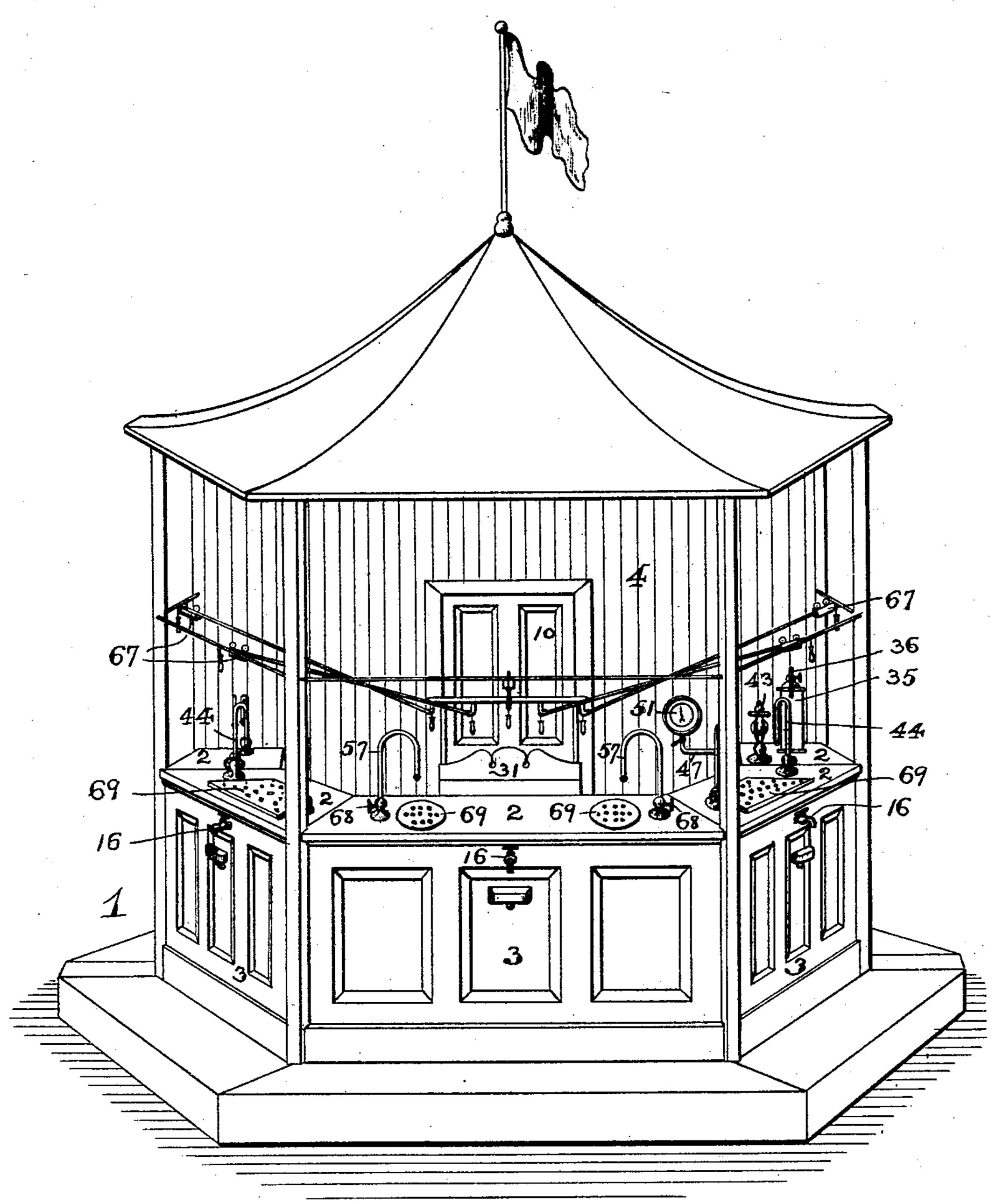


FIG.I

WITNESSES:

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Joseph Salmon.

INVENTOR:

WILLIAM A. FREISE

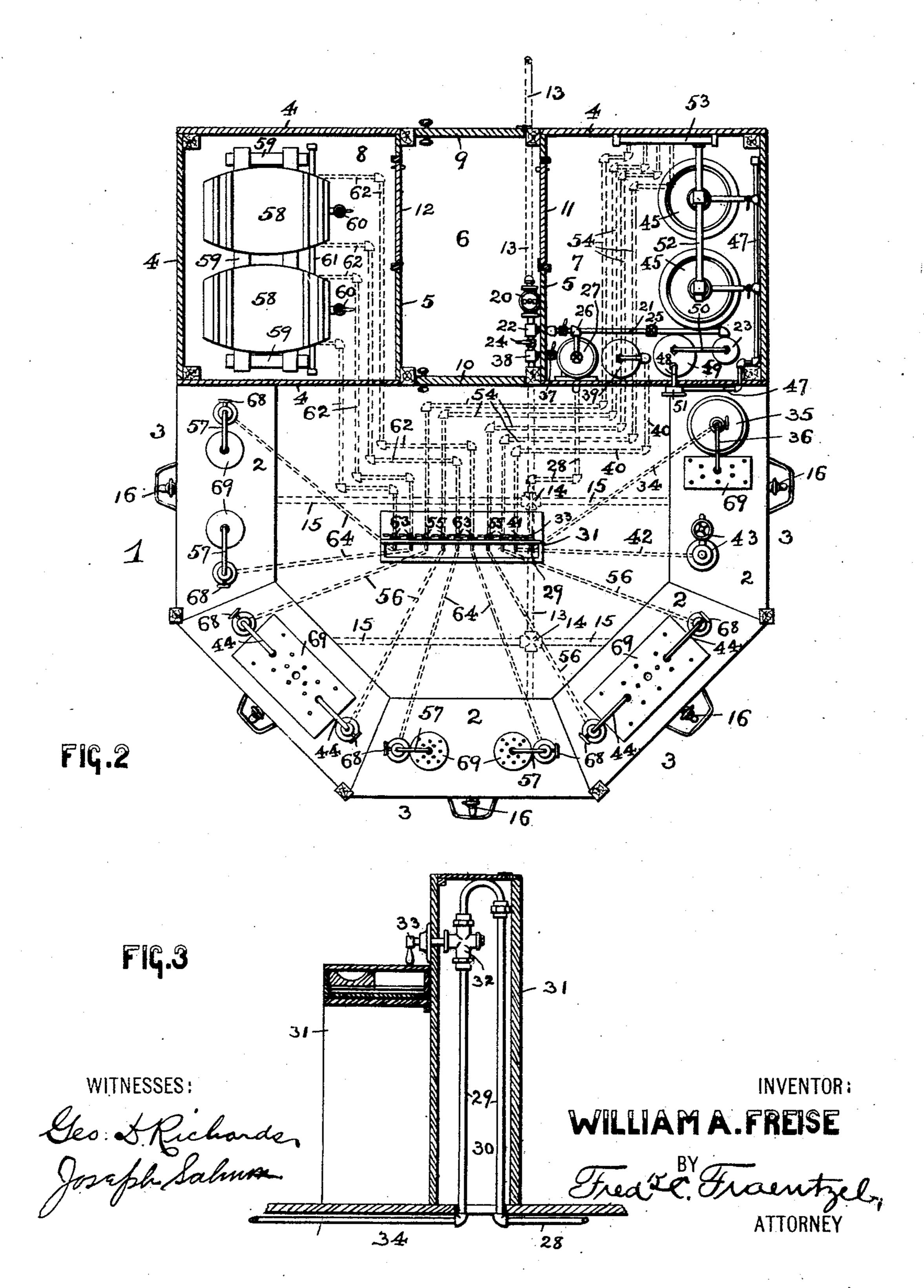
Fred Fraentzel,
ATTORNEY

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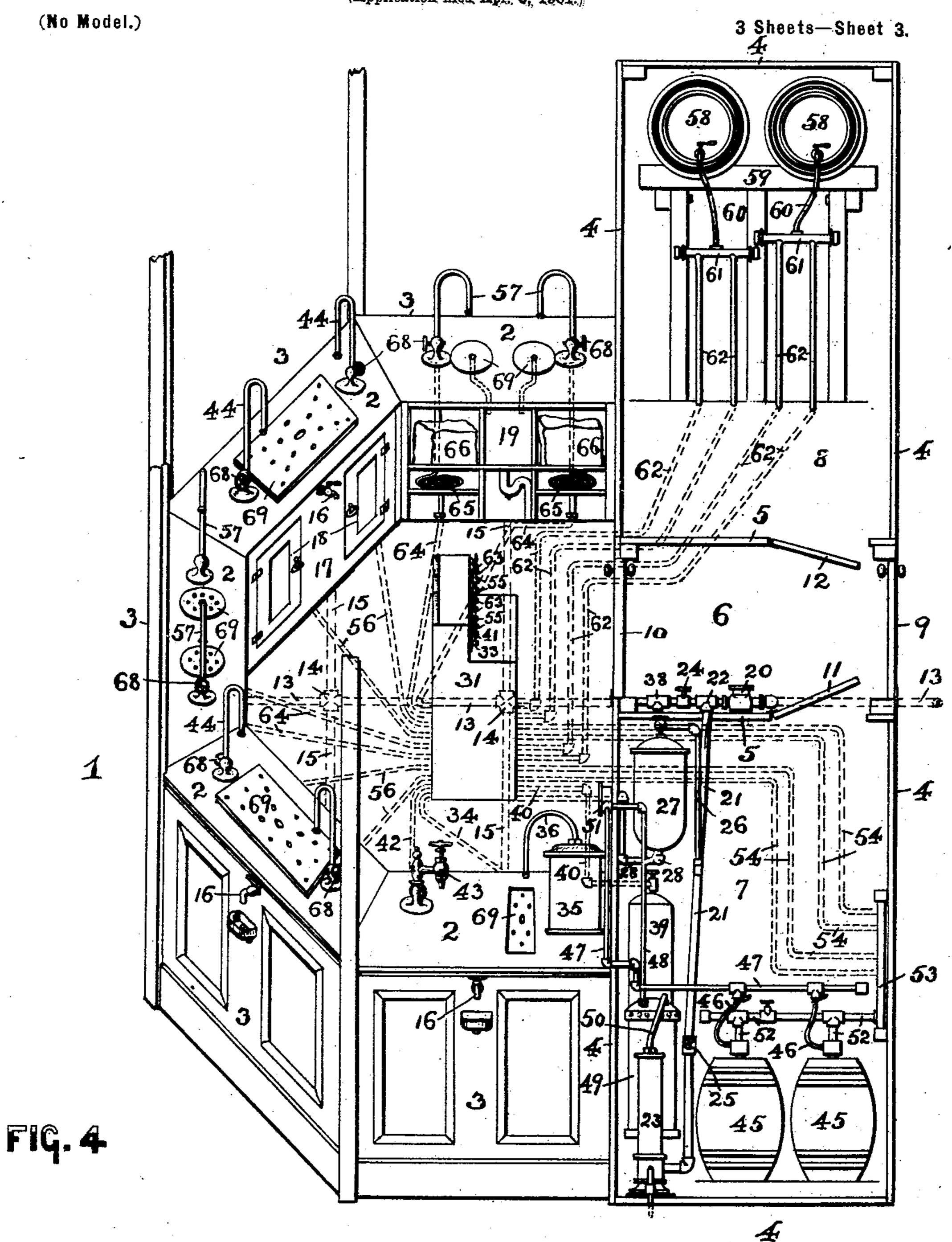
(No Model.)

3 Sheets—Sheet 2.



W. A. FREISE. DISTRIBUTING AND DISPENSING DEVICE.

(Application filed Apr. 6, 1901.)



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DISTRIBUTING AND DISPENSING DEVICE.

SPECIFICATION forming part of Letters Patent No. 710,963, dated October 14, 1902.

Application filed April 6, 1901. Serial No. 54,620. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. FREISE, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Distributing and Dispensing Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to numerals of reference marked thereon, which form a part of this specification.

This invention has reference to a novel device for the distribution and dispensation from a central point or station of a beverage or beverages to different points and in different directions through a system of ducts or pipes through which the liquids pass, the dispensation of the liquid or liquids being controlled at the said central point or station.

The primary object of this invention is to provide a novel device of this character and a self-acting system for serving a liquid or liquids or various kinds of beverages to a customer or customers at one and the same time from one central point or station, such distribution of the liquids or liquors being under the perfect control of a single person at said central point or station.

A further object of this invention is to provide a novel construction of bar or dispensing-table which may be used either within doors or out of doors, as may be desired, provided with suitably-disposed and suitably-arranged pipes and outlets, all under the control of an operator at a central desk, whereby several customers can be served with various drinks at the same time.

A further object of this invention is to provide a novel arrangement of counters or tables, a central controlling-desk, a system of delivery-pipes, the necessary pump for maintaining certain riquors under pressure, valves and controlling-cocks or other controlling means, and compartments for storing malt liquors—such as beer and ales and wines, whiskies, and the like—and, furthermore, to furnish a dispensing device of the character indicated which shall be of a simple construction, shall be neat in appearance, and which

can be located in a room or in a park at any desired point for the dispensation of beer, ales, wines, whiskies, sodas, filtered water, or 55 any other beverages.

With these several objects in view my invention consists in the novel distributing and dispensing device hereinafter described and, furthermore, in the peculiar arrangements 60 and combinations as well as in the constructions of the various parts and devices, all of which will be set forth in detail in the following specification and then finally embodied in the clauses of the claim.

The invention is clearly illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of one embodiment of my invention, representing the distributing and dispensing device in the form 70 of an ornamental pavilion. Fig. 2 is a part plan and part horizontal section of the distributing and dispensing device; and Fig. 3 is a vertical section of the cashier's desk, on an enlarged scale, said view illustrating in 75 connection with the desk one arrangement of distributing-pipes and controlling means for the dispensation of the liquids at the outlet or outlets above the counter and for the shutting off the supply of the liquid when 80 the glass has been filled. Fig. 4 is a diagrammatic view of the various arrangements and combinations of devices and parts thereof, all arranged according to the principles of this invention.

Similar characters of reference are employed in all of the said above-described views to indicate corresponding parts.

In carrying out my invention I employ a suitable counter 2, the same comprising in 90 the present instance five counter-sections 3, the front facing or panels of which are suitably ornamented and may form a part of the pavilion 1, as clearly indicated in Figs. 1 and 4 of the drawings. This pavilion is prefer- 95 ably provided at one side with vertical walls 4 and partitions 5, providing a passage-way 6 and the store-rooms or compartments 7 and S; but of course it will be understood that the parts may be differently arranged. Doors 9 100 and 10 are placed in the vertical walls 4, as shown, and the partitions 5 are likewise provided with doors 11 and 12 for establishing communication between the passage-way 6

and the compartments 7 and 8. As clearly indicated in Figs. 2 and 4, the reference-numeral 13 refers to a water-supply pipe in which are any suitable number of fittings 14 5 and connecting side branches 15, which lead into and beneath the several counter-sections 3 and terminate at the water-faucets 16 at the front and back of each counter-section for the purpose of cleansing the glasses directly at 10 the counter, if desired. Each counter-section is provided in its rear wall 17 with suitablyarranged doors 18 for placing the ice in the cooling or refrigerating compartments or chambers 19 beneath each counter-section. 15 The said water-pipe 13 may be provided with a suitable water-meter 20, and 21 is a branch pipe, which is connected by means of a fitting 22 with the said pipe 13 for feeding water to an air-compressing pump 23. Suitable valves 20 or shut-offs 24 and 25 may be arranged in the respective pipes 13 and 21, as shown. Connected with the said water-pipe 21 is a pipe 26, which leads into the top of a suitable water-filter 27, from the bottom of which the fil-25 tered water passes through the pipe 28 into a pair of pipes 29, placed in a compartment 30 in the back of a centrally-disposed cashier's desk 31. In one of these pipes 29 is a suitably-constructed valve 32, which is provided 30 with a stop-cock 33, placed directly above the counting-table of the cashier's desk and within easy reach of the person seated at said desk. This stop-cock 33 can be opened and closed by the cashier, and the filtered water 35 is forced by the pressure back of it through a pipe 34 into the cooling-chamber of the respective bar-section 3 and thence into an additional filter 35, which is placed upon the bar and from which the water is dispensed 40 through an outflow-pipe or gooseneck 36, connected with the said filter, as shown. If desired, the water-filter 27 may also be connected by means of an outlet 37 and a fitting 38, as illustrated in Fig. 2, with the main pipe 13, 45 whereby when the shut-off 24 in said main pipe is closed all the water will pass into and through the filter 27, and such filtered water is then delivered at the faucets 16, as will be clearly evident. The two filters 27 and 35 in 50 that case are provided with filtering materials of different grades and better filtered and clearer water is dispensed from the filter 35. Within the said compartment 7 may be placed one or more tanks or vessels 39, which con-55 tain carbonated liquids. Each tank 39 is connected by means of the piping 40 with pipes and a valve in the back compartment 30 of the desk, the flow of the liquid through said pipes being controlled by a stop-cock 41 and 60 through the pipe 42 and the delivery-faucet j 43 in the same manner as above set forth.

In order that malted beverages, such as beers and ales, may be dispensed from the outlets 44 above the bar-sections or tables, 65 the barrels or kegs 45, which contain the liquor, are placed within the compartment 7 and by means of the piping 46, 47, and 48 are

connected with an air reservoir or tank 49, in which the air is kept under pressure by means of the pump 23, hereinabove men- 70 tioned. This pump is in communication with said tank 49 through a suitable pipe 50. A pressure-indicating gage 51 may be arranged in the said pipes 48 and 47, as indicated in Fig. 4, the gage being preferably secured in 75 a suitable position against the front of the vertical wall 4, so as to be readily read by the person at the central desk 31. The barrels or kegs 45 are furthermore connected by means of certain pipes 52, which also lead 80 into a suitable manifold 53. Extending from this manifold 53 are other delivery-pipes 54, which communicate with pipes and valves arranged in the compartment 30 of the central desk 31, similar to the arrangement of 85 the pipes 29 and their valve 32, previously mentioned, the flow of the beer or ale or other malted liquor being controlled by the stopcocks 55 in front of the desk, which when opened permit of the liquid to flow under 90 pressure through pipes 56 to the various barsections 3 and then to be delivered from the said faucets or delivery-pipes 44, as will be clearly understood. In like manner alcoholic drinks—such as wines, whiskies, and 95 the like—may be served from the faucets or outlets 57 above the bar-sections or tables from barrels or casks 58, placed upon a suitable rack or support 59 in the compartment 8, as clearly illustrated in Figs. 2 and 4, flexi- 100 ble pipes or ducts 60, connecting the said barrels or casks with suitable manifolds 61, from which pipes 62 lead to other pipes and valves (similar to the pipes 29 and valve 32) in the back of the desk 31, the flow of the 105 liquor being controlled by the stop-cocks 63 in tront of the cashier, whereby the liquor is allowed to flow by its own gravity through pipes 64 to the respective bar-sections to be delivered from the faucets or delivery-pipes 110 57 above each bar-section.

That the various liquids when they are being drawn from the several outlets above the bar-sections or tables may be cold each delivery-pipe between the central desk 31 and 115 the refrigerating-chamber 19 in the respective bar-section has arranged therein a suitably-constructed cooling-coil 65, as clearly indicated in Fig. 4, in which a portion of the liquid will remain, directly beneath the ice, 120 which will therefore be properly cooled when the liquid is drawn from the faucet.

The manner of dispensing the liquids is as follows: The person desiring a certain drink steps up to the counter-section provided with 125 a faucet or outlet labeled with the name of the kind of beverage that can be dispensed from the said faucet. The money for the drink is placed by the person in a suitable cash-carrier, as 67, (see Fig. 1,) and delivered at the cashier's desk 31. The customer places one of the glasses, which are to be found upon the bar, beneath the outlet or faucet, and the cashier at the desk 31 opens the required stop-

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éock 33, 41, 55, or 63, according to the kind [of drink asked for. As soon as the glass is filled the stop-cock is again closed by the person at the cashier's desk and the further dis-5 pensation of the liquid at the faucet above the counter is prevented until the corresponding stop-cock is again manipulated by the person at the cashier's desk.

The various outlets 44 and 57 may be pro-10 vided above the bar-sections with stop-cocks 68, if desired, and drip-pans 69 may be placed in the counters, said drip-pans being connected by means of the usual pipes with the

waste-pipe, as will be understood.

The novelty, as well as the utility and efficiency of the device, will be clearly evident from the above description of my invention and from an inspection of the accompanying

drawings.

Of course it will be understood that changes may be made in the several arrangements and combinations of the various devices and parts embodying the principles of my invention as well as in the details of the construction 25 of said parts without departing from the scope of this invention. Hence I do not limit my invention to the exact arrangements and combinations of the devices and parts as herein described, and illustrated in the drawings; 30 nor do I confine myself to the exact details of the construction of any of the said parts. I am also aware that the same general system of combined distributing and dispensing mechanism through which the flow of a liquid 35 or liquids is controlled from one central point or station may be used with several counters or tables variously placed about a room to provide a novel and self-acting service.

Having thus described my invention, what

40 I claim is—

1. In a distributing and dispensing device for liquors, &c., a bar, a central controllingdesk, delivery-outlets on said bar, a system of pipes and valves at one side of said desk, 45 and stop-cocks on said desk in front of and within reach of a person at the desk, deliverypipes between the said system of pipes at the desk and the said outlets on the bar, and means for delivering liquor to said pipes and 50 valves at the desk, substantially as and for

the purposes set forth.

2. In a distributing and dispensing device for liquors, &c., a bar, a central controllingdesk, delivery-outlets on said bar, a system 55 of pipes and valves at one side of said desk, and stop-cocks on said desk in front of and within reach of a person at the desk, deliverypipes between the said system of pipes at the desk and the said outlets on the bar, and means 60 for delivering liquor to said pipes and valves at the desk, consisting, essentially, of a second set of delivery-pipes between said pipes at the desk and the packages containing the liquor to be dispensed, substantially as and 65 for the purposes set forth.

3. In a distributing and dispensing device

desk, delivery-outlets on said bar, a system of pipes and valves at one side of said desk, and stop-cocks on said desk in front of and 70 within reach of a person at the desk, deliverypipes between the said system of pipes at the desk and the said outlets on the bar, and means for delivering liquor to said pipes and valves at the desk, consisting, essentially, of 75 a second set of delivery-pipes between said pipes at the desk and the packages containing the liquor to be dispensed, all combined with a water-supply pipe, a pump operated from said supply-pipe, an air-reservoir, and a 80 means of communication between said pump and reservoir for compressing the air in said reservoir, and pipe connections between said air-reservoir and the packages containing the malted liquors, all arranged substantially as 85 and for the purposes set forth.

4. In a distributing and dispensing device for liquors, &c., a counter, comprising several bar-sections, and a refrigerating-chamber in each section, a central controlling-desk, de- 90 livery-outlets on each bar-section, a system of pipes and valves at one side of said desk, stop-cocks on said desk in front of and within reach of a person at the desk, delivery-pipes between said system of pipes at the desk and 95 the said outlets on the bar-section, coolingcoils in said delivery-pipes arranged within the refrigerating-chamber of each bar-section, and means for delivering liquor to said pipes and valves at the desk, substantially as and 100 for the purposes set forth.

5. In a distributing and dispensing device for liquors, &c., a counter, comprising several bar-sections, and a refrigerating-chamber in each section, a central controlling-desk, de- 105 livery-outlets in each bar-section, a system of pipes and valves at one side of said desk, stop-cocks on said desk in front of and within reach of a person at the desk, delivery-pipes between said system of pipes at the desk and 110 the said outlets on the bar-section, coolingcoils in said delivery-pipes arranged within the refrigerating-chamber of each bar-section, and means for delivering liquor to said pipes and valves at the desk, consisting, essentially, 115 of a second set of delivery-pipes between said pipes at the desk and the packages containing the liquor to be dispensed, substantially as and for the purposes set forth.

6. In a distributing and dispensing device 120 for liquors, &c., a counter, comprising several bar-sections, and a refrigerating-chamber in each bar-section, a central controlling-desk, a system of pipes and valves at one side of said desk, stop-cocks on said desk in front of 125 and within reach of a person at the desk, delivery-pipes between said system of pipes at the desk and the said outlets on the bar-sections, cooling-coils in said delivery-pipes arranged within the refrigerating-chamber of 130 each bar-section, and means for delivering liquor to said pipes and valves at the desk, consisting, essentially, of a second set of defor liquors, &c., a bar, a central controlling- I livery-pipes between said pipes at the desk

and the packages containing the liquor to be dispensed, all combined with a water-supply pipe, a pump operated from said supply-pipe, an air-reservoir for receiving air from said pump, and pipe connections between said air-reservoir and the packages containing the malted liquors, all arranged substantially as and for the purposes set forth.

7. In a distributing and dispensing device for liquors, &c., the combination, with a counter and a central desk, beer-pipes leading to said desk and from said desk to the counter, and outlets connected with said beer-pipes, above the counter, wine-pipes leading to said

desk and from said desk to the counter, and outlets connected with said wine-pipes, above the counter, and means at the desk for controlling the supply of the liquid from the said outlets, consisting, of a valve in each pipe, and a stop-cock connected with each valve arranged in front of and within reach of a per-

ranged in front of and within reach of a person at the desk, substantially as and for the

purposes set forth.

8. The herein-described device for dispensing liquids, comprising, counter-sections, a store room or rooms, and a central desk, a water-supply pipe 13, a water-filter 27 receiving water from said supply-pipe 13, a second water-filter 35 on one of said counter-sections, and a pipe connecting said second filter 35 with said filter 27, and means at the central desk for controlling the flow of water to said second filter, substantially as and for the purposes set forth.

9. The herein-described device for dispensing liquids, comprising, counter-sections, a store room or rooms, and a central desk, a water-supply pipe 13, a water-filter 27 receiving water from said supply-pipe 13, a second water-filter 35 on one of said counter-sections, and a pipe connecting said second filter 35

ter-filter 35 on one of said counter-sections, and a pipe connecting said second filter 35 with said filter 27, and means at the central desk for controlling the flow of water to said

second filter, a branch pipe 21 connected with said supply-pipe 13, a pump in said branch 45 pipe, an air-reservoir connected with said pump, pipe connections from said air-reservoir for placing liquor to be dispensed under pressure, pipes 54 leading to said desk, pipes 56 leading from said desk to the counter-sections and terminating in outflows 44, and means at the central desk for controlling the flow of liquor through said pipes 56, substantially as and for the purposes set forth.

10. The herein-described device for dispens- 55 ing liquids, comprising, counter-sections, a store room or rooms, and a central desk, a water-supply pipe 13, a water-filter 27 receiving water from said supply-pipe 13, a second water-filter 35 on one of said counter-sections, 60 and a pipe connecting said second filter 35 with said filter 27, and means at the central desk for controlling the flow of water to said second filter, a branch pipe 21 connected with said supply-pipe 13, a pump in said branch 65 pipe, an air-reservoir connected with said pump, pipe connections from said air-reservoir for placing liquor to be dispensed under pressure, pipes 54 leading to said desk, pipes 56 leading from said desk to the counter-sec- 70 tions and terminating in outflows 44, a second series of delivery-pipes 62 through which liquor flows by gravity, said pipes 62 leading to said desk, pipes 64 leading from said desk to the counter-sections and terminating in 75 outflows 57, and means at the central desk for controlling the flow of liquids through the various pipes 56 and 64, substantially as and for the purposes set forth.

In testimony that I claim the invention set 80 forth above I have hereunto set my hand this

3d day of April, 1901.

WILLIAM A. FREISE.

Witnesses:

FREDK. C. FRAENTZEL, GEO. D. RICHARDS.