

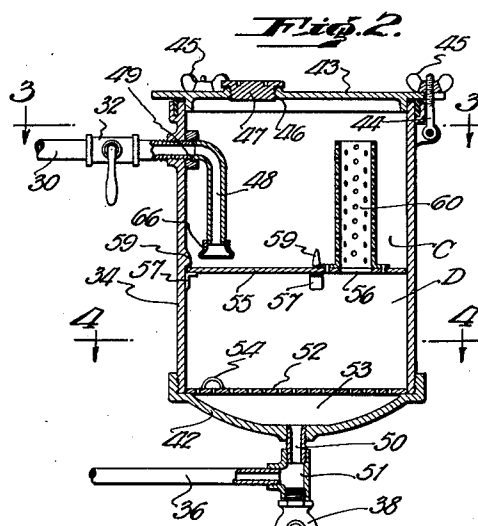
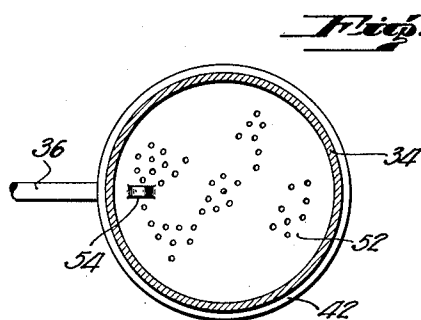
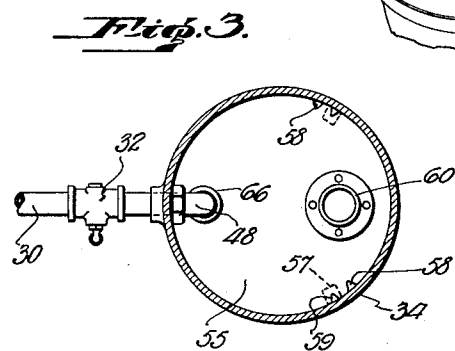
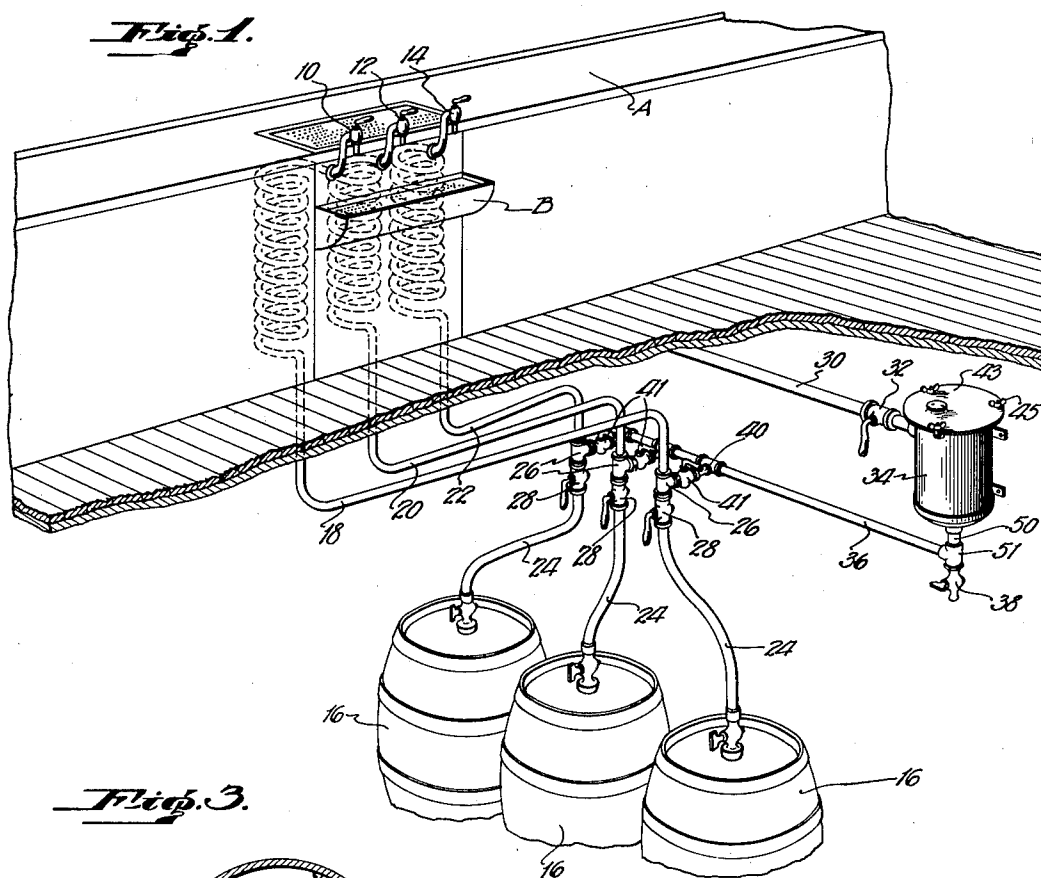
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DISPENSING APPARATUS

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DISPENSING APPARATUS

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2 Claims. (Cl. 225—12)

This invention relates to new and useful improvements in dispensing apparatus and more particularly it pertains to a new and improved cleaning means for removing deposits accumulated in the pipes of built-in or permanent dispensing apparatus.

It is one of the objects of the present invention to provide a new and novel means whereby the pipes of built-in dispensing systems may be cleaned at will.

In the cleaning of the pipes of built-in dispensing systems and particularly in beer apparatus, it is customary to use a chemical mixed with water and force the same through the pipes to be cleaned. It is in many instances accomplished by means of a hand operated pump and it has been proposed in past to set up this circulation by means of a water supply system such as a city system. In this last mentioned type of apparatus, the chemical employed is used in a suitable mixing tank or chamber to which the water of the supply system is introduced and from which, after dissolution of the chemical is forced through the system to be cleaned by the pressure of the water supply system.

It is a further object of the invention to provide a highly efficient chemical mixing tank.

With the above and other objects in view reference will be had to the accompanying drawing, in which:

Figure 1 is a perspective view illustrating a beverage dispensing counter having a plurality of dispensing faucets, said figure also illustrating the beverage supply together with the system employed to connect the supply to the dispensing faucets and the manner of use of the device of the present invention.

Figure 2 is a longitudinal sectional view of the chemical tank employed.

Figure 3 is a horizontal sectional view taken on the line 3—3 of Figure 2, and;

Figure 4 is a horizontal sectional view taken on the line 4—4 of Figure 2.

Referring again to the drawing and more particularly to Figure 1, the reference character A designates a drink dispensing counter, the same having a plurality of dispensing faucets 10, 12 and 14. These faucets are connected with suitable beverage supplies in the form of kegs 16, by means of pipes 18, 20 and 22 respectively. Each of the pipes carries a flexible connection, generally in the form of a length of rubber hose, which is adapted for direct attachment to its container. Each of the pipes is provided with a T-coupling 26 and between each T-coupling and

its respective flexible connection 24, there is a valve 28.

The reference numeral 30 designates a water supply system and this system is provided with a valve 32.

The reference numeral 34 indicates the chemical tank and this is connected in the system 30 and to the several pipes 18, 20 and 22 by means of a pipe 36 leading from the lower end of the tank 34. A drain cup 38 for the tank and pipe 36 is provided. Each of the pipes 18, 20 and 22 is connected to the pipe 36 by means of short pipe lengths 40 and each of these short pipe lengths includes a valve 41.

As thus far described it will be obvious that either of the pipes 18, 20 or 22 may be cleaned by closing its respective valve 28 and opening its respective valve 41 assuming, of course, that the valve 32 will be opened after the valve 28 has been closed and the valve 41 opened. With the parts in the position mentioned, water of the water supply system flows through the pipe 30, tank 34, pipe 36 through that valve 41 which has been opened and its respective pipe to its respective dispensing faucet from which it flows into the drain B.

When it is desired to use chemicals in the cleaning of these pipes, the chemical is introduced into the tank 34 and is dissolved and picked up by the water of the supply system 30 and is carried through the pipes thereby to effect a cleaning thereof.

I will now describe the chemical tank 34. This is preferably formed from metal and is of circular shape. The lower end is closed by a cap 42 which may be screwed or otherwise secured thereto. Its upper end is closed by a cover 43 held in place by pivoted bolts 44 having wing ends 45. The cover 43 is provided with an opening 46 closed by a plug 47 which plug and opening provide means for the introduction of chemicals into the tank without necessitating the removal of the cover 43 thereof.

The water supply line 30 leads into the tank near its upper end and has a downwardly extending leg 48 removably secured thereto by a coupling or union 49. Leading from the lower cap 42 is the pipe 36, it being secured thereto preferably by a short length of pipe 50 and a T-coupling. The reference numeral 52 designates a perforated bottom wall which rests upon the cap 42 but spaced therefrom as indicated at 53. This perforated plate has a handle 54 by means of which it may be grasped and removed when desired. Mounted within the tank and spaced above the

perforated plate 52 there is a plate 55 having an opening 56. This plate 55 is supported upon a plurality of brackets 57, of which there are preferably three, and it is notched as at 58 in order
 5 that it may slip or pass by lugs 59 in placing the same in position. After it has been so placed, it is turned slightly so that the notches 58 are out of register with the lugs 59, which latter therefore, serve to retain the plate in position
 10 upon the brackets 57. Surrounding the opening 56 of the plate 55 and extending upwardly into the upper portion of the tank there is a perforated pipe 60.

The partition 55 divides the tank 34 into upper
 15 and lower compartments C and D. Chemicals being introduced into the upper compartment C will rest upon the partition 55. If, now, the valve 32 be opened, water from the supply system 30 will be introduced into the upper chamber C and
 20 will be discharged in a lateral direction with considerable force, this being accomplished by a spray head 66 secured to the lower end of the leg 48 and having openings so arranged that the water will be discharged therefrom in laterally
 25 disposed streams. The water discharged from the spray head thus, that is, in a lateral direction, will therefore produce considerable agitation in the mixing tank and will cause the chemicals to rapidly dissolve and mix with the water.
 30 The water and the chemicals pass from the upper chamber C through the perforated pipe 60 to the lower chamber D, through the perforated plate 52, through the short length of pipe 50 to the pipe 36 and thence through those pipes of the
 35 system to be cleaned in the manner heretofore described.

From the foregoing it will be apparent that by reason of the specific arrangement of the chemical mixing tank 34 and thorough dissolution of

the chemical used will be had before the mixed chemical and water are discharged from the tank 34 thus insuring the proper chemical mixture for treatment of the pipes to be cleaned. If at any
 80 time it becomes necessary to clean the chemical tank 34 it can be readily disassembled by removing the cover 43, the leg 48 of the water supply system 30, the partition 55 and the perforated plate 52 all of which parts are removable, thus
 85 giving free access to the interior of the chemical tank 34 and its associated parts.

Having thus described the invention, what is claimed as new and what it is desired to secure by Letters Patent of the United States, is:

1. A chemical mixing tank comprising a main
 90 body portion, a removable cover therefor, a removable partition dividing said body portion into upper and lower chambers, and a plurality of brackets for supporting said partition, means for locking said partition on said brackets, an opening
 95 formed in said partition, a perforated pipe registering with said opening and extending upwardly into the upper chamber of the tank, said pipe forming communication between the upper and lower chambers of the pipe, and a perforated
 100 member forming the bottom wall of the lower chamber of the tank.

2. A chemical mixing tank comprising a main
 105 body portion, a removable cover therefor, a removable partition dividing said body portion into upper and lower chambers, means for securing said removable partition in place in the body portion, a perforated pipe upstanding from said partition and having communication with the lower
 110 chamber through an opening in the partition and a perforated member forming the bottom wall of the lower chamber of the tank.

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