March 13, 1934. H. MICHAELSEN 1,951,252

BEER PIPE CIRCULATION CLEANER

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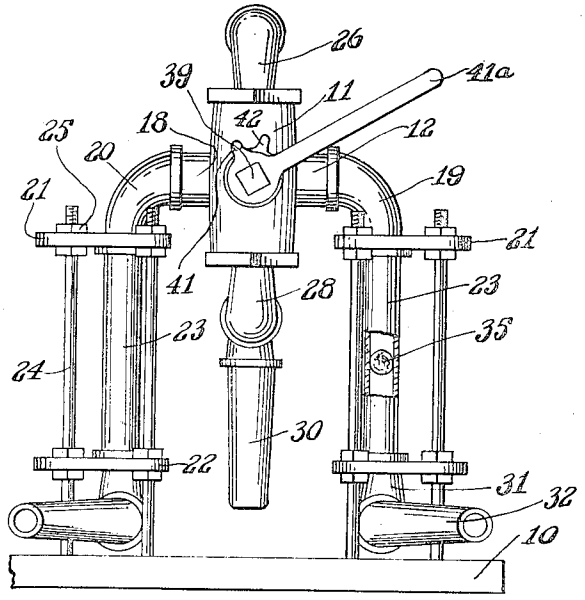


FIG. 1

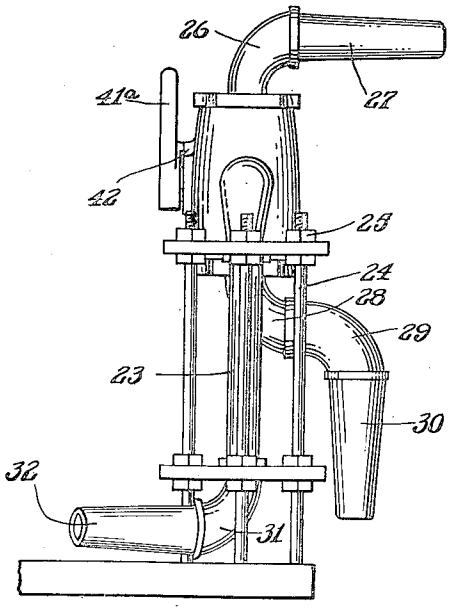


FIG. 2

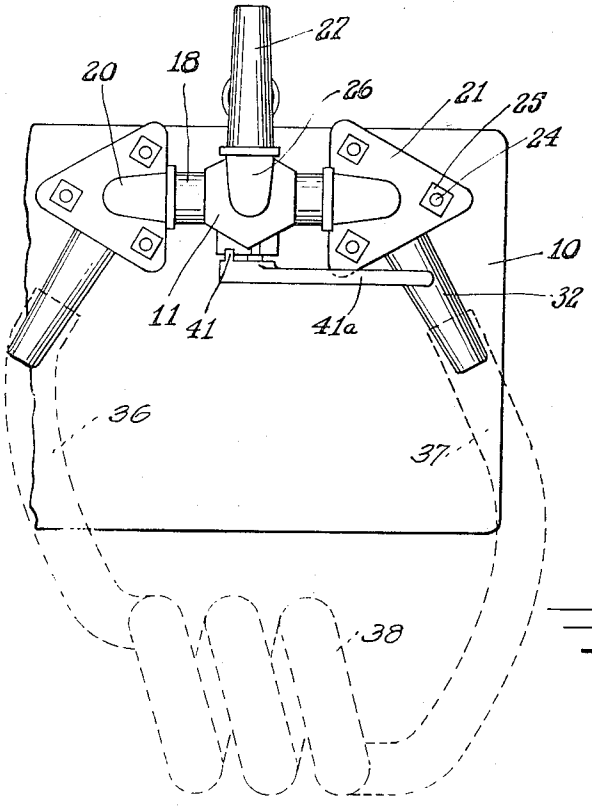


FIG. 3

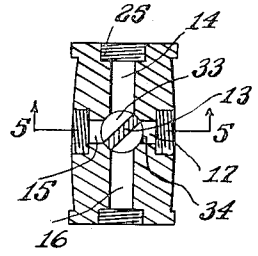


FIG. 4

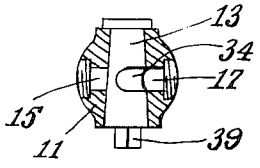


FIG. 5

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BEER PIPE CIRCULATION CLEANER

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Application May 8, 1933, Serial No. 669,876

1 Claim. (Cl. 225—12)

The main object of this invention is to provide a cleaner for cleansing draught beer circulatory systems. My device uses a sponge which is introduced into the apparatus and circulates entirely through the beer draught circulation system and the device with a constantly moving column of water.

Another object of the invention is to provide a beer pipe circulation cleaner which is inexpensive in cost of manufacture and simple in design.

The above and other objects will become apparent in the description below in which characters of reference refer to like named parts in the drawing.

Referring briefly to the drawing Figure 1 is a front elevational view of the beer pipe circulation cleaner showing a section of the sight glass broken away to expose the slime removing sponge.

Figure 2 is a side elevational view of the device.

Figure 3 is a top plan view of the device.

Figure 4 is a cross sectional view through the valve body showing the valve in position for deflecting and reversing the column of water passing through the device.

Figure 5 is a cross sectional view through the valve body, the section being taken on line 5—5 of Figure 4.

Referring in detail to the drawing, the numeral 10 indicates a baseboard upon which the entire device is mounted. Superimposed over this baseboard is a valve body 11 in which a valve stem 13 is located. This valve body is provided with substantially intersecting passageways 14, 15, 16, 17. The passageways 15 and 17 have sleeve members 12 and 18 leading to them. From these sleeves reducer elbows 19 and 20 extend. The lower smaller ends of the elbows depend downwardly and have triangular flanges 21 secured thereto. These flanges 21 superimpose similar members 22 which latter are spaced apart from the upper members and secure between them transparent glass sighting members 23. The flange members 21 and 22 are secured mutually by tie rods 24 on the latter of which threaded ends are provided to which nuts 25 are engaged.

The passageway 14 serves as the inlet in the valve body and all of the passageways have threaded recesses 25. The upper end of the passageway 14 receives the smaller end of a reducer elbow 26 from which a tapered inlet nozzle 27 extends horizontally. The passageway 16, aligned with the passageway 14 and also provided with a recess in which threads are formed is similarly provided with a reducer elbow 28 to which a second elbow 29 is secured. This latter member 29 has a depending outlet nozzle 30 extending therefrom.

Below the transparent glass sighting members 23 reducer elbows 31 are coupled and have horizontal circulation nozzles 32 secured to their outer ends.

The valve stem 13 is substantially tapered to make a leak proof fit between the valve body and the valve stem, and is provided with a pair of oppositely disposed diametro channels 33 and 34. These latter channels deflect the water circulating through the system and cause said water to by-pass from the passageway 14 into the passageway 15, and from the passageway 16 into the passageway 17.

It should be noted that a sponge of spherical proportions and indicated by the numeral 35 is introduced into the circulation of the device and also the hose sections 36 and 37 which are coupled to opposing ends of a beer pipe coil. This sponge may be of rubber or an abrasive member such as a floating stone of the petrified variety may be introduced. The object of introducing the sponge or abrasive member 35 into the system is to cleanse the slimy material and sediment from the interior surface of the coil and remainder of the beer pipe circulation system to which the device is temporarily coupled for purposes of cleaning. I place emphasis upon the fact that the entire channel passageways and sighting columns including the elbows and nozzles are of the same gauge and no shoulders or recesses of any kind are introduced into the organization by reason of this design, so that the sponge will have free and ready travel through the cleaning device and through the coil 38, the cleansing of which is the goal.

It is to be noted that certain changes in form and construction may be made without departing from the spirit and scope of the invention.

The valve stem is provided with a square shank 39 upon which a handle 40 is secured, a lug 41 on the valve handle cooperates with a similar lug 42 on the valve body, the latter serving as a stop for the rotation of the handle 41.

I claim:

In a beer pipe cleaner an elongated upright valve body, an upper inlet and a lower outlet extending from said valve body, sleeves projecting from opposite sides of said valve body and in communication with the interior thereof, elbow fixtures depending from said sleeves, said elbows having reduced ends, sighting glasses extending downwardly from the reduced ends of said elbows, a pair of oppositely disposed circulation

nozzles coupled to said sighting glasses, a tapering valve stem rotatably mounted on a horizontal axis in said valve body, intersecting passageways in said valve body, oppositely disposed channels in said valve stem for alternating the direction of flow of a column of water in said beer pipe cleaner, an elongated valve handle, a square shank on said valve stem having said valve handle secured thereto, an off-set lug on said valve body, a lug extending from the secured end of said handle being adapted to co-operate with the lug on the valve body to limit rotation of said valve handle and valve stem, said beer pipe cleaner being adapted to have means introduced therein to frictionally and abrasively remove the sediment from the coils of a beer pipe circulation system.

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