

(No Model.)

C. L. DIMON, Jr.
BEER PIPE CLEANER.

No. 540,810.

Patented June 11, 1895.

Fig. 1.

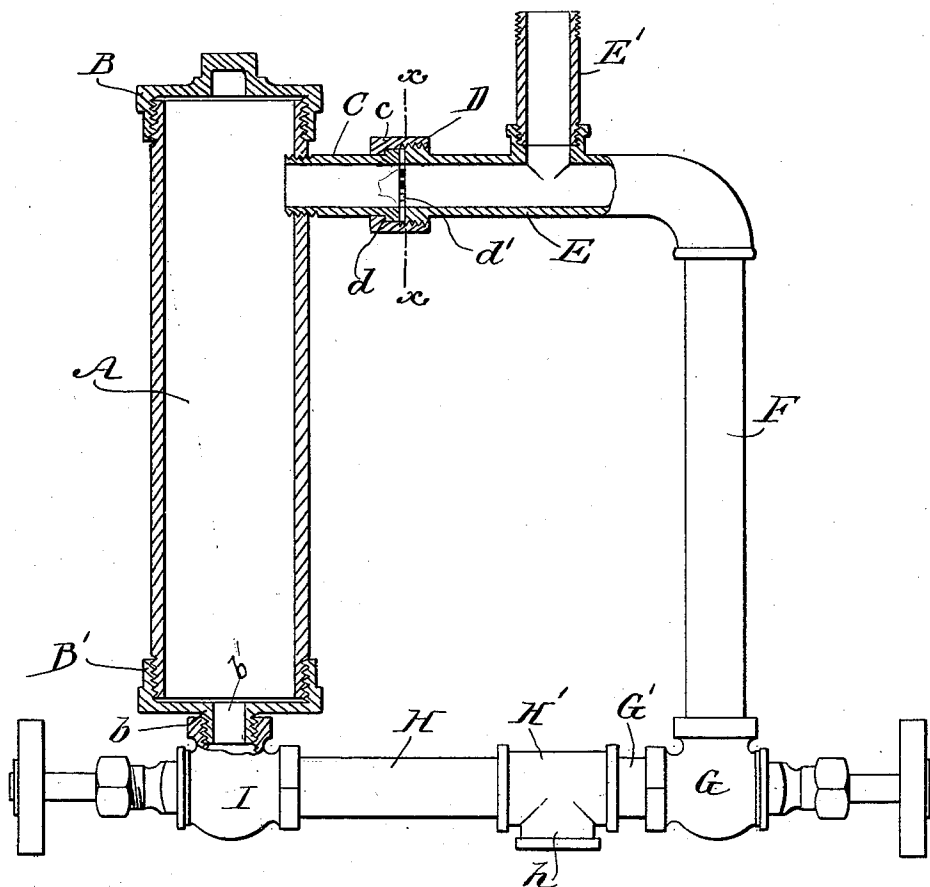
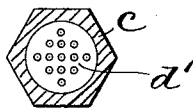


Fig. 2.



WITNESSES:
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BEER-PIPE CLEANER.

SPECIFICATION forming part of Letters Patent No. 540,810, dated June 11, 1895.

Application filed November 3, 1894. Serial No. 527,831. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. DIMON, JR., a citizen of the United States, and a resident of New York, county of New York, and State of New York, have invented certain new and useful Improvements in Beer-Pipe Cleaners, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts in both figures.

My invention relates to improvements in portable pipe cleaning appliances, and is especially adapted for cleansing the conducting pipes and coils common to all beer apparatus.

In apparatus of this nature the interior walls of the pipes and coils through which the beer or other liquid must flow, frequently become foul and coated with an offensive deposit; and provision is generally made for connecting them with the main water-pipe, so that the water may be caused to flow through them at times, thereby washing out any deposit which may have settled therein; but it has been demonstrated by practice that pure cold water cannot be relied upon to thoroughly cleanse the pipes, and it has been found necessary to alkaliify the water before it can be positively relied upon to do its work properly.

The object of my invention is to furnish a cheap and readily attachable and detachable device, adapted to be interposed between the main water-pipe and the pipes or coils to be cleaned, and to be charged with a suitable soluble alkali, through which the water may be caused to flow, thereby becoming alkalified before it reaches the pipes or coils of the apparatus about to be cleansed. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an elevation partly broken away, and Fig. 2 is a detailed cross-section on a line *xx* of Fig. 1.

In constructing my improved device a cylindrical receptacle A, is employed, having detachable screw caps B, and B' adjusted to its upper and lower ends respectively. Near the top of the said cylinder A, is tapped a short section of tubing C, having at its outer

end an annular flange *c*, adapted to engage with the shoulder *d*, of a collar D. Within the said collar D, is placed a perforated disk or strainer *d'*, which is held tightly in place by the threaded flange *e*, of a section of tubing E, which is tapped into the collar D. Leading from the section E, is an outlet pipe E', adapted to engage with the pipes of a beer apparatus, when the device is in use. Connected to the pipe or section E, at its outer end, is another section of tubing F, which communicates with a valve G. The said valve G, communicates with a short section of tubing G', which in turn communicates with a longer section H, and is connected to same by means of a T joint H', which is adapted to engage with a main water-pipe. To the end of the section H, opposite to the joint H' is secured a valve I, which is in turn secured to a threaded stud *b*, of the cap B'. The said threaded stud *b*, has an opening *b'*, communicating with the cylindrical receptacle A, thereby admitting of free inlet of water to the said receptacle A, when the valve I, is opened.

In practice the head B, of the cylinder A, is removed and the said cylinder A, is filled with soda or other desirable alkali, after which the cap B, is again secured to its place. The device is then secured to a main water-pipe at the inlet *h*, of the T joint H', and the outlet E' is secured to a beer or other pipe, which it is desired to cleanse. The valve G, is then shut off, and the valve I, opened wide, which admits of free inflow of the water into the cylinder A, and through the soluble alkali contained therein, thence through the strainer *d'*, and to the outlet E', leading into the beer or other pipes about to be cleansed. The water is now allowed to flow freely through the soda or other alkali until it has dissolved and carried off enough of the same to properly cleanse the pipes, when the valve I is shut off and the valve G opened, thus stopping the inflow of water to the cylinder A, and allowing of free inflow to the tube F, and thence through the outlet E', to the pipes being cleaned. This free inflow of pure water washes out any particles of soda which may have lodged in the pipes, and renders them perfectly clean. The same operation can be repeated until the soda

or other alkali is all dissolved, when the cylinder A, can be readily and quickly recharged.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a pipe cleaning device, the combination, with pipe sections connected by a joint adapted to be secured to the water supply main or pipe, and valves secured upon the free ends of the sections, of a cylinder or pipe section adapted to receive alkaline material, and having detachable caps surrounding each end thereof, to close the same at the top, and connect the same to one of the valves at bottom, a pipe section projecting from said cylinder at the top and having a branch secured thereto leading to the coils to be cleaned, whereby on opening the cylinder valve the flow may be directed through the alkali to said coils, a removable strainer beyond the outlet of the cylinder, and a pipe leading from the remaining valve and opening into the end of the pipe section leading from the cylinder, whereby, when the flow through said cylinder is cut off by its valve, the water may be directed through the pipe from the other valve, substantially as shown and described.

2. In a pipe cleaning apparatus, the combination, with two pipe sections secured together by a T joint in which they are screwed, and which is adapted to be secured to the water supply main or pipe, and valves secured upon the free ends of said sections, of a cylinder constructed of a pipe section having detachable caps surrounding the same at top and bottom, the upper cap being solid to close said cylinder, and the lower cap being apertured and screwed into one of the valves, said cylinder being adapted to receive alkaline material therein, a double pipe section projecting horizontally from the cylinder near

the top thereof, having its members intervened by a removable strainer disk, and secured together by a flanged tubing or joint screwed around the same, the opposite end of said pipe section being downwardly turned, a branch projecting therefrom between said end and the strainer, and leading to the pipes to be cleaned, whereby, when the cylinder valve is opened, the flow of water is directed through the alkali of said cylinder to the pipes, and a pipe section screwed into the remaining valve, and into the downturned end of the pipe leading from the cylinder, whereby, when the flow of said cylinder is cut off, the water may be directed through said pipe section to rinse the pipes, substantially as shown and described.

3. In a pipe cleaning apparatus, the combination, with a divided pipe section adapted to be connected to the water supply pipe or main, and having valves in their opposite ends, a cylinder secured to one of said valves and adapted to receive alkaline material, and a pipe projecting from the opposite valve, of two pipe sections projecting between said cylinder, a strainer disk *d'* inserted between said pipes and removably held therein to prevent the escape of the alkaline materials, and an internally threaded annular collar or tubing D, surrounding said pipe sections to secure the same together, and retain the strainer disk in place, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 2d day of November, 1894.

CHARLES L. DIMON, JR.

Witnesses:

PERCY T. GRIFFITH,
THOS. H. DYER.