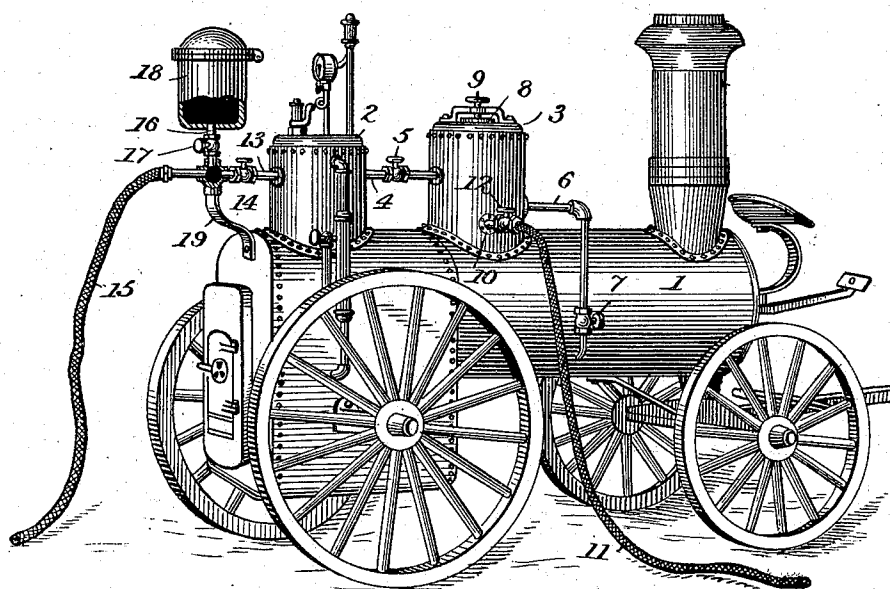


(No Model.)

T. B. LEONARD & L. BRICK.
CLEANING APPARATUS.

No. 559,393.

Patented May 5, 1896.



Witnesses

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UNITED STATES PATENT OFFICE.

THOMAS B. LEONARD AND LEWIS BRICK, OF PITTSBURGH, PENNSYLVANIA.

CLEANING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 559,393, dated May 5, 1896.

Application filed November 2, 1894. Serial No. 527,743. (No model.)

To all whom it may concern:

Be it known that we, THOMAS B. LEONARD and LEWIS BRICK, citizens of the United States, residing at Pittston, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Cleaning Apparatus, of which the following is a specification.

Our invention relates to apparatus for cleaning beer-pipes in bar-rooms, sewer connections, and the like. It is also applicable for cleaning the floors of bar-rooms, stores, hotels, and other public buildings.

The invention consists in combining with a portable steam-boiler a tank for holding a cleaning solution and a box for sand and providing the boiler and these receptacles with suitable pipe connections and with hose, so that the steam and hot water and the other materials used may be delivered either separately or combined into the beer-pipes or other parts to be cleaned.

Our invention will be more readily understood by reference to the accompanying drawing, in which the entire apparatus is illustrated in one figure.

In the drawing 1 indicates a portable boiler supported upon wheels and provided with the usual furnace and smoke-stack. The boiler is also provided with a steam-dome 2. A solution-tank 3 is attached to some suitable portion of the boiler or vehicle. A pipe 4, provided with a valve 5, is arranged to convey steam from the steam-dome to the upper part of the solution-tank, and a pipe 6, provided with a valve 7, is arranged to convey hot water from the bottom of the boiler to the lower part of the tank to produce the solution. In the top of the tank there is an opening for the introduction of the materials which are used in the solution, this opening being normally closed by a cover 8, which is held in place by a set-screw 9. From the bottom of the tank there extends a discharge-pipe 10, to which is attached a hose 11, communication through the pipe being controlled by a valve 12. A second steam-pipe 13 extends from the steam-dome and is provided with a valve 14 and a hose 15. In the upper part of this pipe there is an opening which communicates by

means of a pipe 16 and valve 17 with a sand-box 18, all of these parts being supported by a bracket 19.

The operation of our invention is as follows: The cleansing materials for the solution, preferably soda and salt, are introduced into the tank by removing the cover 8. After the cover is replaced the valve 7 is opened, and the tank is filled with hot water from the bottom of the boiler. The valve 7 being now closed, the valve 5 is opened and the solution subjected to the steam-pressure. Now upon opening the valve 12 the solution will be forced under pressure through the hose 11 and through the beer-pipes or sewer-pipes to which the hose may be connected. The hot solution will have the effect of softening the grease and dirt in the pipes. After the solution is turned off, steam and sand, mixed, are blown through the hose 15 and the pipes by opening the valves 14 and 17. The sand will cut the dirt from the pipes and cleanse and polish the interior. The sand may then be cleaned from the pipes, either by blowing more steam through or by opening the valves 7 and 12 and forcing hot water through them. If it is desired to cool the pipes quickly, the operation may be concluded by forcing cold water through them.

Our apparatus is also adapted for cleaning out bar-rooms, hotel-offices, stores, &c., in which case the solution, hot water, and sand may be distributed over the floors by means of the hose-pipes. We are thus enabled to do quickly and cheaply what is otherwise laborious and somewhat costly work, and by our apparatus the cleaning may be done in a much more satisfactory manner.

Having described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In cleaning apparatus, the combination with a steam-boiler, of a solution-tank having steam and hot-water connections with the boiler, and having an outlet adapted for attachment of a hose-pipe, substantially as described.

2. An apparatus for cleaning beer or sewer pipes and the like, a portable boiler having a steam-dome, a solution-tank attached to the

boiler and having steam and water connections therewith, an outlet at the bottom of the solution-tank provided with a valve and a hose connection, a sand-box, a steam-pipe
5 from the dome, and a sand-pipe and valve therefor adapted to conduct sand from the box into said steam-pipe, said steam and water connections being provided with suitable valves, whereby solution, steam and
10 sand, steam, and hot water may be separately

and successively forced through the pipes, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

THOMAS B. LEONARD.
LEWIS BRICK.

Witnesses:

W. L. RAEDER,
B. B. WINCHESTER.