(No Model.)

A. JACKSON.

CISTERN CLEANER.

No. 598,250. Patented Feb. 1, 1898.

Fig. 1.

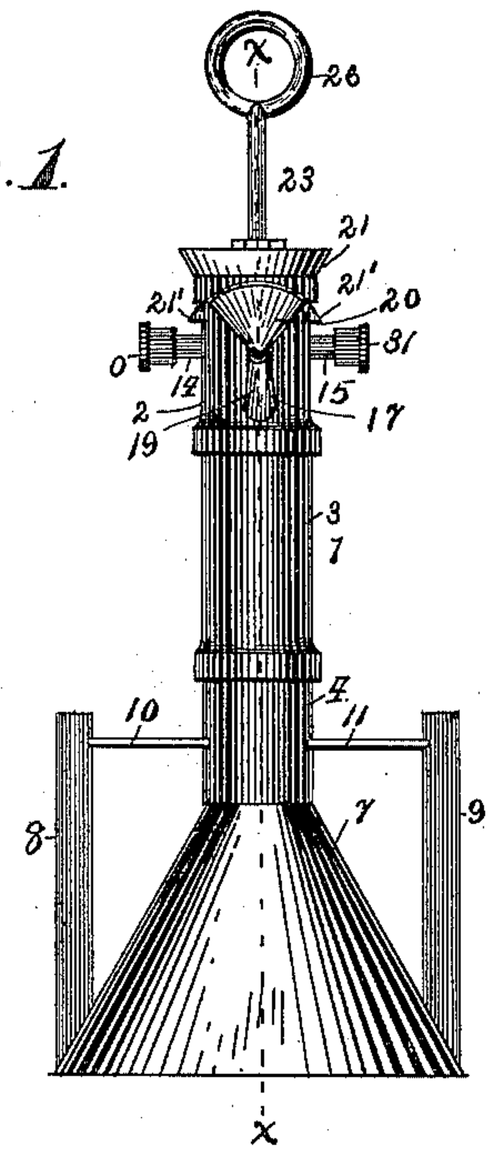


Fig. 2.

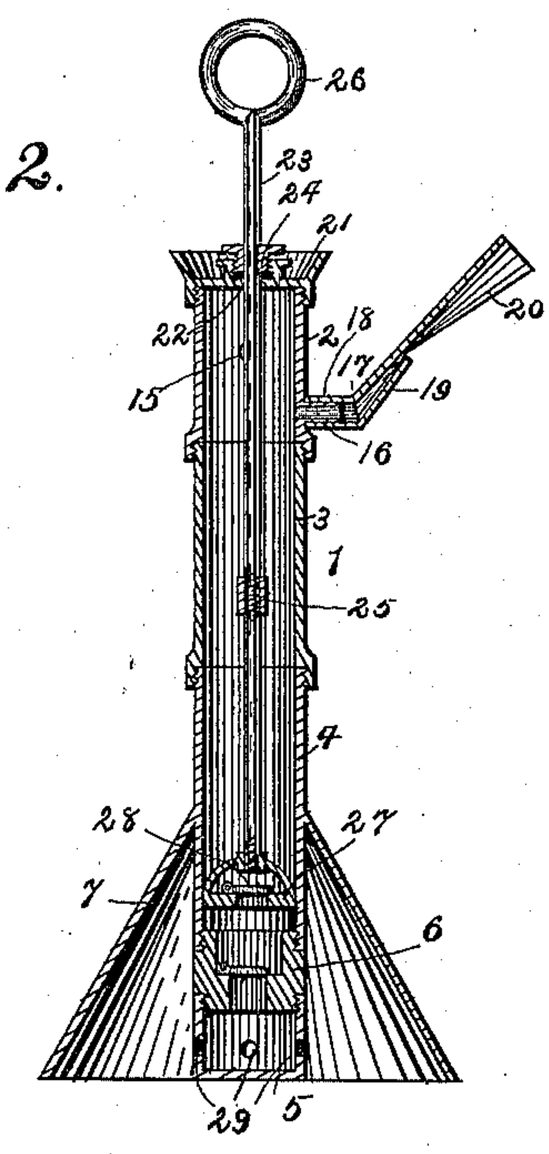


Fig. 3.

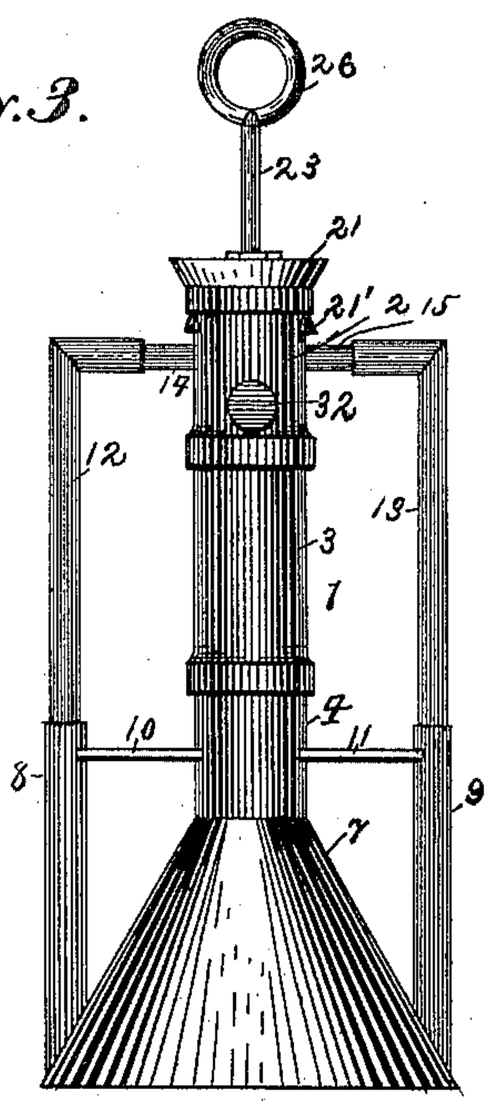
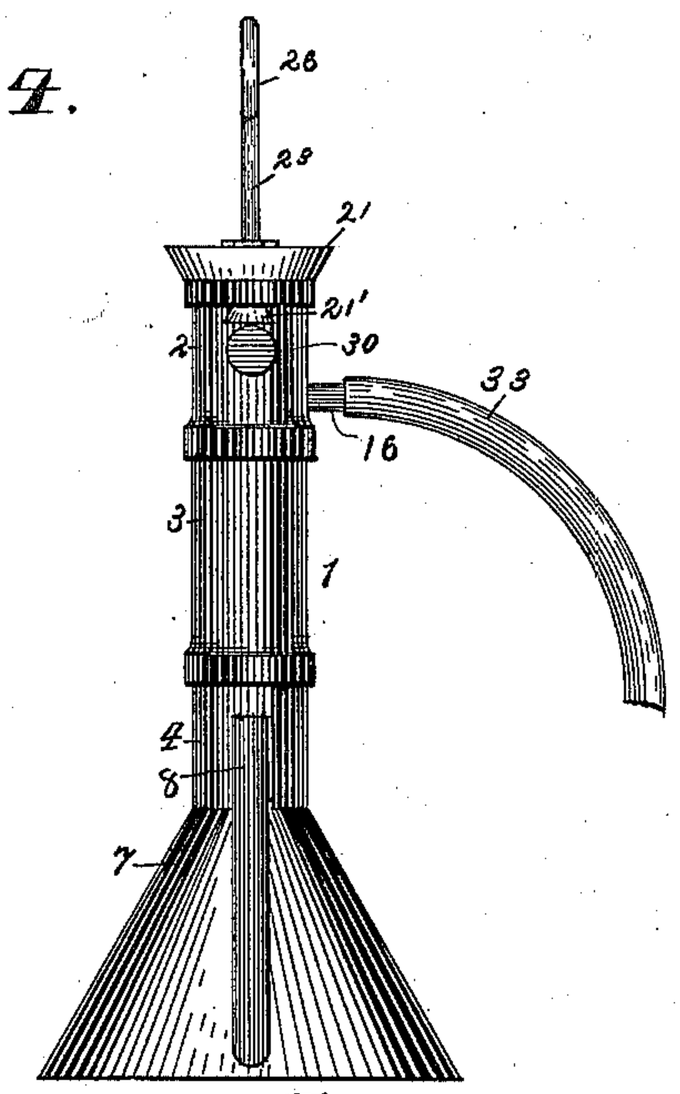


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

ANDREW JACKSON, OF INDIANAPOLIS, INDIANA.

CISTERN-CLEANER.

SPECIFICATION forming part of Letters Patent No. 598,250, dated February 1, 1898.

Application filed July 19, 1897. Serial No. 645,063. (No model.)

To all whom it may concern:

Be it known that I, ANDREW JACKSON, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Cistern-Cleaners; and I do 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 the figures of reference marked thereon, which form a part of this specification.

My invention relates to cistern-cleaners of that class in which the cleaner is placed in the cistern and is adapted to be operated from the outside of the cistern, thereby avoiding the necessity of a person entering the cistern.

The objects of my invention are, first, to provide a cistern-cleaner of that class that will be cheap, durable, and inexpensive; second, to provide a means for washing down the sides of the cistern beneath the arch; third, to provide a means of agitating the dirt on the bottom of the cistern; fourth, to provide a means of removing the dirty water in the cistern; fifth, to provide a means of operating the cleaner from without the cistern, and, sixth, to provide a cistern-cleaner that may be adjusted to cisterns of different depths.

My invention consists in the particular construction and combination of parts shown in the accompanying drawings and described in the following specification.

In the drawings, Figure 1 is an elevation of the cleaner in readiness to be used for cleaning the top and sides of the cistern. Fig. 2 is a vertical transverse section thereof, taken on a line X X of Fig. 1. Fig. 3 is an elevation of the cleaner in readiness to be used for agitating the dirt upon the bottom of the cistern. Fig. 4 is an elevation showing the cleaner in readiness to be used for removing the sediment from the cistern.

Referring to the drawings, 1 indicates the pump, consisting of sections 2, 3, 4, and 5. Section 2 is enlarged at its lower end and threaded to receive the threaded end of section 3, and the lower end of section 3 is also enlarged and threaded to receive the threaded end of section 4. Sections 4 and 5 are connected by means of a valve 6. Encircling said section 4 is an enlarged funnel-shaped base 7, having pipes 8 and 9 extending upward therefrom and made rigid by means of braces 10 and 11, being attached to the upper ends of said pipes 8 and 9 and to the said section 4. The said pipes 8 and 9 are to receive the elongated ends of the L-shaped pipes 12 and 13. On opposite sides of section 2 and made integral therewith are short horizontal pipes 14 and 15, over which are fitted the horizontal sections of said pipes 12 and 13. On one side of section 2, directly opposite and some distance below the said short pipes 14 and 15, is another short horizontal pipe or spout 16, over which is to be fitted one end of the spraying-nozzle 17, said nozzle 17 having a horizontal portion 18 and a reduced upwardly-extending portion 19, to the upper edge of which is attached a spraying-pan 20.

By having the upwardly-extending portion 19 of the nozzle 17 reduced the water is caused to issue therefrom with considerable force, and by having the spraying-pan dished and the outer end much wider than the inner end the water is caused to spread out and strike the walls of the cistern in the form of a sheet, thereby covering a greater portion of the walls than would be the case if the water were thrown directly against the wall from the nozzle in a single stream. Screwed on the top of section 2 is a cap 21, having an opening 22 therein, through which passes a lifting-rod 23, said opening 22 being provided with a packing-head 24. The said section 2 is provided with ears 21′, by means of which the pump is lifted from the cistern. The said rod 23 is made in two or more sections, they being held together by means of a sleeve 25. To the upper end of said rod 23 is attached a lifting-handle 26, and to the lower end thereof is attached a bucket 27, said bucket being provided with a valve 28.

The lower end of section 5 is capped over and is provided with ports 29 around its periphery, through which the water passes into the pump. Should it be desired to cleanse the sides of the cistern, the L-shaped pipes 12 and 13 are removed and the short horizontal pipes 14 and 15 covered with caps 30 and 31.

Should it be desired to agitate the sediment

on the bottom of the cistern, the L-shaped pipes 12 and 13 are replaced and the nozzle 17 removed and the horizontal pipe 16 covered with a cap 32, as shown in Fig. 3. By this means the water is lifted up into the pump and discharged through the pipes 14 and 15 into and through the pipes 12 and 13 and 8 and 9, falling into the flaring base 7 with considerable force, thereby agitating the water on the bottom. Should it now be desired to remove the water and sediment from the cistern, the pipes 12 and 13 are again removed and the caps 30 and 31 replaced on the pipes 14 and 15, and placing a hose 33 over the pipe 16 the water may be pumped out of the cistern, as shown in Fig. 4.

The pump 1 and rod 23 are made in sections, so that they may be made longer by adding more sections thereto, thereby raising the spout above the cistern-top for the purpose of pumping out the dirty water instead of employing the hose above described. The cleaner is also adjusted to cisterns of different depths by this means.

The function of the funnel-shaped base 7 is to confine the force of the water falling through the pipes 8 and 9 to a small surface of the cistern-bottom, thereby causing it to more thoroughly agitate the sediment on said bottom. The cleaner may be easily moved about on the bottom by means of the ears 21′ until the entire bottom has been covered. On account of the arch with which most cisterns are built it is impossible to wash or brush the sides from the top of the cistern.

Having described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a cistern-cleaner of the class described, having a series of pipe-sections removably secured together, and provided with a means for pumping water through said pipe-sections, the combination of a funnel-shaped base 7 secured to one of said sections, having the vertical pipes 8 and 9 entering the walls thereof and adapted to be connected with one of the upper pipe-sections by means of the L-shaped pipes 12 and 13 in the manner and for the purposes set forth.

2. In combination in a cistern-cleaner of the class described, the section 2 having the short horizontal pipes 14 and 15, the spout 16, and the ears 21′, the section 3, the section 4 secured to the base 7, the section 5 having the openings 29, the valve 6 between said sections 4 and 5, the funnel-shaped base, having the perpendicular pipes 8 and 9 held in place by braces 10 and 11, the cap 21 having the opening 22 to receive the packing-head 24, the lifting-rod 23 having the bucket 27 provided with the valve 28, the spray-nozzle 17 having the horizontal portion 18, the reduced upwardly-extending portion 19, and the fan-shaped dished spray-pan 20; and the detachable L-shaped pipes 12 and 13 whereby the horizontal short pipes 14 and 15 on the pipe-section 2 and the vertical pipes 8 and 9 of the funnel-shaped base 7, are connected, all as set forth.

3. The combination in a cistern-cleaner of a funnel-shaped base 7 having upwardly-extending pipes 8 and 9 with the pipe-sections 2, 3, 4, and 5, said section 2 having a spout 16 and horizontal pipes 14 and 15, and the L-shaped pipes 12 and 13, whereby the horizontal pipes 14 and 15 and the vertical pipes 8 and 9 are connected for the purpose of conveying water from said pipe-sections to within said funnel-shaped base, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ANDREW JACKSON.

Witnesses:
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