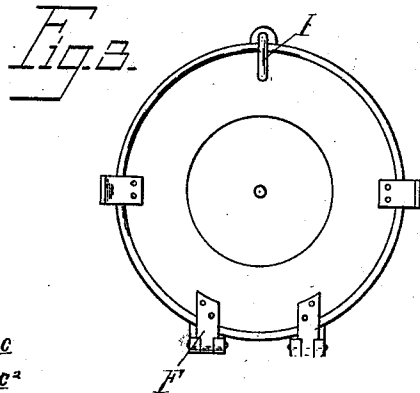
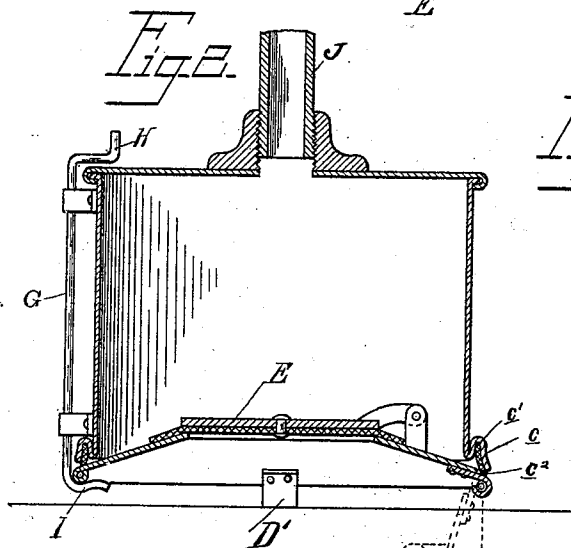
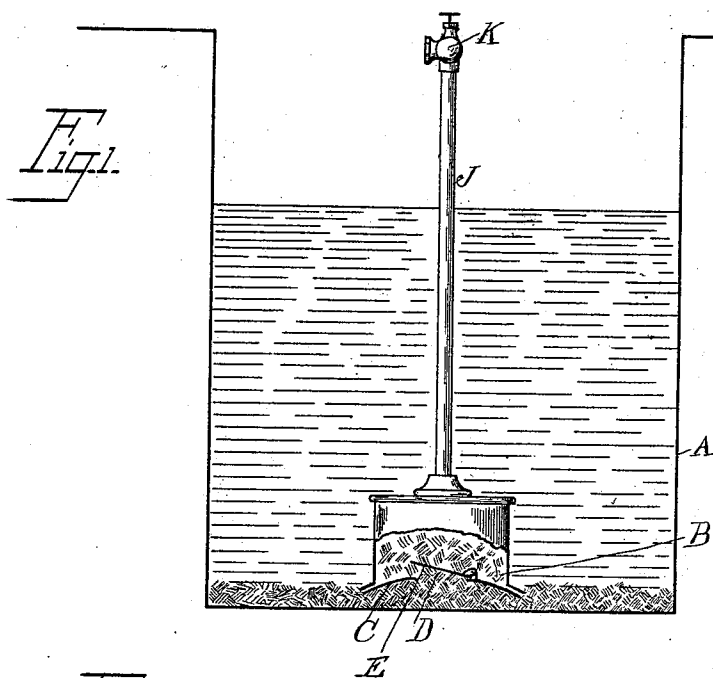


(No Model.)

J. SHEPHERD.
CISTERN CLEANING MACHINE.

No. 519,074.

Patented May 1, 1894.



—Witnesses—
Otto F. Barthel,
Mrs. Agnew.

—Inventor—
John Shepherd,
By *M. S. Magner,*
Att'y.

UNITED STATES PATENT OFFICE.

JOHN SHEPHERD, OF MEMPHIS, MICHIGAN, ASSIGNOR OF TWO-THIRDS TO
GUSTAVUS BARTON, OF SAME PLACE.

CISTERN-CLEANING MACHINE.

SPECIFICATION forming part of Letters Patent No. 519,074, dated May 1, 1894.

Application filed September 2, 1893. Serial No. 484,636. (No model.)

To all whom it may concern:

Be it known that I, JOHN SHEPHERD, a citizen of the United States, residing at Memphis, in the county of Macomb and State of Michigan, have invented certain new and useful Improvements in Cistern-Cleaning Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention consists in the peculiar construction of a valved chamber or vessel designed to be lowered to the bottom of a cistern in the water, and having a tubular standard extending therefrom, likewise controlled by a valve and forming an air vent and a handle whereby the vessel may be lowered to the bottom of the cistern and vented, collecting the sediment from the bottom in the receptacle, from which it may then be removed.

The invention further consists in the peculiar construction, arrangement and combination of the various parts, all as more fully hereinafter described.

In the drawings, Figure 1 is a sectional elevation of my improved device, showing it in use. Fig. 2 is a vertical, central, longitudinal section of the receptacle, and Fig. 3 is a bottom plan view thereof.

A is a cistern to which I have shown my device applied to remove the sediment. It is well known that the sediment collects at the bottom of the cistern and that to maintain the water there in proper condition, the cistern should frequently be cleaned. This ordinarily requires that the water shall be pumped out and the sediment in the bottom removed by a person therein. My device enables me to clean the cistern while filled with water and consists of a receptacle B, preferably cylindrical and having the frusto-conical bottom C, centrally of which is an aperture D controlled by a check valve, E. The bottom C, is hinged to one edge, as shown at F and is locked in position, by means of a lock, consisting of a shaft G having a crank handle H at its upper end and a locking portion I at its lower end adapted to be turned beneath the

edge of the bottom. Centrally from the top of the receptacle extends the vent pipe J which at its upper end is provided with a suitable valve K.

The parts being thus constructed, they are intended to operate as follows: The valve K being closed, and the bottom being locked in its closed position, as shown in Fig. 2, the operator lowers the receptacle by means of the vent pipe J to the bottom of the cistern, the air being trapped therein by the water surrounding the edges of the receptacle, and forcing the receptacle upon the bottom then opens the valve K by hand which allows the air to escape, the water and sediment rushing in to take its place through the aperture D, lifting the valve E. As soon as the receptacle is vented, the operator closes the valve K and lifting the receptacle from the cistern the trapped material being held by the closing of the valve, removes it and dumps it, by releasing the lock I from the edge of the bottom. This operation may be repeated at different parts of the cistern until the sediment is removed. By arranging the vent pipe J centrally of the top it not only forms a handle for operating the receptacle, but also vents the receptacle above the water, so that the water is not disturbed by the movement of the air. By hinging the bottom of the receptacle at one edge the interior may be cleaned quickly and readily. The lower edges of the receptacle have outwardly extending flanges c formed with the pocket c' in which a ring c² of packing material is clamped. Against this ring the bottom rests to prevent the contents from escaping from around the edge of the bottom. To elevate the receptacle slightly above the bottom of the cistern, I secure the legs D' to the lower edges of the receptacle. By this means the material is permitted to flow into the receptacle in sufficient quantity to fill the same.

What I claim as my invention is—

In a cistern cleaning device, the combination with a receptacle having a frusto-conical bottom hinged at one side only, and pro-

vided with a central aperture, a flap valve on
the bottom over the aperture, brackets on
the sides of the receptacles a horizontally ro-
tating crank journaled in the brackets and
5 projecting below the bottom and its opposite
end extending above and over the top of the
receptacle, an open vent pipe leading out
from the receptacle, and a hand actuating

valve in the upper end of the vent pipe, sub-
stantially as described. 10

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

JOHN SHEPHERD.

Witnesses:

OTTO F. BARTHEL,
JAMES WHITTEMORE.