

(No Model.)

M. J. HEWLETT & DE J. C. CECIL.
WATER PURIFIER.

No. 488,673.

Patented Dec. 27, 1892.

Fig 1

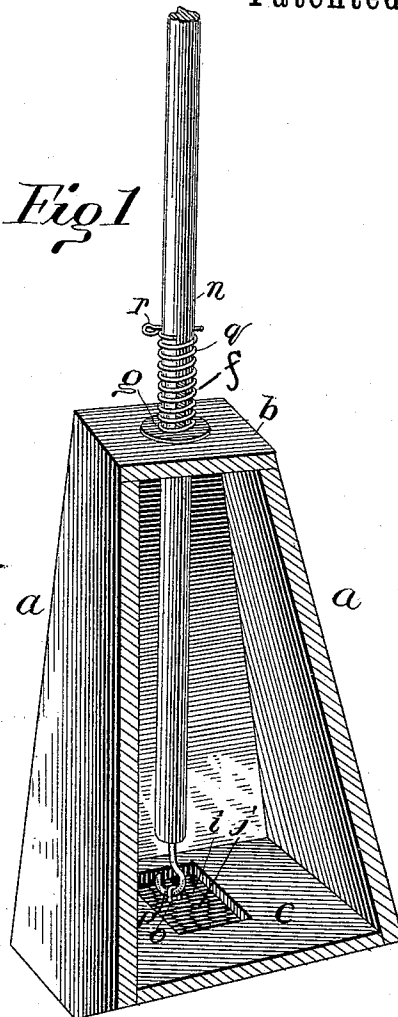


Fig 4

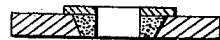


Fig 2

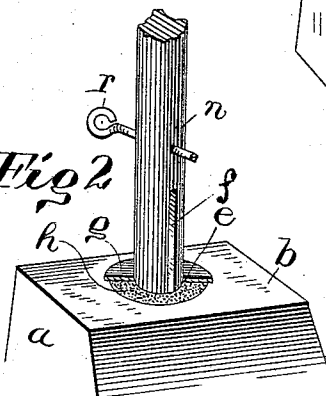
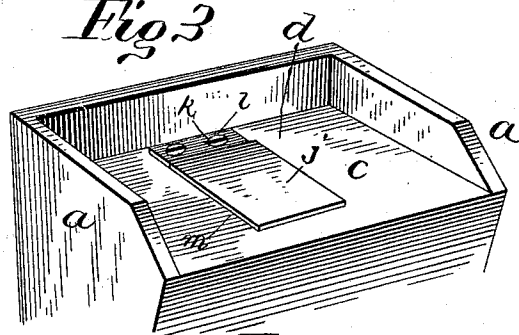


Fig 3



Witnesses:

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per
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their Att'y

UNITED STATES PATENT OFFICE.

MADDRA J. HEWLETT AND DE JOHN C. CECIL, OF PADUCAH; SAID HEWLETT
ASSIGNOR TO HENRY F. CARRICO, OF GRAVES COUNTY, KENTUCKY.

WATER-PURIFIER.

SPECIFICATION forming part of Letters Patent No. 488,673, dated December 27, 1892.

Application filed August 17, 1891. Serial No. 402,872. (No model.)

To all whom it may concern:

Be it known that we, MADDRA J. HEWLETT and DE JOHN C. CECIL, citizens of the United States, residing at Paducah, in the county of McCracken and State of Kentucky, have invented certain new and useful Improvements in Water-Purifiers; and we do hereby 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.

Our invention relates to a water purifier and more especially to that class of implements for removing sediment from the bottom of cisterns or wells.

The object of our invention is to produce a device which will be more simple, cheap and effective than those heretofore in use.

To this end our invention consists in the peculiar manner of constructing and arranging the parts, as will be more fully set forth and described hereinafter.

Our invention is illustrated in the accompanying drawings, in which:

Figure 1 represents a view of our complete invention, one side of the receptacle being removed to disclose the interior and the manner of operating the valve in the bottom thereof. Fig. 2 represents a top view, showing the manner in which the air is allowed to escape from the interior of the receptacle. Fig. 3, a bottom view. Fig. 4 is a sectional view of the top of the receptacle, showing the manner of packing the rod, thereby making the interior air-tight when the rod is in normal position.

In the drawings the reference letter *a* represents the sides of a hollow receptacle, having a top and bottom *c*, the latter being located above the lower extremities of the sides *a*. One of the sides *a* is made shorter than the other three, the object of which will be explained later.

Secured on the exterior of the bottom *c*, by staples *l* passing through perforations *k*, is an upwardly seating flap valve *j* opening toward the short side *a*. The upper face of this flap valve *j* is provided with a loop *o* which receives a hook *p* on the end of an actuating rod *n*. The upper edges of the flap valve are

provided with packing strips *m*, thus preventing the escape of water or air through the opening *i* when the valve is in its normal position.

The top *b* is provided at its center with an opening *e*, through which slides the vertically movable rod *n*. The opening is provided with packing held in place by a washer *g*, which surrounds the rod and is made such a size that it covers the entire opening. Seated on this washer is the lower end of a coil spring *q* which surrounds the rod *n* and is held compressed by means of a pin *r* passing through the rod, and against which the upper end of the spring bears. In the rod is a longitudinal air vent *f*, held normally a short distance above the opening *e* by means of the spring *q* bearing upon the pin *r*.

It will be understood that the rod *n* is continued to a handle, to enable the device to be used.

In operating our device the operator grasps the handle attached to the rod and lowers the receptacle into the cistern to be cleaned. When the bottom of the receptacle reaches the bottom of the cistern, he continues the pressure on the handle rod, against the tension of the spring *q*, which opens the valve *j* in the bottom *c*. As the space at the bottom of the receptacle is only open on one side, the section will be much greater than if it were open on all sides. By arranging the lower end of the vent *f* a short distance above the lower edge of the opening *e*, the rod is allowed to descend and partially open the valve *j* before the air in the receptacle escapes. By thus arranging the vent the sudden inflow of the water caused by the sudden escape of the air tends to draw the sediment up into the receptacle instead of the receptacle being allowed to gradually fill with water as in devices heretofore used. In our device the lower valve may be slightly open and yet the vent will hold air in the receptacle. The rod having been pushed down as far as possible and the air having escaped through the vent *f*, water and sediment will fill the receptacle, after which they may be drawn up and discharged.

Having thus described our invention, what

we claim as new and desire to secure by Letters Patent is:

5 In a cistern cleaner, a hollow receptacle having a valved bottom, a rod passing through the top of said receptacle and connected to the valve and a vent in said rod so arranged that the lower valve may be opened before the vent operates, as described.

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

MADDRA J. HEWLETT.
DE JOHN C. CECIL.

Witnesses:

GUY. NANCE,
M. NANCE.