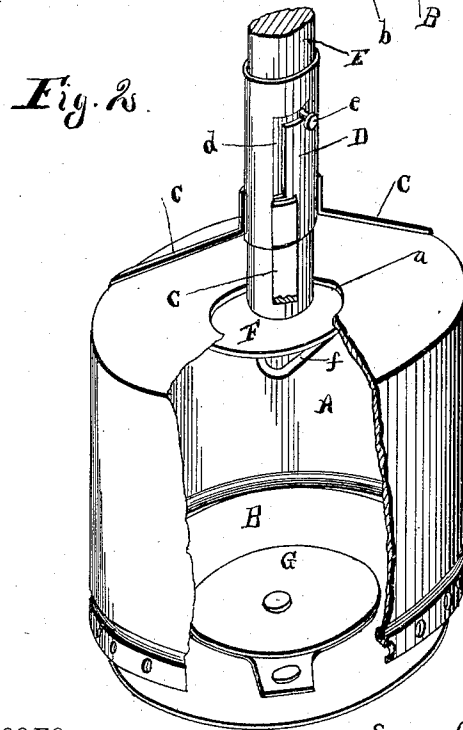
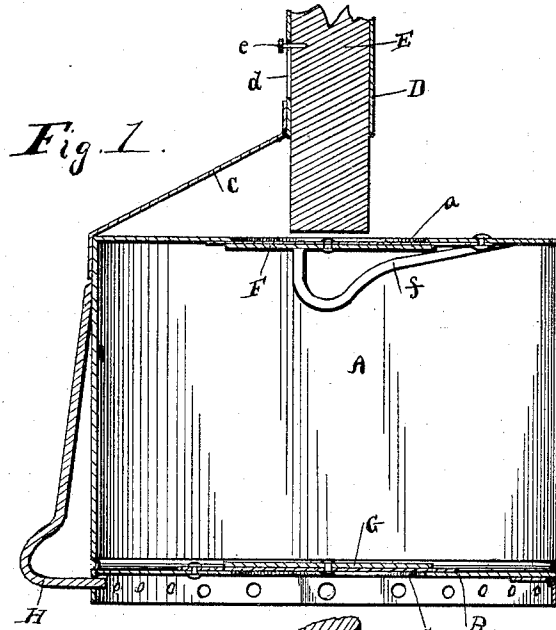


(No Model.)

G. W. McCONNELL.
CISTERN CLEANER.

No. 477,567.

Patented June 21, 1892.



WITNESSES
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UNITED STATES PATENT OFFICE.

GEORGE W. McCONNELL, OF HALE, MISSOURI.

CISTERN-CLEANER.

SPECIFICATION forming part of Letters Patent No. 477,567, dated June 21, 1892.

Application filed August 11, 1891. Serial No. 402,345. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. McCONNELL, a citizen of the United States, residing at Hale, in the county of Carroll and State of Missouri, have invented certain new and useful Improvements in Cleaning Devices for Wells and Cisterns; and I 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.

This invention relates to improvements in devices for cleaning wells or cisterns, the object being to produce a cheap, simple, and durable device that may be effectively operated by any one, skilled or unskilled.

My invention consists, primarily, in a vessel having a valve in its upper and lower end and a handle to operate the upper valve, substantially as hereinafter described and claimed.

Figure 1 represents a vertical diametrical section of my well-cleaning device. Fig. 2 is a perspective view showing the side and top of the body partly broken away, and also showing the location of the valves.

Referring to the drawings, A represents the body proper, which will preferably be made of sheet metal and which may be of any desired shape. The top of this vessel has a central orifice *a*. The bottom B of the vessel, which also has an orifice *b*, will preferably be hinged to the main body at a point a short distance above the lower edge of the body proper, as shown in the drawings, the purpose of which will be hereinafter explained.

Supported upon arms C, secured to the body of the vessel, as shown, is a tubular guide D, through which the handle E of the device extends. Formed in the tubular guide D, which is located above and in a line central with relation to the vessel, is an L-slot *d*. A pin *e* on the handle E is extended through said slot, which pin and slot control the movement of said handle, as hereinafter set forth.

Hinged to the inner side of the top of the vessel beneath and covering the orifice *a* is an inwardly-swinging gate-valve F, which gate-valve is held normally closed by a spring *f*, secured to the under side of the top of the

vessel and bearing against said valve, as clearly shown in Fig. 1. I also provide the inner side of the hinged bottom B with an inwardly-swinging valve G, adapted to cover the orifice *b* therein. The bottom B is held normally closed and locked by a spring-catch H, as shown in Fig. 1.

Having described the construction of the device, its operation is as follows: The normal positions of the valves and handle before beginning operation are as represented in Fig. 1, the valves being closed and the handle elevated, where it is held in elevation by the pin *e*, which rests in the horizontal portion of the L-slot. The vessel may be let down into the well or cistern with the bottom open or otherwise, circumstances and conditions of the well determining this. In lowering the vessel into the well it is filled with air, and after the same is lowered sufficiently to strike the dirt or refuse pressure is brought to bear upon the handle E, when the sharp edge of the body will cut its way into the dirt and the valve G will open. Then the handle will be turned to disengage the pin from the horizontal portion of the L-slot, and then it will be depressed to contact with and open the top valve, allowing the air to rush out through the top orifice and be replaced by the water, dirt, and other matter to be removed from the well, after which the device is lifted out of the cistern or well and the hinged bottom opened and the vessel emptied.

By reason of the peculiar connection of the handle to the body or casing of my improved device, in conjunction with the spring-pressed inwardly-opening valve F, it will be readily perceived that the device may be sunk well into the mud or other refuse, when the lug of the handle may be disengaged from the horizontal branch of the L-slot and said handle may be reciprocated vertically to open and close the said valve F, when the refuse will be drawn into the casing with but a minimum amount of water, whereby it will be seen that the removal of the refuse will be facilitated.

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

In a cleaning device for wells and cisterns, the combination, with the body or casing having a port or opening in its top, the bottom flexibly connected to the body or casing and
5 having a port or opening, a suitable means for normally holding the bottom closed, the inwardly-opening valve covering the port in the bottom, the inwardly-opening and spring-pressed valve covering the port in the casing-
10 top, the tubular guide having an L-slot, and the arms supporting said guide above the

body or casing, of the handle seated in the tubular guide and having a lateral pin or stud to engage the slot thereof, substantially as and for the purpose set forth. 15

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

GEORGE W. McCONNELL.

Witnesses:

SOL. MEISTER,
LOUIS MYERS.