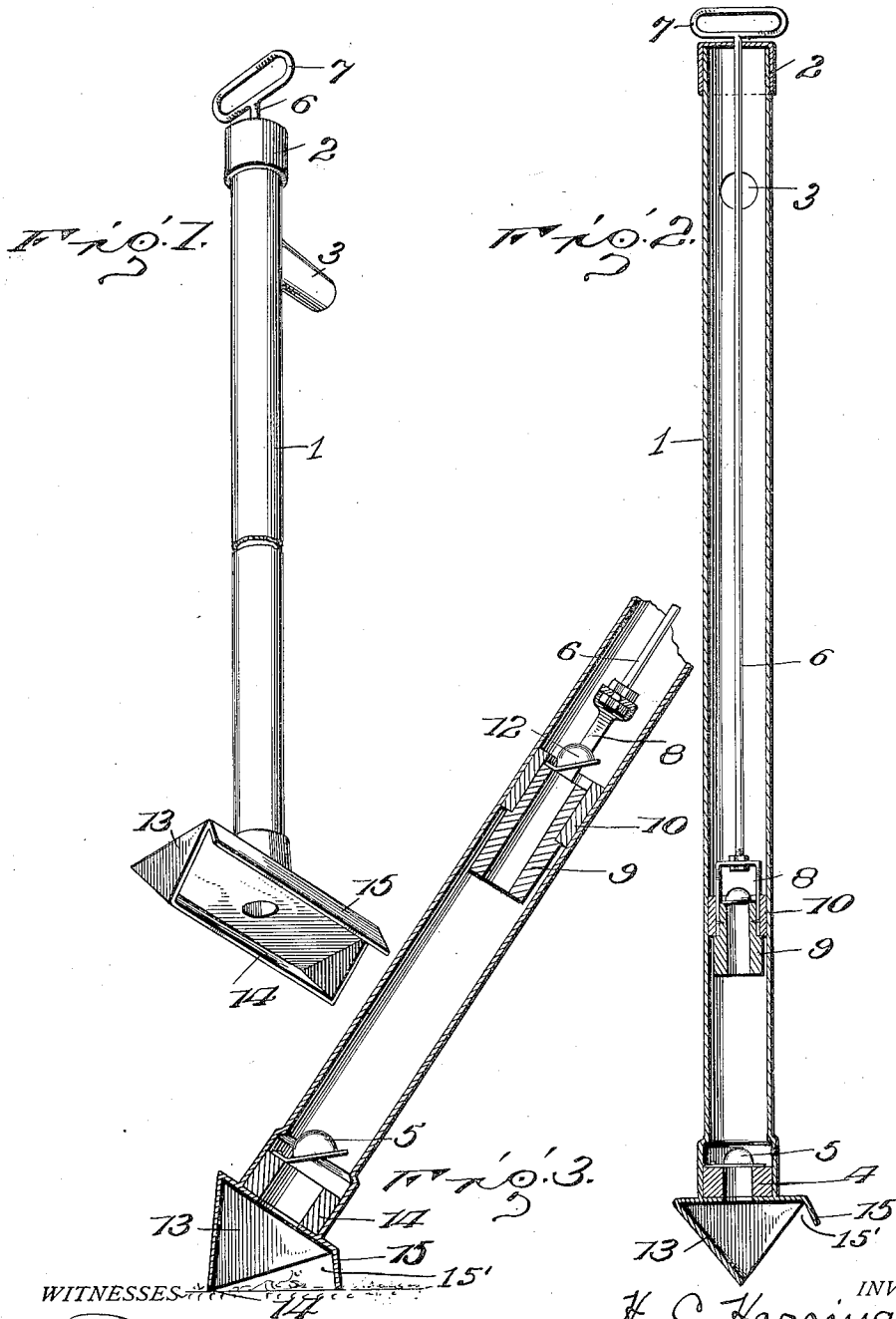


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 DEVICE FOR CLEANING WATERING TANKS AND THE LIKE.
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1,101,541.

Patented June 30, 1914.



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DEVICE FOR CLEANING WATERING-TANKS AND THE LIKE.

1,101,541.

Specification of Letters Patent.

Patented June 30, 1914.

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To all whom it may concern:

Be it known that I, HEZEKIAH C. HARRINGTON, a citizen of the United States, residing at Maroa, in the county of Macon and State of Illinois, have invented certain new and useful Improvements in Devices for Cleaning Watering-Tanks and the like, of which the following is a specification.

This invention relates to certain improvements in and relating to devices for scraping and cleaning water tanks and the like; and the objects and nature of the invention will be readily understood by those skilled in the art in the light of the following explanation of the accompanying drawings illustrating what I now believe to be the preferred embodiment from among other formations and arrangements within the spirit and scope of my invention.

An object of the invention is to provide simple and efficient means whereby vegetable growths, such as moss or the like, and sediment can be easily scraped from the bottoms and sides of water tanks and the like, and readily removed without necessitating emptying of such tanks.

The invention consists in certain novel features in construction and in combinations and arrangements as more fully and particularly set forth and pointed out hereinafter.

Referring to the accompanying drawings:—Figure 1, is a perspective view of a device constructed in accordance with my invention. Fig. 2, is a longitudinal section thereof. Fig. 3, is a longitudinal section of a portion of such device in the position it assumes when employed to scrape a tank bottom.

In the drawings, 1, is an elongated stiff metal pipe or pump barrel of greater length than the depth of the water in the tank to be scraped and cleaned so that the operator at the exterior of the tank can utilize said barrel as a handle in operating the scraper on the interior of the tank. The upper end of the barrel is closed by a removable cap 2, and the upper portion of the barrel is formed with a suitable lateral discharge spout 3, or other discharge outlet. The lower end of the barrel is shown slightly enlarged to receive a bushing 4, the upper annular edge of which forms a valve seat. On the upper edge of this bushing I secure a suitable upwardly opening check valve. For instance, I show a suitably weighted leather (or other suitable material) flap

valve 5. If so desired, the bushing can be composed of wood secured in the barrel end by transverse or radial nails or other means.

A longitudinally reciprocatory piston rod 6, is arranged in the barrel and extends loosely through cap 2, and is provided with a suitable handle 7, at its upper end above the barrel. An inverted U-shaped yoke 8, is secured to and depends from the lower end of the piston rod within the barrel and carries and is secured to a suitable piston. In the particular example illustrated, this piston consists of a bushing 9, if so desired composed of a wooden cylinder provided with an exterior packing 10. This packing can be formed by leather surrounding and secured to the bushing. The depending legs of the yoke 8, depend at the exterior of the bushing and between the same and the packing 10, and are suitably secured to the bushing. The piston is provided with a suitable upwardly opening check valve for closing the passage through the piston when the same is drawn upwardly by the operation of the piston rod. In the particular example illustrated, this check valve consists of a suitably weighted flap valve 12, secured on the top edge of the bushing which forms a valve seat therefor. This flap valve can be composed of leather or other suitable material.

The lower end of the pump barrel is provided with a transversely arranged and elongated rigid box or housing 13, fixed to and arranged below the extremity of the barrel and approximately oblong in side elevation and inverted V-shape in end elevation. This box can be composed of stiff sheet metal, and is open at one side and is closed at the opposite side, at the ends and at the top (except for the suction opening therefrom to the pump barrel). The bottom horizontal edge of the closed side of the box forms a scraping edge 14, below said open side of the box, while an elongated depending scraper 15, is arranged along the top of the open side of the box and is fixed to and depends at an angle from the box top. This scraper member 15 depends at such an angle that when the device is in use, it is in a substantially vertical position as shown in Fig. 3 of the drawing. This member 15 extends entirely along the top edge of the box or housing 13 so that when the device is in position for use substantially triangular

openings 15' are provided to permit the material to be removed to enter the hollow box or housing 13.

The device of my invention, is designed to enable the farmer to readily remove such foreign material from water tanks (whether built or arranged above ground or whether in the form of cisterns and arranged under ground). The barrel can be placed in the tank and held at an angle about as indicated by Fig. 3, with the elongated parallel horizontal scraping edges 14, 15, resting on the bottom of the tank and with the open side of the box between said edges. This box can be worked back and forth on the bottom of the tank to loosen the sediment and moss, or the like, and cause the same to collect or accumulate in the box. The accumulation of foreign matter can be readily and quickly withdrawn from the box through the pump barrel and discharged through outlet 2, by reciprocating the piston rod, as will be readily understood by those skilled in the art. The piston can be reciprocated, if so desired, as the box is worked back and forth in the tank to draw the sediment into the box and thereby facilitate the collection and removal thereof.

By the use of this device, tanks can be easily and quickly cleaned, with an incidental removal of but a minimum quantity of water. The device can also be readily adapted for cleaning cisterns.

It is evident that various changes, modifications and variations might be resorted to without departing from my invention and hence I do not wish to limit myself to the exact disclosure hereof.

What I claim is:—

1. A portable tank cleaning device com-

prising an elongated barrel having an outlet in its upper portion and a valved piston therein and a piston rod extending there-through, said barrel having a box or housing at its lower end, said housing being of an approximately vertical V shape in end elevation, having its ends closed and one side open, a scraper member depending from the top of the open side of the box at such an angle that when the device is in position for use, it is nearly vertical to the surface being scraped, said barrel having a valved inlet to said box or housing.

2. A portable tank cleaning device comprising an elongated barrel having an outlet in its upper portion and a valved piston therein and a piston rod extending there-through, said barrel having a box or housing at its lower end, said housing being of an approximately vertical V shape in end elevation, having its ends closed and one side open, a scraper member depending from the top of the open side of the box at such an angle that when the device is in position for use, it is nearly vertical to the surface being scraped, said barrel having a valved inlet to said box or housing, the lower edge of the closed side of said box or housing serving as an additional scraping member and the first mentioned scraping member spacing the box or housing from the surface being scraped so as to provide triangular openings into said box or housing.

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

HEZEKIAH C. HARRINGTON.

Witnesses:

F. E. BOWMAN,
J. M. OAKES.