W. WESTLAKE.

WINDOW-WASHERS AND GARDEN-SPRINKLERS.

No. 187,496. Patented Feb. 20, 1877.

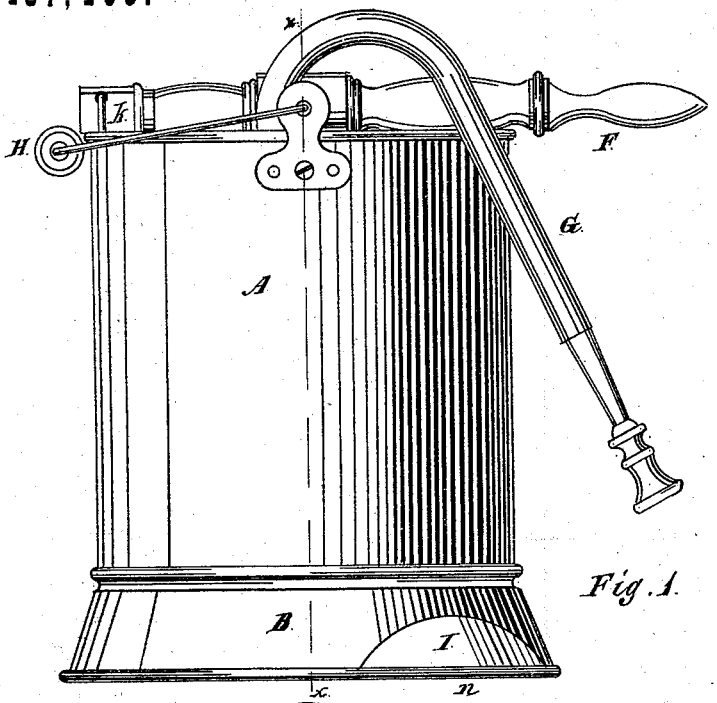

Fig. 1.

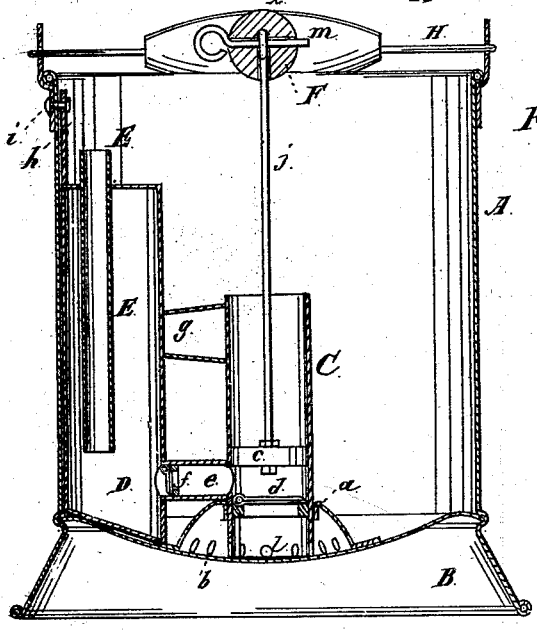

Fig. 2.

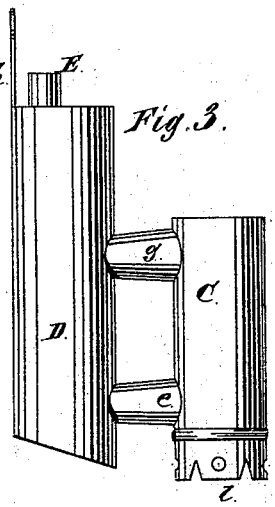

Fig. 3.

Witnesses:
A. W. Bond.
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UNITED STATES PATENT OFFICE.

WILLIAM WESTLAKE, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN WINDOW-WASHER AND GARDEN-SPRINKLER.

Specification forming part of Letters Patent No. **187,496**, dated February 20, 1877; application filed June 22, 1876.

To all whom it may concern:

Be it known that I, WILLIAM WESTLAKE, of the city of Chicago, Cook county, State of Illinois, have invented new and useful Improvements in Window-Washers and Garden-Sprinklers, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation; Fig. 2, a vertical section at *x* of Fig. 1; Fig. 3, a detail.

This invention consists in so constructing the pump-cylinder, air-chamber, and other parts connected therewith that the same can be secured properly within a vessel containing water, and also be easily detached therefrom, if it becomes necessary to repair the same.

The invention is chiefly designed to be used, in connection with a pail or other small vessel, for holding water, which can be easily removed from place to place.

In the drawings, A represents the vessel designed to hold water; B, a heavy flange upon the bottom of the vessel, furnishing a support, and elevating it away from the ground. The bottom of this flange is provided with a stiffening-wire, *n*. I is an opening in the flange B, permitting the insertion of the foot over the wire *n*, to aid in holding the vessel in position while in use, if necessary; C, the piston-cylinder; D, the air-chamber; E, the discharge-tube; F, the operating handle or lever; G, a piece of flexible hose connected with the discharge-pipe; H, the bail or handle. *a* is a piece of metal, permanently secured to the bottom of the vessel A, having an opening in the top, into which the lower end of the pump-cylinder can be inserted. *b* are holes in *a* to admit water from the vessel A to the pump-cylinder. *c* is the piston; *d*, the valve near the bottom of the cylinder C; *e*, the passage from the cylinder C to the air-chamber D; *f*, the valve in the passage *e*; *g*, a support or brace connected both to the pump-cylinder and to the air-chamber, for the purpose of supporting the top of the cylinder; *h*, a metal bar permanently secured to the top of the air-chamber D, having a hole at the top to receive the bolt *i*. *j* is the piston-rod, the upper end of which is connected to the lever F, one end of which lever is hinged at *k* to the top of the vessel A. The lower end of the pump-cylinder C has an extension, *l*, fitting into the opening in the top of *a*. The air-chamber D is closed at both top and bottom. The bottom of the vessel A may be concave.

The vessel A can conveniently be made of galvanized iron; and, for ordinary purposes, may hold about four gallons of water.

The pump-cylinder C and air-chamber D are connected together by means of the passage *e* and brace *g*; and these parts are secured in place in the vessel A by inserting the lower end *l* of the pump-cylinder C into the opening in the top of *a*, the lower end of D resting upon the bottom of the vessel. Then, by the use of the single bolt and nut *i*, the whole will be firmly secured within the vessel A.

In use, the vessel A is to be filled with water, which can be ejected by means of the pump and parts connected therewith. The device can be used for sprinkling gardens, for extinguishing incipient fires, and for other similar purposes, using either an ordinary nozzle, or a sprinkling-rose, according to circumstances.

The construction of the cylinder and air-chamber, and the mode of securing them within A, is such that they can be very easily removed therefrom in case the pump or the parts connected therewith get out of order. To do this it is only necessary to remove the bolt *i*, and disengage the upper end of the piston-rod from the lever F, which can be done by removing the pin *m*.

I make the pump-cylinder and air-chamber of sheet metal, and connect the passage *e* thereto by means of solder, so that if access to the valve *f* is necessary it can be had by unsoldering one end of the passage *e*.

For ordinary sizes and purposes the cylinder and air-chamber will be sufficiently secured within the vessel by the means described; but, if it should be found necessary or desirable, one or more additional braces may be applied, near the top of the cylinder, in any suitable manner.

It is important that, when the vessel A is made of sheet metal, its top be suitably strength-

ened by the use of a heavy wire or metal band. It will be well to provide the metal or boss *a* with fine perforations to operate as a strainer. The extension *l* must also be perforated.

I am aware that a pump-cylinder and air-chamber have been located outside of a receiving-vessel, the lower end of such cylinder and air-chamber being connected permanently to a stand, and the upper end being permanently connected to the bottom of the vessel. This mode of constructing and connecting the vessel and pump is much more expensive than mine, and the pump and air-chamber cannot be removed therefrom except with very great difficulty.

I do not claim, broadly, a pump-cylinder and air-chamber in combination with a vessel for holding water; but

What I do claim as new, and desire to secure by Letters Patent, is as follows:

The pump-cylinder C, air-chamber D, connected by means of the tube *e*, valves *d f*, and outlet-pipe E, arranged within the vessel A, and secured to it by bolt and nut *i*, substantially as and for the purpose set forth.

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