No. 619,903. Patented Feb. 21. 1899.

J. MORRISON.

SPRAY APPARATUS.

(Application filed Sept. 7, 1898.)

(No Model.)

Fig. 1.

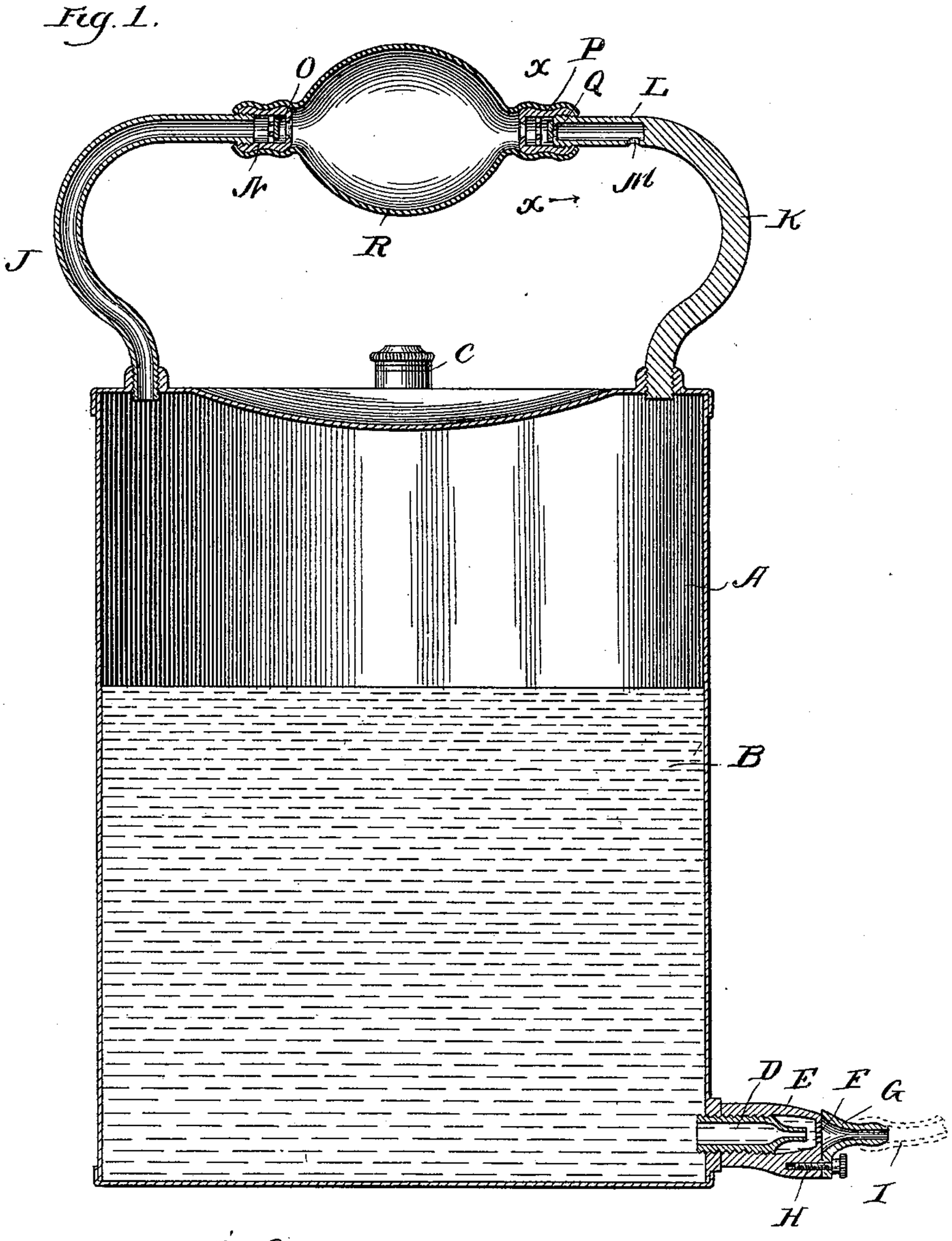

Fig. 2.

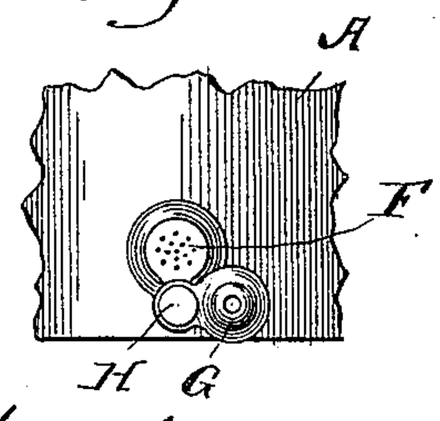

Fig. 3.

Witnesses:
H. B. Hallock.
Samuel Stuart

Inventor.
James Morrison
by Wm. Le. Hazelton
Attorney.

UNITED STATES PATENT OFFICE.

JAMES MORRISON, OF PHILADELPHIA, PENNSYLVANIA.

SPRAY APPARATUS.

SPECIFICATION forming part of Letters Patent No. 619,903, dated February 21, 1899.

Application filed September 7, 1898. Serial No. 690,392. (No model.)

To all whom it may concern:

Be it known that I, JAMES MORRISON, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Improvement in Spraying Apparatus, of which the following is a specification.

My invention relates to a new and useful improvement in apparatus for sprinkling, projecting a stream, or forcing liquid through a flexible tube for the purpose of disinfecting or moistening objects and for other similar purposes.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a vertical section of my improvement; Fig. 2, a detail of the nozzle, the hose attachment therefor being turned to one side, so as to show the spraying-holes; and Fig. 3, a section at the line *x x* of Fig. 1.

In carrying out my invention as here embodied, A represents a can or reservoir adapted to contain the liquid, as indicated at B, and having an inlet C, properly closed by a screw-cap, by which means the can may be filled when required. Near the bottom of the can a nozzle D is secured therein, the nose of which is so constructed as to project a stream after the manner of a hose, and the periphery of this nozzle is threaded, so as to receive the spraying attachment E, the latter being adapted to run over said nozzle, as clearly shown, and having therein a series of holes or perforations F, through which the liquid passing from the nozzle may issue in spray form, thus adapting the device for sprinkling plants, for carpet for the well-known purposes.

An extension G is secured to the attachment E by means of a thumb-screw H, and this extension is so shaped as to be adapted to receive the end of the flexible tube shown in dotted lines at I, whereby such a tube may be utilized to convey the contents of the can to any desired point.

J represents a tube which is threaded into the top of the can and so curved as to form a portion of a handle for the can, while K is a rod of similar shape, also secured to the top of the can upon the opposite side thereof, and this rod K has a recess L formed therein, and a hole M leads from said recess for the purpose hereinafter set forth.

A valve-casing N is attached to the upper end of the tube J and has therein a valve O, adapted to fit upon a suitable seat, while a similar valve-casing P is attached to the rod K and has therein a valve Q. To these two casings is attached a rubber bulb R, by which arrangement when the bulb is compressed the air therein will be forced through the casing O downward into the can, the valve Q closing upon the recess L during this action, so as to prevent the air escaping in this direction from the bulb; but when the bulb is permitted to expand the valve O will close against its seat to prevent the drawing of the air previously forced into the can therefrom, while the valve Q will be drawn from its seat and the bulb refilled with air drawn through the hole M. A repetition of this operation will continue to force air within the can, as will be readily understood.

From this description it will be seen that in practice the operator grasps the bulb, using the same as a handle to hold the can, and then by alternately compressing said bulb and permitting it to expand a pressure will be created within the can upon the liquid therein, thus forcing it with more or less pressure through the nozzle and spraying-perforations or the flexible tube, as the case may be.

It is to be noted that the extension G may be turned to one side, as clearly shown in Fig. 2, and there held while the spraying-perforations are being used by the proper manipulations of the screw H.

Having thus fully described my invention, what I claim as new and useful is—

1. An apparatus of the character described consisting of a suitable reservoir, means for filling the same with liquid, a nozzle connected with the lower portion thereof, a spraying attachment adapted to be secured upon the noz-

zle, an extension secured to the end of the spring attachment and adapted to receive a tubing, a bent tube and rod projecting upward from the top of the reservoir, valves secured to the ends of said tube and rod, and a compressible bulb attached to said tube and rod in such manner as to be used as an air-pump for creating a pressure within the reservoir, as specified.

2. In combination, a can adapted for use as a reservoir, a nozzle secured in the lower portion thereof, said nozzle having screw-threads formed upon its outer surface, a spraying attachment having perforations in its end and adapted to be run upon the threads upon the nozzle, an extension secured to the end of the attachment by means of the thumb-screw and so formed as to receive the end of a flexible tube, and means for creating a pressure within the can, as and for the purpose set forth.

3. In combination, a reservoir consisting of a can, a nozzle connected with the lower portion thereof, a spraying attachment adapted to be secured over the nozzle, an extension secured to said attachment by means of a thumb-screw whereby it may be turned into or out of position, a bent tube secured to the top of the can, a bent rod also secured to the top of said can, said rod having a cavity in its upper end and a hole connected therewith, a valve-casing secured upon the end of both the tube and rod, valves located within said casings, and a compressible bulb attached to the casings whereby air may be forced under pressure within the can, as specified.

4. In combination, with a can of the character described, a curved tube attached to the top of said can and communicating with the interior thereof, a valve-casing secured upon the upper end of said tube, a valve located therein, a curved rod also secured to the top of the can, said rod having a cavity therein and a hole connected with said cavity, a valve-casing secured to the upper end of the rod, a valve located within this casing, and a rubber bulb connected to the two valve-casings and adapted to force air within the can, as shown and described.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

JAMES MORRISON.

Witnesses:
MARY I. CRAWFORD,
SAMUEL STUART.