

No. 818,938.

PATENTED APR. 24, 1906.

C. A. CRANE.
SPRINKLER.

APPLICATION FILED JULY 3, 1905.

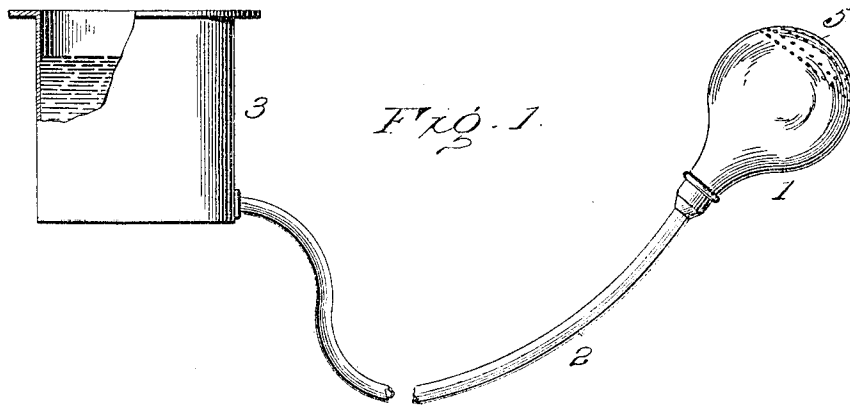


Fig. 2.

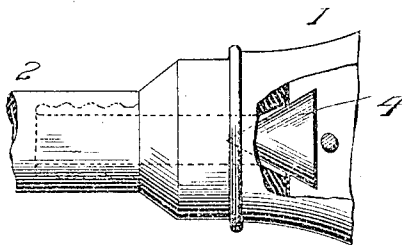
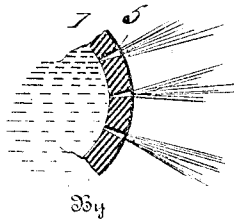


Fig. 3.



Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

CLARENCE A. CRANE, OF WARREN, OHIO.

SPRINKLER.

No. 818,938.

Specification of Letters Patent.

Patented April 24, 1906.

Application filed July 3, 1905. Serial No. 268,116.

To all whom it may concern:

Be it known that I, CLARENCE A. CRANE, a resident of Warren, in the county of Trumbull and State of Ohio, have invented certain new and useful Improvements in Sprinklers; 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.

The object of this invention is to provide a sprayer for sprinkling clothes, flowers, floors, &c., which will be composed of but few parts, inexpensive, not liable to readily get out of order, and which will not leak when not in use.

The invention will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in side elevation. Fig. 2 is a slightly-enlarged view, partly in section. Figs. 3 and 4 are fragmentary sectional views of the bulb, the former showing the punctures closed and the latter opened.

Referring to the drawings, 1 designates a hollow bulb or fluid-receptacle which is preferably in the shape of a ball and composed of rubber, rubber composition, or other suitable material. To it is connected a tube 2, leading from a source 3 of water-supply, that shown consisting of a tank or reservoir, although it is manifest that the tube may be connected to a faucet or hydrant. A check-valve 4, located over the supply-opening, prevents the water in the bulb from flowing backward through tube 2 when the bulb is compressed, such valve, however, being unseated by the inflow.

In bulb 1 are formed numerous small punctures, as at 5. These punctures are not circular holes maintaining their integrity under all conditions and allowing constant outflow of water, but, on the contrary, are self-sealing, being normally closed to prevent the outflow of the water, which latter is ejected only by the squeezing of the bulb to such an extent as to cause the water to be ejected in the form of small sprays. As soon as the pressure on the bulb is released the punctures therein will at once close under the resiliency or yielding of the material of which the bulb

is composed, and the vacuum created in the bulb will draw the water thereinto whether the bulb be above or below the source of supply. There is no leakage or outflow of the water save when the bulb is compressed, and hence the device may be allowed to remain in any position when not in use without fear that the water will flow therefrom.

I do not confine myself to any special shape of bulb nor to any special means of supplying water thereto nor to any particular form of valve to prevent backflow when the bulb is compressed. It will be observed that the punctures in the elastic bulb are no larger than is necessary to insure the ejection of the water therethrough in the form of sprays when the bulb is compressed, such punctures automatically closing and cutting off the outflow the moment pressure is released. Although I prefer to make the bulb of rubber, yet it may be made of rubber composition or other suitable elastic material.

I claim as my invention—

1. A sprinkler comprising a fluid-containing bulb or receptacle having punctures formed therein, which punctures are normally closed to prevent outflow of the fluid and are opened to permit the fluid to pass outward in the form of sprays when the bulb is compressed.

2. A sprinkler comprising a fluid-containing bulb or receptacle of rubber or other yielding material having punctures formed therein, which punctures are normally closed by the action of the material composing the bulb, the fluid being ejected through such punctures in the form of sprays only when the bulb is compressed.

3. A sprinkler comprising a fluid-containing bulb or receptacle having a series of punctures normally closed by the action of the material forming the bulb, a fluid-supply tube leading to such bulb, and a valve for preventing the fluid in the bulb from reëntering the tube.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CLARENCE A. CRANE.

Witnesses:

S. B. CRAIG,
ZELL P. HART.