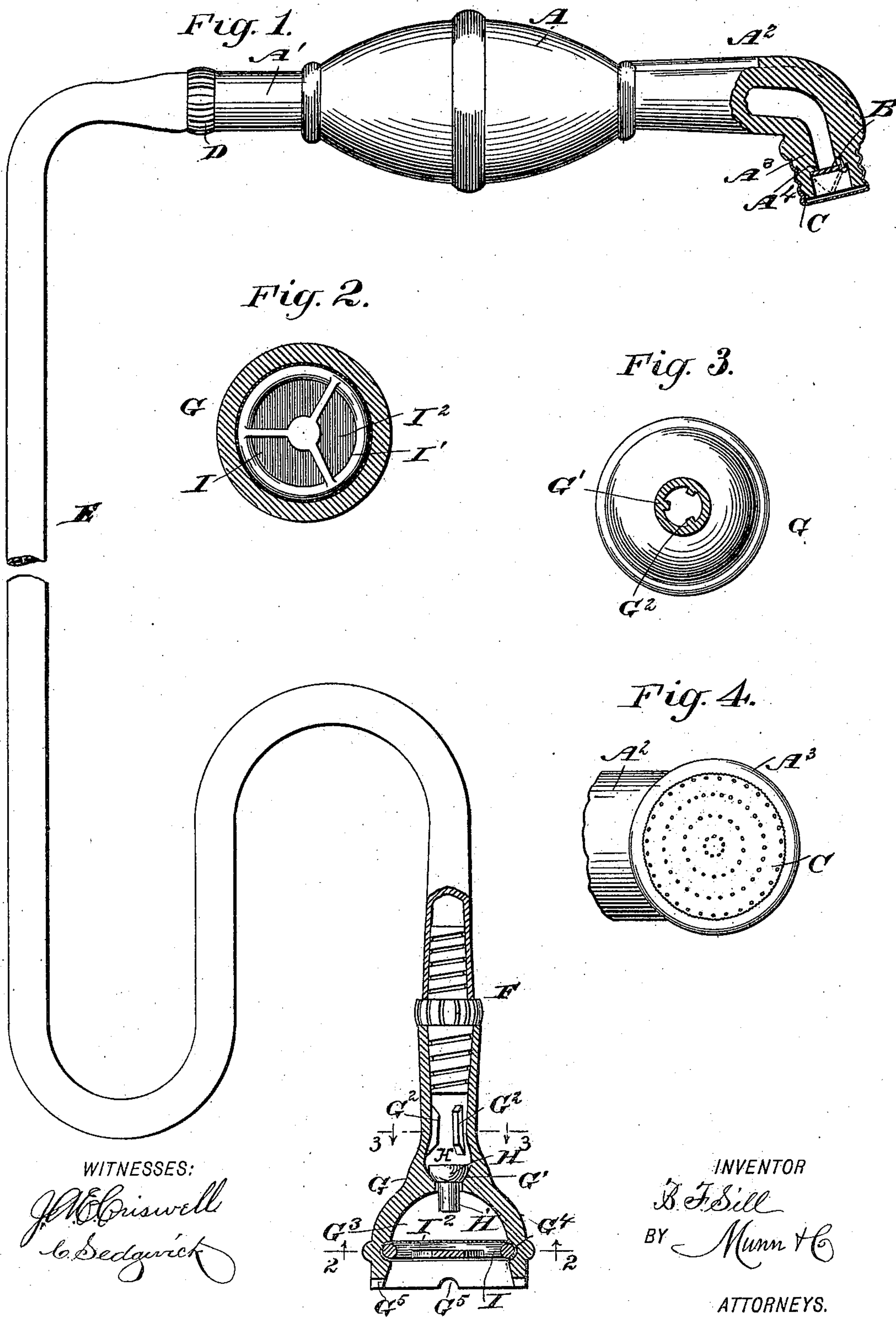


(No Model.)

B. F. SILL.
WINDOW GARDEN SPRAY.

No. 502,590.

Patented Aug. 1, 1893.



WITNESSES:

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BENJAMIN F. SILL, OF LONG ISLAND CITY, NEW YORK.

WINDOW-GARDEN SPRAY.

SPECIFICATION forming part of Letters Patent No. 502,590, dated August 1, 1893.

Application filed September 3, 1892. Serial No. 444,977. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. SILL, of Long Island City, in the county of Queens and State of New York, have invented a new and Improved Window-Garden Spray, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved window garden spray, which is simple and durable in construction, very effective in operation, and arranged to conveniently and thoroughly sprinkle the plants from every direction, without danger of breaking or injuring the plants in passing the spraying nozzle into and between the branches of the plants.

The invention consists of a compressible bulb having a spraying nozzle formed integral with the bulb.

The invention further consists of a filter arranged on the inlet of the spray, to prevent impurities from passing to and blocking the rose on the nozzle.

The invention also consists of certain parts and details, and combinations of the same, as will be hereinafter described and then pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improvement with parts in section. Fig. 2 is a sectional plan view of the inlet containing the filter, the section being taken on line 2—2 of Fig. 1. Fig. 3 is a sectional plan view of the inlet, on line 3—3 of Fig. 1; and Fig. 4 is an enlarged plan view of the spraying nozzle and rose.

The improved window garden spray is provided with an elastic compressible bulb A, having at one end an inlet A', formed integral with the bulb A. The opposite end of the bulb A is provided with a spraying nozzle A² having at its outer end an angular offset A³, and formed integral with the bulb A.

In the angular offset A³ is formed a valve seat A⁴ on which is adapted to be seated a flap valve B, preferably made of rubber and secured by a nail or other device to the offset A³, as plainly shown in Fig. 1. On the offset is formed an exterior screw thread on which

screws the rose C closing the outer end of the nozzle, the rose being provided with very fine apertures, as plainly shown in Fig. 4, so as to spray the liquid in very fine jets on to the plants. The inlet A' of the bulb A is connected by a hard rubber connection D with the tube E, the outer end of which is connected by a hard rubber connection F with the suction nozzle G containing a valve H and a filter I. The suction nozzle G is provided with a valve seat G', on which is adapted to be seated the valve H opening inwardly and limited in its lift by lugs G² formed inside of the suction nozzle, and integral with the same. The stem H' of the valve H passes loosely through the opening in the valve seat to the cup G³ forming the outer end of the suction nozzle. In this cup G³ is held the filter I above mentioned, the said filter comprising a ring or wheel I', and a filtering cloth I² stretched across the inside of the ring and over the periphery of the same, so as to cover the cup G³ to prevent impurities from passing to the interior of the cup and to the valve H. The ring I with the cloth I² drawn over the same, as described, fits into an annular recess G⁴ formed on the inside of the cup, as plainly illustrated in Fig. 1.

The outer edge of the suction nozzle is provided with recesses G⁵ through which water can pass to the filter and the cup in case the suction nozzle is set flat on the bottom of the vessel containing the supply of water or other liquid to be sprayed. The suction nozzle G is preferably made of soft rubber so that the filter I can readily be sprung into the recess G⁴ and securely held therein by the flexible material of which the suction nozzle is constructed. It will also be seen that the valve H can be inserted and pushed to the seat, owing to the flexible nature of the suction nozzle, which permits of pushing the said valve past the lugs G² to reach its seat. The valve H is made of the same flexible, elastic material as the other parts above mentioned.

Among the advantages of my invention are that the chief working parts, being made of elastic, flexible pliable material, they are rendered tough and durable, and not likely to be injured by accidental crushing or falling, while as to manufacture, they are economical and easily produced.

By constructing the sprinkling nozzle A² of the same elastic material of which the bulb A is composed, the nozzle can be readily passed in between the branches of the plants without danger of breaking the branches, owing to the flexible nature of the said nozzle.

The window garden spray is used in the usual manner, that is, the suction nozzle G is inserted in a supply of liquid, then the bulb A is actuated by pressing and releasing the same so that the liquid is drawn in the suction nozzle through the filter I, past the valve H into the tube E and bulb A to be forced out on compressing the bulb, through the nozzle A², the liquid opening the valve B in its outward passage, to finally pass in a very finely divided spray through the rose C onto the plants to be sprinkled.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a window garden spray, the elastic pressure bulb constructed as shown, with a bent-up delivery-nozzle, both in one piece of elastic material, the interior of the extremity

of the delivery nozzle being enlarged to form a valve chamber and therein provided with an outwardly opening valve, said nozzle being also constructed with an exterior elastic screw thread upon which a perforated cap screws, which forms a delivery rose and a protection for the valve, all combined as herein shown and described.

2. In a window garden spray, the filtering cup and valve chamber constructed in one piece of elastic material, the valve chamber having inward projecting valve lugs made of and integral with the elastic material, in combination with the valve constructed of elastic material, and a filter ring with its filter cloth set within the mouth of the filtering cup and held in place by the elastic pressure of the material composing the cup, and protected therein by the projecting rim or extremity of the filtering cup, as and for the purposes herein shown and described.

BENJAMIN F. SILL.

Witnesses:

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EDWIN F. WHITE.