

J. SCHIER.
Cotton-Sprinkler.

No. 221.617.

Patented Nov. 11, 1879.

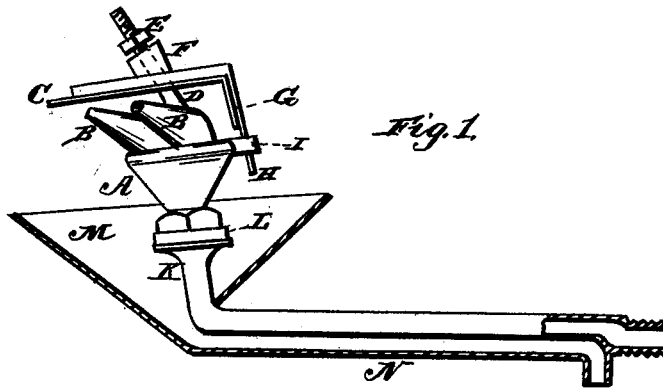
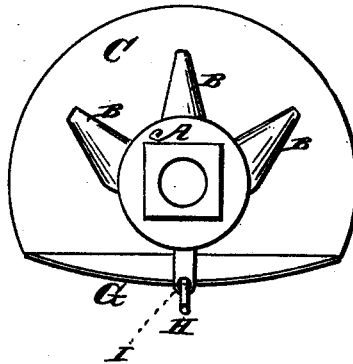


Fig. 2.



WITNESSES
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JOHN SCHIER, OF ELLINGER, TEXAS.

IMPROVEMENT IN COTTON-SPRINKLERS.

Specification forming part of Letters Patent No. **221,617**, dated November 11, 1879; application filed September 27, 1879.

To all whom it may concern:

Be it known that I, JOHN SCHIER, of Ellinger, in the county of Colorado and State of Texas, have invented certain new and useful Improvements in Cotton-Sprinklers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side view, partly in section, of my improved device. Fig. 2 is a bottom view thereof.

The object of my invention is to provide a sprinkler for the effective distribution of poisonous liquids upon cotton-plants, for the purpose of destroying the cotton-worm or other destructive insects.

The nature of my improvement consists, essentially, in a sprinkler provided with sprinkling tubes or nozzles, a deflector for distributing the liquid which is ejected from the same, and means for preventing waste of the liquid, all as fully described in the following specification, and particularly pointed out in the claims.

In the drawings the discharge-nozzle is shown as composed of a short barrel, A, provided with several discharge-tubes, B, which branch out from the same, substantially as shown.

Above the tubes B is arranged a deflector, C, for the purpose of receiving the impact of the streams and spreading the same into a sheet, whereby all spots desirable to be sprinkled shall be reached by the liquid. This deflector is arranged to slide freely upon a spindle, D, and is controlled by a screw-nut, E, which works upon a screw-threaded portion of the spindle.

F is a bow-shaped brace, which extends from side to side of the deflector, and through which the spindle also passes.

The deflector is formed or provided with a deflecting-plate at or about right angles thereto, and this deflecting-plate G extends downward in rear of the discharge-tubes B, so as to prevent the sheet of liquid from being thrown out in all directions. So much of the liquid as impinges upon the deflecting or guard plate G is directed so as to be caught by a

funnel-shaped cup, whence it is returned to the reservoir or basin, as presently described.

In order to guard against the rotation of the deflector, I provide it with a pin, H, which works in an eye or sleeve, I, connected to the barrel A of the nozzle.

K designates a pipe upon which the nozzle is screwed, a suitable washer, L, being employed for packing. This pipe, which projects up through a funnel-shaped cup, M, leads to a suitable pump, which, in practice, will be employed for forcing the liquid through the same, and thence out through the nozzle.

N designates a return-pipe, which leads from the funnel-shaped drip-cup back to the reservoir or receptacle from which the liquid is pumped, and hence such liquid as may drip into cup M or be deflected therein by the guard-plate or deflector G will be caught and saved.

The pipes K N may be inclosed by a metal casing. They may be united side by side without such casing, or arranged in any practical way.

What I claim, and desire to secure by Letters Patent, is—

1. A cotton-sprinkler comprising a nozzle having several discharge-tubes branching out from a common barrel, and a deflector having a determinate sliding movement upon a spindle, substantially as specified.

2. In combination with the barrel A and branching discharge-tubes B, the deflector C and the guard or deflecting plate G, adapted to direct liquid into a drip-cup, substantially as set forth.

3. In a cotton-sprinkler, a nozzle comprising a series of discharge-tubes, in combination with the deflector C, spindle D, plate G, pin H, and sleeve I, substantially as set forth.

4. The funnel-shaped drip-cup M, pipes K and N, and nozzle comprising a series of branching discharge-tubes, in combination with the deflector C and guard or deflecting plate G, substantially as shown and specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN SCHIER.

Witnesses:

C. W. MEYER,
L. KROLE.