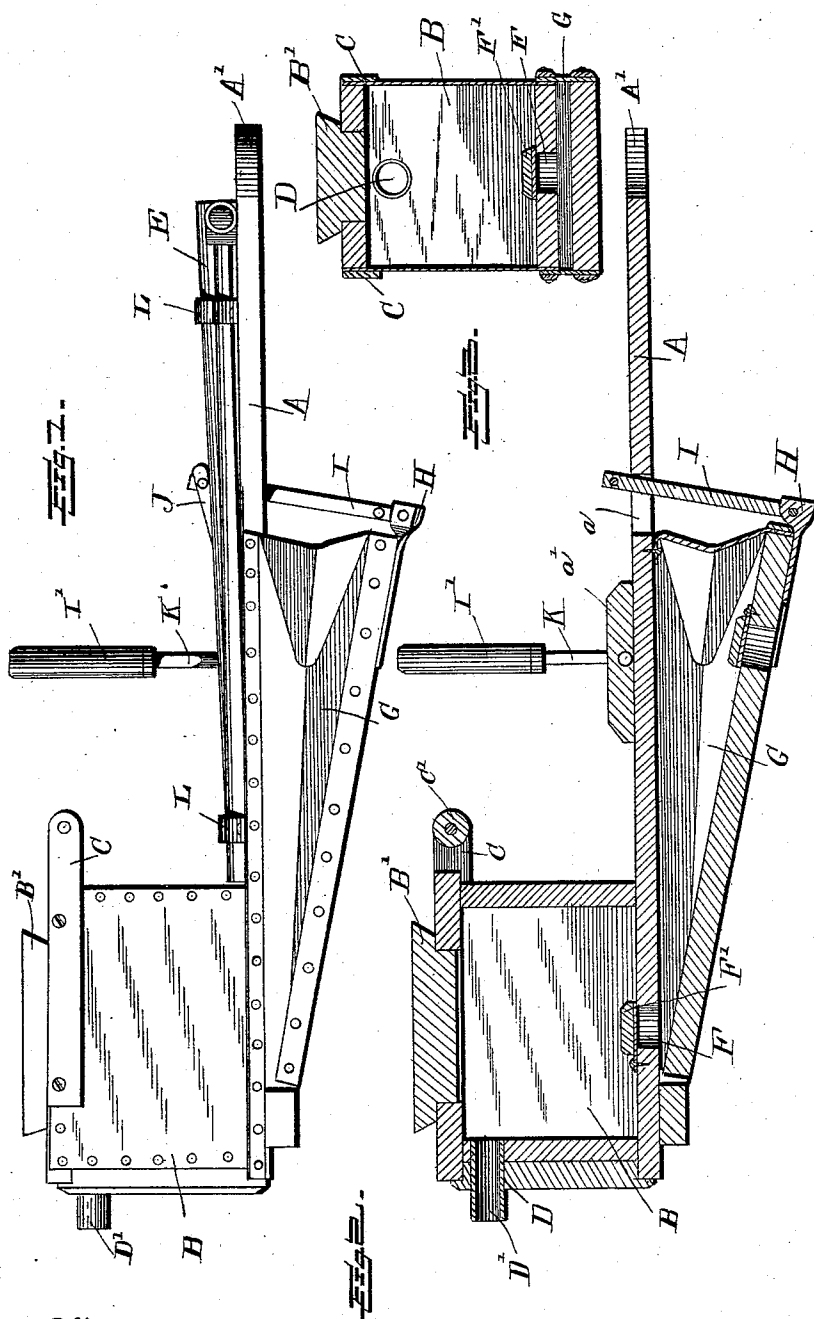


(No Model.)

C. M. ARTHUR.
POWDER DISTRIBUTER.

No. 571,145.

Patented Nov. 10, 1896.



Witnesses
A. F. Mills.
K. A. Hare.

Inventor
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UNITED STATES PATENT OFFICE.

CHRISTOPHER M. ARTHUR, OF BETHANY, MISSOURI, ASSIGNOR OF ONE-HALF TO JAMES H. HILLIS, OF McFALL, MISSOURI.

POWDER-DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 571,145, dated November 10, 1896.

Application filed March 30, 1896. Serial No. 585,363. (No model.)

To all whom it may concern:

Be it known that I, CHRISTOPHER M. ARTHUR, a citizen of the United States, residing at Bethany, in the county of Harrison and State of Missouri, have invented certain new and useful Improvements in Spraying Devices; 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.

This invention relates to certain new and useful improvements in spraying devices designed for spraying all kinds of fruit-trees, fruit vines and bushes, and all kinds of vegetables. It also can be used for spraying land-plaster and for killing insects or vermin in the poultry-house and even on the poultry itself. It comprises a bellows mounted on a suitable frame or support provided with a hopper or receptacle for the powder, the rear end of the body portion being curved to fit against and conform to the body of the person carrying the same, a suitable lever being provided for actuating the bellows, a handhold to the box or receptacle, and a tube through which the material is to be forced and sprayed. A valve is arranged within the box or hopper and so constructed that when the air is forced out of the bellows it will raise the valve and admit the air that passes up through the powder or dust, through the box, and force it out through the discharge-pipe. The discharge-pipe may be made in sections and detachably mounted, so that one of a different sort can be employed when desired.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is an elevation of my improved sprayer. Fig. 2 is a vertical section through the same. Fig. 3 is a cross-section through the hopper.

Like letters of reference indicate like parts in the several views.

Referring now to the details of the drawings by letter, A designates the supporting-piece, which at one end is provided with a curved portion A', adapted to rest against the body of the operator, and at the other end is a hopper or box B, having a removable cover B', by which the same may be held, and secured to opposite sides thereof near the top are the bars C, which extend beyond the upper end of the same and support the handle C', which is designed to be grasped by one hand while the other is employed for operating the lever. The opposite end of the box has a discharge-opening D, in which is fitted a short length of pipe D', to which are designed to be connected the discharge or spray pipes E, which are preferably made in sections, so as to be adjustable in length, and these sections are detachably secured to the pipe D', so they may be removed and another one of another character substituted therefor when desired, according to the character of the work to be performed. The bottom of this receptacle or box has an opening F, over which is a hinged valve F', and upon the back of the part A is a bellows G. Connected with the rear under portion of the bellows is an arm H, to which is pivotally and adjustably connected the arm I, which extends through a slot *a* in the support A and has pivotally connected therewith the arm J, which extends upward from the crank-arm K, which is mounted in a suitable bearing in the block *a'* on the outer face of the support A, and the other end is extended at right angles thereto and provided with a suitable handle I', constituting the lever by which the bellows may be operated. Upon the outer face of the base A are loops or analogous means L for holding the discharge-pipes when not in use.

With the parts constructed and arranged substantially as herein described the operation will be readily understood. The dust or powder to be used is placed in the hopper and the cover replaced. The discharge-tube being placed in position the handhold C' is grasped by one hand, the curved portion A' of

the base A resting against the body of the operator, who with the other hand operates the lever. This actuates the bellows, and as the same is moved the valve within the bottom of the box is opened and the air forced into the powder, which is discharged through the discharge-pipe onto the plants or vines or animals.

Modifications in details may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

Having thus described the invention, what is claimed as new is—

1. The combination with the base, the receptacle thereon having a discharge-opening and a valve in its bottom, of a bellows mounted on the back of said base and connected with the opening controlled by the valve, and means for operating the bellows comprising a crank-arm with a connection between one

end thereof and the bellows, the upper end of the base having a curved portion, substantially as described.

2. The combination with the base, the box with discharge-opening and valve, and the bellows mounted on the back of the base connected with an opening beneath said valve, of an arm pivotally mounted on the bellows, a crank-arm mounted for oscillation on the base, having one end extended to form a lever, and a connection between the other end and the arm connected with the bellows, substantially as described.

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

CHRISTOPHER M. ARTHUR.

Witnesses:

JOHN W. KENYON,
ED SKINNER.