
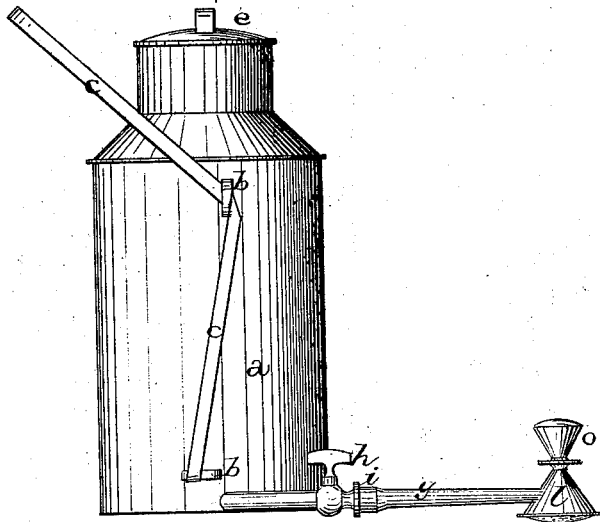

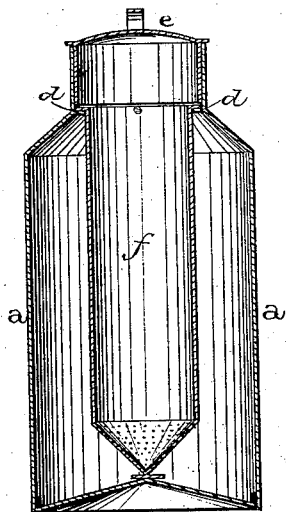



P. S. RYAN.
Insect-Destroyer.

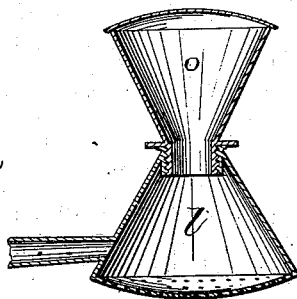
No. 207,306.  1. Patented Aug. 20, 1878.



 2.



 3.



Witnesses.

J. W. Garner
H. D. Haines

Inventor:
P. S. Ryan,
per
J. A. Lehmann
att'y.

UNITED STATES PATENT OFFICE.

PATRICK S. RYAN, OF RUTLAND, VERMONT.

IMPROVEMENT IN INSECT-DESTROYERS.

Specification forming part of Letters Patent No. 207,306, dated August 20, 1878; application filed July 19, 1878.

To all whom it may concern:

Be it known that I, PATRICK S. RYAN, of Rutland, in the county of Rutland and State of Vermont, have invented certain new and useful Improvements in Insect-Destroyers; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in insect-destroyers; and it consists in the peculiar arrangement and construction of parts whereby the poison is delivered upon the bugs in a fine spray, as will be more fully described hereinafter.

The accompanying drawings represent my invention.

Figure 1 is a side elevation of my invention complete. Fig. 2 is a vertical section of the can. Fig. 3 is a vertical view of the sprinkler alone.

a represents a can or reservoir, of any desired size or shape, and in which the liquid poison is placed. Upon opposite sides of this can are formed loops *b*, which serve to secure the strap *c* thereto, which strap is passed over the arms and shoulders and supports the can on the back of the person who is to use it. By thus attaching the can to the back a person can walk rapidly along between the rows, destroying the bugs as he goes, and the apparatus is reduced to its simplest and cheapest form.

Inside of the can is formed the flange *d*, at any suitable distance below the cover *e*, upon which flange is supported the strainer *f*, of any suitable construction: This strainer serves to prevent any lumps or other particles from entering the can, and is made removable at pleasure.

The bottom of the can is made convex, as shown, so that the whole contents of the can will run directly into the tubes *g*, which are secured to the sides of the can. These tubes

may be of any desired length, diverge slightly outward, and are provided with the stop-cocks *h*, so as to stop the flow of the poison through them at any moment. Just beyond the cocks are made screw-couplings *i*, so that the tapering outer ends of the pipes or tubes may be removed for the purpose of being cleaned at any time, or for the convenience of transportation.

To the outer end of each tube is secured the conical sprinkler *l*, which is much larger at the bottom than the top, and is filled with minute holes. Upon the top of each sprinkler is screwed an air-chamber, *o*, by means of which the liquid poison is made to flow out, not only more freely, but in a fine spray. By making these chambers *o* removable, free access is given to the interior of the sprinklers, so that they can be thoroughly cleansed whenever the holes become stopped.

As the two sprinklers are far enough apart to be just over two rows of potatoes, and as the spray is discharged downward and outward, the operator has only to take the can filled with the liquid poison, get between two of the rows, open the two stop-cocks, and then walk along, and the poison will be discharged upon two rows at a time. The apparatus may also be made and used with only one tube, *g*, and one sprinkler, if desired.

Having thus described my invention, I claim—

1. The sprinkler *l*, made in two parts, and connected together by an air-tight joint, the upper part, *o*, forming an air-chamber, substantially as shown.

2. The combination of the can *a*, strainer *f*, supported by the flange *d*, pipes *g*, cocks *h*, and sprinklers *l* *o*, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 2d day of July, A. D. 1878.

PATRICK S. RYAN.

Witnesses:

CHESTER PARMENTER,
JOEL C. BAKER.