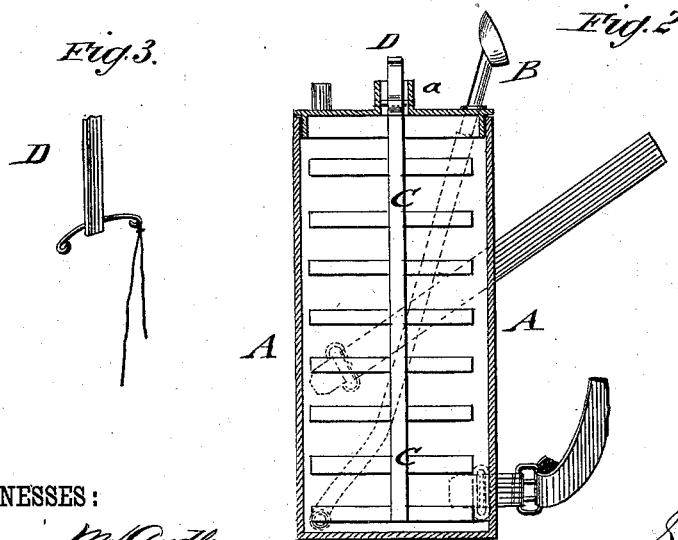
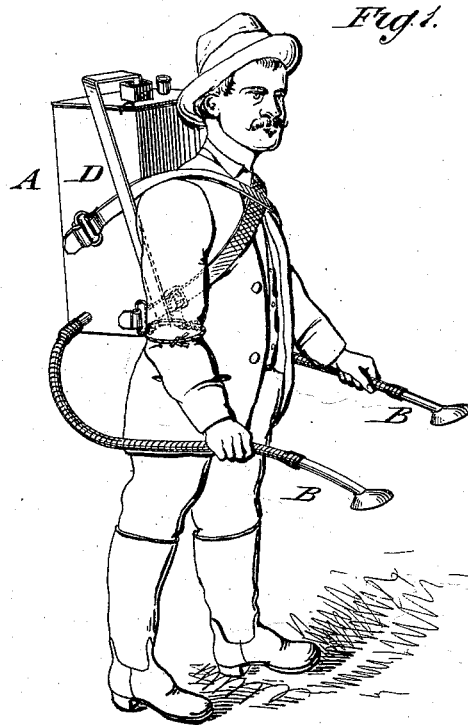


S. RUGGLES.
Bug-Exterminator.

No. 203,072.

Patented April 30, 1878.



WITNESSES:
Francis McArdle.
C. Sedgwick

INVENTOR:
S. Ruggles
BY *Mumford*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

SILAS RUGGLES, OF THREE RIVERS, MASSACHUSETTS.

IMPROVEMENT IN BUG-EXTERMINATORS.

Specification forming part of Letters Patent No. **203,072**, dated April 30, 1878; application filed March 25, 1878.

To all whom it may concern:

Be it known that I, SILAS RUGGLES, M. D., of Three Rivers, in the county of Hampden and State of Massachusetts, have invented a new and Improved Bug-Exterminator, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a perspective view of my improved potato-bug exterminator, being shown as carried on the back of a person and applied for use. Fig. 2 is a detail vertical transverse section of the same; and Fig. 3, a detail view of the lower end of the lever, with straps to attach the same to the arm.

Similar letters of reference indicate corresponding parts.

This invention relates to an improved potato-bug exterminator that is to be carried on the back; and it consists of a reservoir provided with two sprinklers and an interior reciprocating stirrer, that is fulcrumed to the top of the reservoir, and operated by an angular lever strapped to the arm.

Referring to the drawing, A represents the reservoir of my improved potato-bug exterminator, which is provided with two straps that pass over the shoulders and cross in front of the chest, so as to be conveniently carried for use. The reservoir is provided at both sides, near the bottom, with a rubber tube and sprinkler, B, so that the person carrying the exterminator may use both sprinklers in passing down between the rows of potato-vines, and sprinkle them both at the same time, at a considerable saving of time and labor in going over the field.

The poison is kept thoroughly mixed in the reservoir by means of a stirrer, C, that is hung to a pivot, *a*, at the top part of the reservoir, and connected by an arm or lever, D, that is first bent sidewise at right angles to the in-

terior stirrer, and then downward and slightly forward to the arm of the person, having a curved cross-piece, *b*, with eyes at the lower end, to which straps are applied for attaching the lever to the arm of the person carrying the reservoir.

The stirrer consists of a center piece, which passes down to a short distance from the bottom, and of lateral parallel cross-strips that reach from the front to the back wall of the reservoir, so as to agitate the solution in the reservoir every time the arm is moved to and from the body. The poison is in this manner constantly mixed during its application to the vines without requiring any exertion or causing a loss of time to stir it up.

The sinking down or settling of the parison or other poison in the bottom of the reservoir, and the consequent loss of time in mixing it up again, is thereby avoided, and an exterminator furnished that works with great facility, and admits of a rapid and labor-saving application of the poison to the potato-vines.

When not in use, the sprinklers are retained by spring-clasps at the top of the reservoir, sidewise of the same.

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

The combination of the stirrer C, pivoted at *a*, and the bent lever D, for attachment to the arm of operator, with a rectangular reservoir provided with two sprinklers, and adapted to be strapped to the back, as shown and described, for the purpose specified.

SILAS RUGGLES.

Witnesses:

GEORGE ROBINSON,
S. B. COWAN.