(No Model.)

P. W. BERRIDGE.

DISTRIBUTER FOR INSECTICIDES.

No. 536,911. Patented Apr. 2, 1895.

Fig. II.

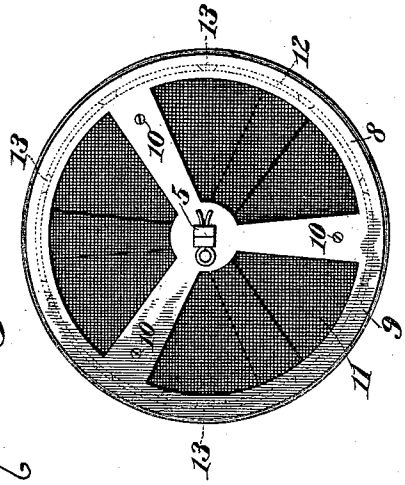


Fig. IV.

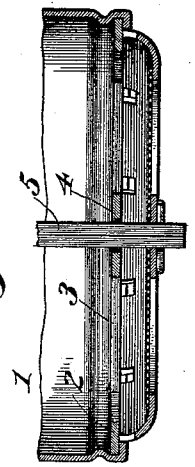


Fig. III.

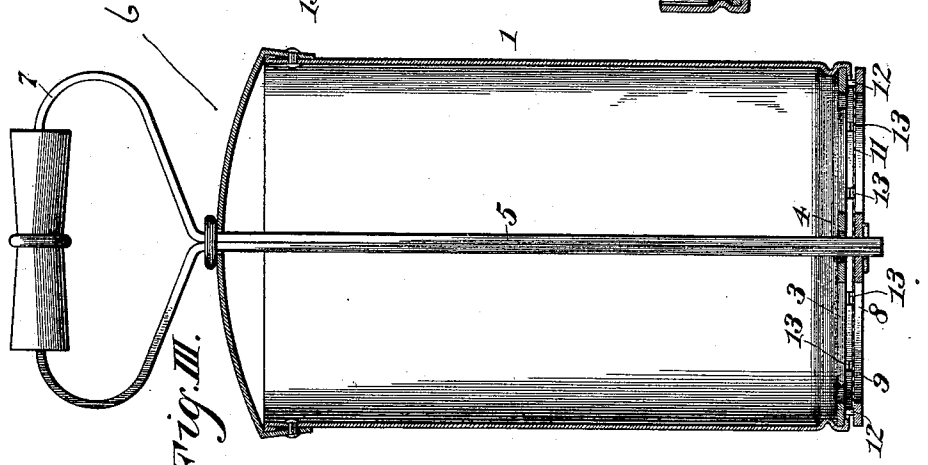
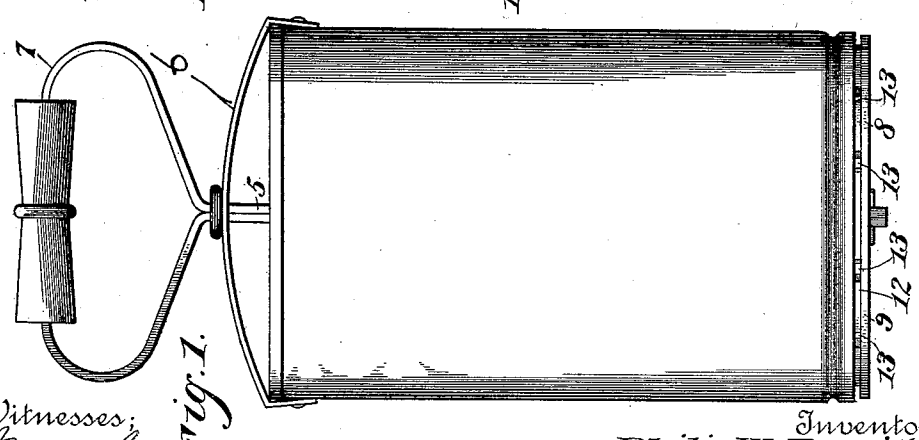


Fig. I.



Witnesses;
J. M. Withrow
A. N. Acker

Inventor,
Philip W. Berridge,
By Joseph L. Atkins
Attorney

UNITED STATES PATENT OFFICE.

PHILIP W. BERRIDGE, OF STURGIS, MICHIGAN.

DISTRIBUTER FOR INSECTICIDES.

SPECIFICATION forming part of Letters Patent No. 536,911, dated April 2, 1895.

Application filed April 20, 1894. Serial No. 508,327. (No model.)

To all whom it may concern:

Be it known that I, PHILIP W. BERRIDGE, of Sturgis, county of St. Joseph, State of Michigan, have invented certain new and useful Improvements in Distributers for Insecticides, of which the following is a specification, reference being had to the accompanying drawings.

The object of my invention is to produce a device which will thoroughly, economically and conveniently distribute insecticides, and which is especially adapted for use with fruit trees, or vines, in which a considerable quantity of the material is to be handled.

In the accompanying drawings: Fig. I is a side elevation of my distributer. Fig. II is a bottom plan view, and Fig. III is a central longitudinal section. Fig. IV is a modified form of bottom.

Referring to the figures on the drawings: 1 indicates the case or receptacle of my distributer which is preferably made of sheet metal in the shape of a cylinder. To the bottom of the receptacle is secured, as by infolding, the annular rim 2 of a lower bearing frame 3.

The frame preferably consists of a plurality of arms supporting a central bearing piece 4, within which is rotatably secured a shaft 5 that is carried in an upper bearing frame 6 secured to the sides of the receptacle.

7 indicates a handle by which the shaft may be rotated. The downward longitudinal movement of the shaft is prevented by the handle, while its movement in the opposite direction is prevented by a revoluble disk 8 that is secured by suitable means to the end of the shaft outside of the lower bearing frame, that end of the shaft being preferably made square so as to prevent the rotation of the disk, except with the shaft.

The disk preferably consists of a frame 9 of substantially the same shape as the lower bearing frame, and of a diameter substantially equal to the diameter of the receptacle. To the disk frame, preferably to the upper part thereof, is secured, as by screws 10, a perforated diaphragm 11. Near the perimeter of the disk frame and preferably integral therewith I provide an annular flange 12, and at intervals in the flange I furnish apertures 13. The flange rotates against the bottom of the lower bearing frame 3 and forms therewith a comparatively close joint.

In operation the receptacle is filled with an insecticide, usually in the form of an impalpable powder. By the rotation of the handle the powder is sifted through the perforations of the diaphragm and is also scattered, by the aid of centrifugal force through the apertures 13 in the flange 12. By this means, a large area may be covered with the insecticide and without waste of the material.

By the employment of a removable disk 8 and removable perforated diaphragm thereon, provision is made for conveniently changing the mesh of the diaphragm, or the size of its perforations to suit insecticides of different degrees of fineness or coarseness.

What I claim is—

1. The combination with an open ended receptacle, of a revoluble flanged disk frame and disk secured to the receptacle, the flange of the disk frame being outside of the receptacle, apertures in the flange, and means for rotating the disk frame, substantially as set forth.

2. The combination with an open ended receptacle, of a revoluble disk frame, and a removable disk secured thereto, a flange on the disk frame, and apertures thereon, the flange of the disk frame extending outside of the receptacle, substantially as set forth.

3. The combination with an open ended receptacle, of a disk frame provided with a radially apertured annular flange, a removable perforated disk carried on the disk frame, and means for rotating the disk frame, substantially as set forth.

4. The combination with an open ended receptacle, of bearing frames therein, a rotatory shaft projecting beyond the ends of the receptacle, provided upon one end with actuating mechanism and upon the opposite end with a disk frame provided with a radially apertured vertical annular flange and with a removable perforated disk completely closing the end of the receptacle, whereby the contained powder can be sifted through the removable perforated disk and will be distributed horizontally through the apertures in the flange when the disk frame is rotated, substantially as specified.

5. The combination with an open ended receptacle, of two parallel internal annular flanges at one end thereof, a bearing frame secured between said flanges, a bearing frame secured at the opposite end of the receptacle, a rotatory shaft extending through and beyond the ends of the receptacle journaled in the bearing frames and provided upon its opposite ends, respectively, with a handle and with a disk frame provided with radial apertures and with a removable perforated disk completely closing the end, substantially as specified.

In testimony of all which I have hereunto subscribed my name.

PHILIP W. BERRIDGE.

Witnesses:
BIRD WARDEN,
FANNIE WHITE.