J. F. EDDY.

Plant-Duster.

No. 226,730. Patented April 20, 1880.

FIG. 1.

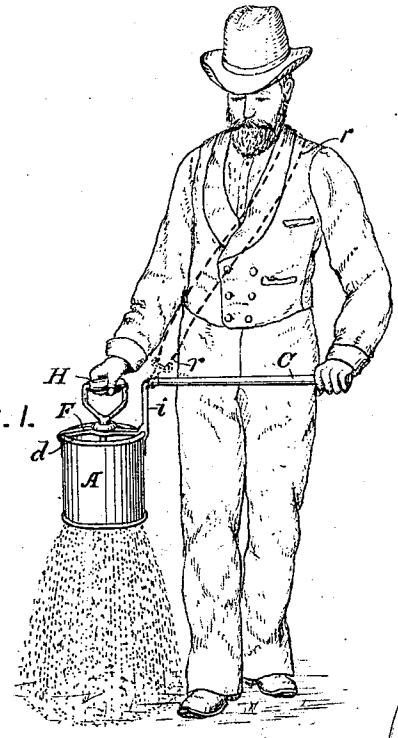


FIG. 2.

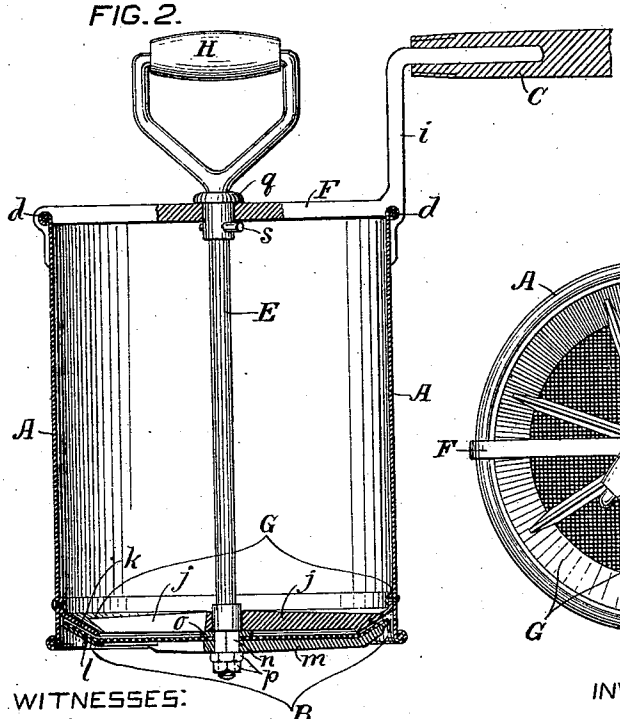
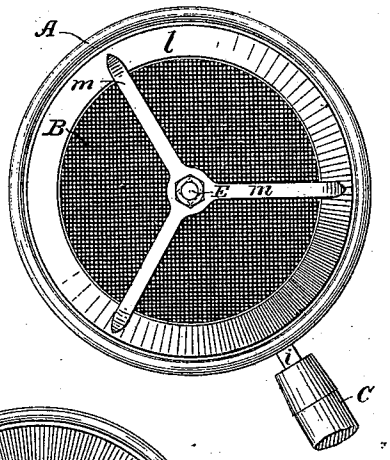


FIG. 4.



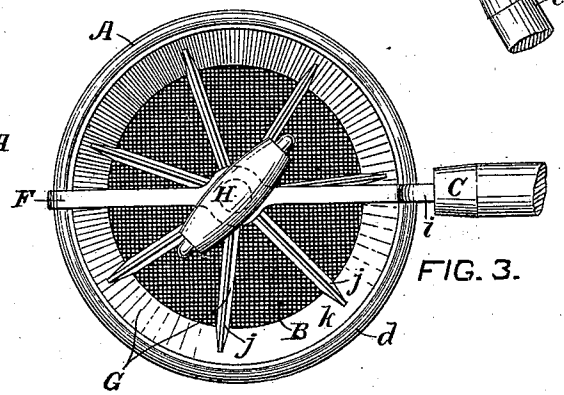


FIG. 3.

WITNESSES:

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James T. Goodfellow.

INVENTOR:

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UNITED STATES PATENT OFFICE.

JOHN F. EDDY, OF BRUNSWICK, (RAYMERTOWN P. O.,) NEW YORK.

PLANT-DUSTER.

SPECIFICATION forming part of Letters Patent No. 226,730, dated April 20, 1880.

Application filed November 14, 1879.

To all whom it may concern:

Be it known that I, JOHN F. EDDY, of the town of Brunswick, (Raymertown P. O.,) in the county of Rensselaer and State of New York, have invented a new and useful Improvement in Plant-Dusters, of which the following is a specification, reference being had to the accompanying drawings.

In the aforesaid drawings, Figure 1 is a perspective view of one of these improved plant-dusters in the hands of a person using the same. Fig. 2 is an elevation of a nearly central section of the same plant-duster on a larger scale, a part of the lateral handle being broken off; and Fig. 3 is a plan of the upper end, and Fig. 4 a plan of the lower end of the same.

Letters of like name and kind refer to like parts in each of the figures.

The design of my invention is to enable fertilizers, insect-destroying substances, &c., which have the form of powder, to be conveniently and easily distributed upon plants; and it consists in a plant-duster in which are combined a vessel for containing the substance to be distributed, a reticulated bottom which is suitably journaled at the lower end of said vessel, so as to be capable of an independent rotary movement, and a handle provided for each of said parts, whereby they may be made either separately or simultaneously vibratory or stationary, substantially as and for the purpose hereinafter specified.

A is the body of a vessel having a circular vibrative sieve-like bottom, B, and a handle, C, firmly secured to the vessel-body, and extending therefrom laterally and higher than the rim *d* of the vessel.

E is a shaft secured to the central part of the sieve-bottom B, and extending therefrom through the middle part of the vessel, and held by journal-bearings, so that it can be freely turned to and fro in supports F G, secured to the vessel-body.

H is a handle fastened crosswise to the upper end of the shaft E, and arranged higher than the rim *d* of the vessel and centrally in relation thereto, so that by vibrating the handle H the shaft E and sieve-bottom B will likewise be turned to and fro about their common axis, while the vessel A can be held stationary or can be vibrated about the shaft by means of the lateral handle C, fast on the vessel.

In carrying out this invention the aforesaid parts thereof can have any suitable construction; but I generally prefer to have the support F in the form of a bar arranged diametrically across and rigidly fastened to the rim part *d* of the vessel-body, with a central journal-socket surrounding the shaft E, and in one piece with the upwardly and outwardly extending shank *i* of the lateral handle.

I also commonly prefer to have the lower support, G, Figs. 2 and 3, in the form of radial arms *j j*, having a central journal-socket fitting upon the shaft E, and made in one piece with a downwardly-extending flange, *k*, that is tightly fastened to the lower part of the vessel.

The sieve-bottom B is preferably of finely-perforated sheet metal, with its lower side supported by a rim, *l*, extending upward under the flange *k*, and in one piece with radial sieve-supporting arms *m*, having at the center an angular socket fitting on a corresponding part, *n*, of the shaft E and against a removable collar or washer, *o*, and secured to the shaft by nuts *p* on a screw-threaded end part of the shaft, so that the sieve bottom B can be easily removed for repairs, or another of different fineness secured in its place, and the collar or washer *o* changed for one of different thickness to adjust the upper surface of the sieve-bottom at different degrees of closeness to the bars *j*, which latter, with the flange *k*, measurably serve to prevent the turning of the mass of ground plaster or powder-like material in the vessel by the turning of the sieve-bottom to and fro by the handle H and shaft E, and also serve to relieve the sieve-bottom of a portion of the pressure of the weight of the powder-like material in the vessel.

A collar, *q*, Fig. 2, fast on the shaft E, over the support F, holds up the bottom B in place when the vessel is carried by the lateral handle C, as can be easily done in use, by means of a loop-like strap extending over the shoulder of the person and secured to the lateral handle at or near its shank *i*, as indicated by dotted lines at *r r* in Fig. 1. When the plant-duster is carried by the handle H the part G of the vessel-body bears on and is supported

by the washer *o* and the parts below fast on the shaft E, or the part F may bear upon and be supported by a removable pin, *s*, projecting from the shaft.

The manner of using this improved plant-duster will be apparent from the foregoing description and the accompanying drawings.

I am aware that a sifter has been heretofore devised with a cylindrical vessel and a circular vibrating sieve-bottom having its upturned rim under a downturned flange on the lower end part of the vessel, and a central rotary or vibratory crank-handle shaft fast to the central part of the sieve-bottom, and supporting and operating the latter, and held by journal-bearings in supports secured to the vessel, but without having two handles, one rigidly secured to and extending laterally from and higher than the vessel-body, and the other fastened crosswise to and upon the upper end of the said sieve-operating shaft and centrally far above the top rim of the vessel.

I do not claim herein a plant-duster consisting of a vessel for containing the article to be distributed provided with a reticulated bottom, a suspension-strap, a carrying-handle, and a horizontal handle for regulating the lateral position of said vessel attached to the upper portion thereof, such being shown in another application for patent filed by me.

What I claim as my invention is—

In a plant-duster, the combination, with a vessel containing the substance to be distributed and provided with a handle attached to its body, of an independent reticulated bottom, also provided with a handle, whereby the body and the bottom of said vessel may be either separately or simultaneously vibrated, substantially as and for the purpose specified.

In testimony whereof I hereunto set my hand, in the presence of two subscribing witnesses, this 12th day of November, 1879.

JOHN F. EDDY.

Witnesses:

AUSTIN F. PARK,

JAMES T. GOODFELLOW.