

S. H. EVERETT.
Fertilizer-Distributor.

No. 222,478.

Patented Dec. 9, 1879.

Fig. 1.

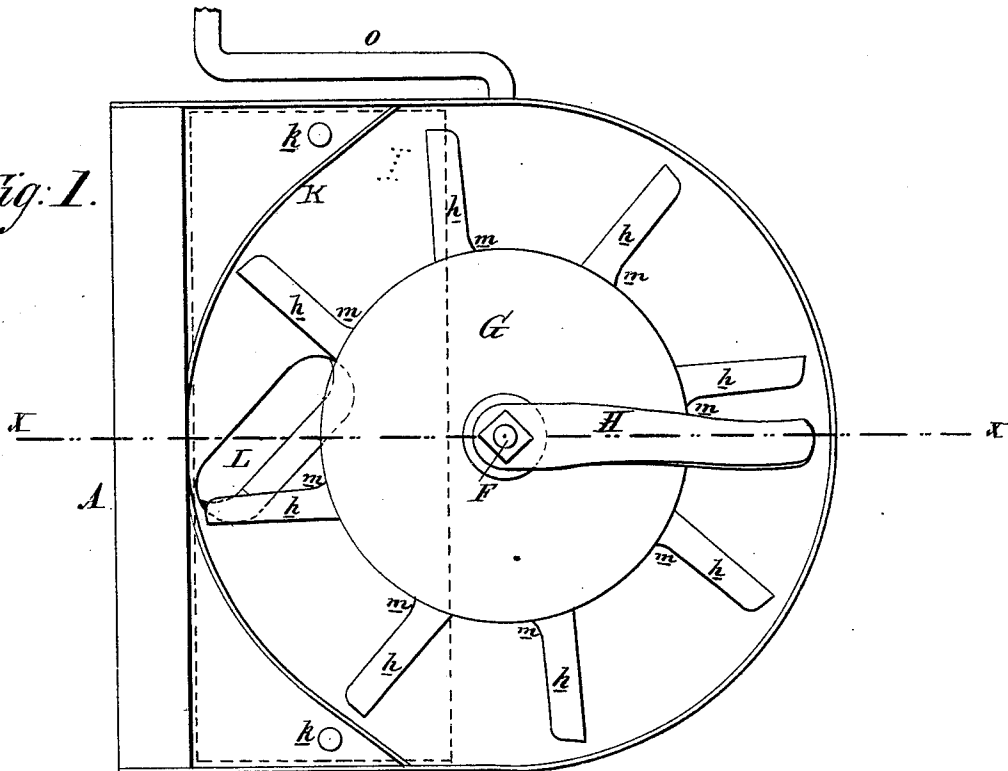
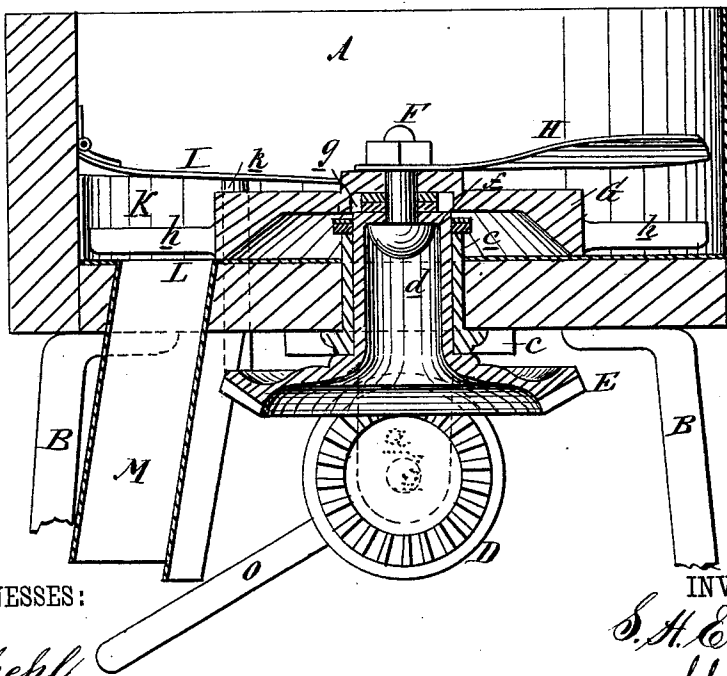


Fig. 2.



WITNESSES:

A. Schehl.
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UNITED STATES PATENT OFFICE.

SAMUEL H. EVERETT, OF MACEDON, NEW YORK.

IMPROVEMENT IN FERTILIZER-DISTRIBUTERS.

Specification forming part of Letters Patent No. **222,478**, dated December 9, 1879; application filed October 18, 1879.

To all whom it may concern:

Be it known that I, SAMUEL H. EVERETT, of Macedon, in the county of Wayne and State of New York, have invented a new and Improved Fertilizer-Distributor, of which the following is a specification.

Figure 1 is a plan of the distributor with the cut-off removed that the discharging-opening may be seen. Fig. 2 is a vertical sectional elevation of the distributor on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to provide an improved device for sowing or distributing phosphates.

The invention consists of a box in which a spoked wheel is revolved horizontally, by suitable mechanism, under a hinged adjustable shelf or cut-off and over a diagonally-arranged opening in the bottom of the box, so that the delivery of the phosphates shall be made continuous and uniform by the passage of the spokes of the wheel over the said diagonal opening.

In the drawings, A represents the box, supported on legs B, and having fastened on its under side a hanger, C, in the dependent lug *a* of which the shaft *b* of the beveled driving-pinion D is journaled, while the thimble *c* of the said hanger C projects centrally up through the bottom of the said box A.

E is a beveled-gear wheel, whose hollow axle *d* extends upward through the thimble *c*, and is held by the bolt and nut F and its own square shoulder *f* firmly in the square socket *g* of the wheel G.

The wheel G is provided with several arms or spokes, *h*, that are slightly curved on one edge, and extend horizontally from its periphery.

A nut and bolt, F, hold on the hub of the wheel G a longitudinally-twisted arm or scraper, H, that revolves with the wheel G and in contact with the upper surface of the hinged shelf or cut-off I. This cut-off I is a flat plate hinged to the inner face of the square side of the box A, and it is vertically adjust-

able by means of the screws *k*, that project upward through the bottom of said box A.

The curved plates K cut off the corners of the box A, and form, in connection with the curved side of the said box, a circular space, over which the arms *h* completely sweep when they are put in motion.

In the bottom of the box A is the elongated discharge-opening L, made a little longer than an arm, *h*, and so located that as the arms *h* sweep over it the shoulder *m* of any one arm *h* will reach the inner edge of the said opening L before the preceding arm has uncovered the opposite and outer edge, so that when in operation one arm *h* is constantly moving over the said opening L and discharging the phosphate through it.

Fastened under the opening L is a spout, M, for the delivery of the phosphate.

It is well known that the ground mineral and other phosphates are ordinarily of so sticky and tenacious a character that they are with difficulty distributed in the usual manner; but by the use of this device any of these phosphates can be distributed or sown with perfect regularity and in a continuous flow.

In operating the device, the cut-off I is adjusted to regulate the depth of the space between it and the bottom of the box A, in order to govern the quantity of phosphate that each arm *h*, as it revolves, shall force through the opening L. Then the phosphate is put into the box A upon the cut-off I, and the operator turns the crank O, whereby, through the action of the gears D and E, the arms *h* and scraper H are put in motion, and at each revolution the scraper H sweeps a quantity of the phosphate from the cut-off I, and the arms *h* force it through the opening L, the rate of delivery being governed by the speed with which the crank O is turned.

I do not confine myself to the precise driving mechanism herein shown, for it is obvious that other driving devices will accomplish the object sought; but,

Having thus described my invention, I claim

as new and desire to secure by Letters Patent—

1. The combination of screws *k* with cut-off *I*, substantially as and for the purpose described.

2. The within-described phosphate-distributor, consisting of a box, *A*, provided with a diagonal discharge-opening, *L*, partitions *K*, and cut-off *I*, in combination with a scraper,

H, and a wheel, *G*, provided with spokes *h*, substantially as herein described, said wheel *G*, arms *h*, and scraper *H* being driven by beveled-gear wheels, as herein set forth.

SAMUEL H. EVERETT.

Witnesses:

WM. H. SOUTHWICK,
JOHN STRONG.