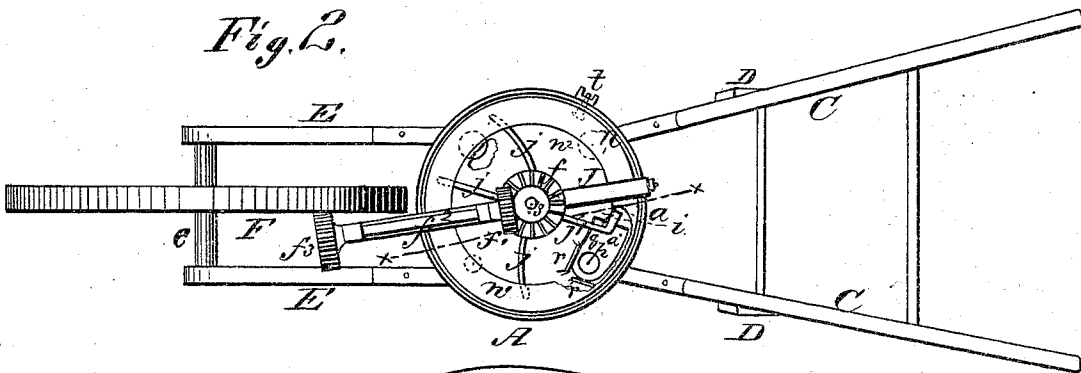
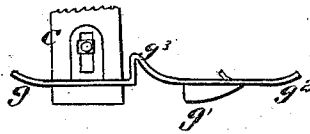
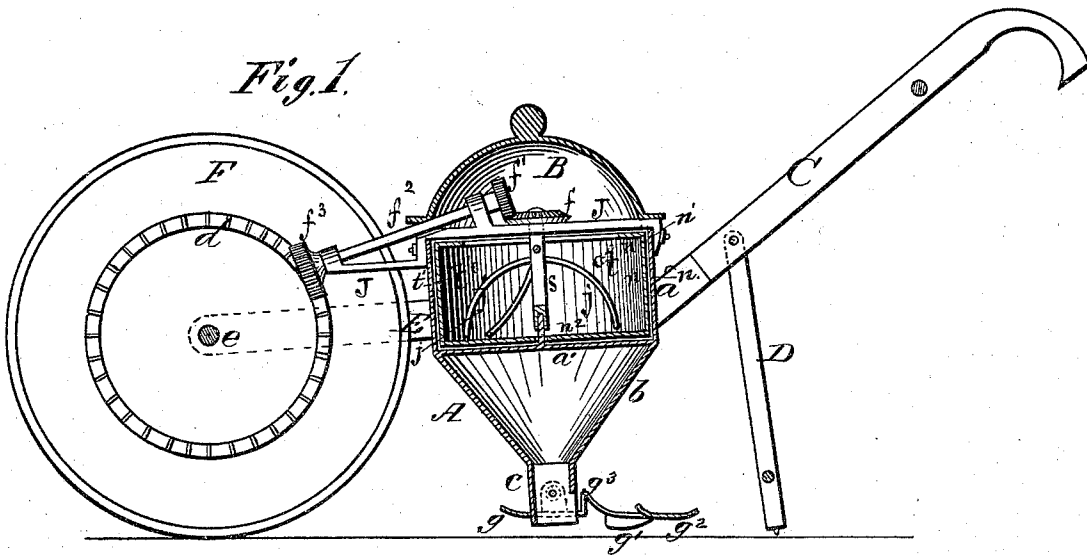


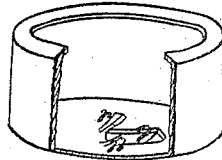
E. G. MATTHEWS.
Seed-Planters.

No. 147,671.

Patented Feb. 17, 1874.



Witnesses.
E. H. Bates.
George E. Upland.



Inventor.
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UNITED STATES PATENT OFFICE.

ELBRIDGE G. MATTHEWS, OF OAKHAM, MASSACHUSETTS.

IMPROVEMENT IN SEED-PLANTERS.

Specification forming part of Letters Patent No. 147,671, dated February 17, 1874; application filed January 3, 1874.

To all whom it may concern:

Be it known that I, ELBRIDGE G. MATTHEWS, of Oakham, in the county of Worcester and State of Massachusetts, have invented a new and valuable Improvement in Seed-Planters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side view of my seed-planter. Fig. 2 is a plan view of the same.

This invention has relation to machines for planting various kinds of garden and field seeds; and it consists in a circularly-adjustable seed-box having a single hole through its bottom, provided with arresting-lugs, in combination with a cylindrical receptacle having a number of holes of different sizes through its bottom, for different kinds and sizes of seeds, and also having a conical conductor formed on it. It also consists in rotating curved agitators, arranged inside of the seed-box, in combination with a seed-discharging arm, for insuring a uniform discharge of the seed.

The following is a description of my improvements:

In the annexed drawings, A represents a cylindro-conical box, consisting of a cylinder, *a*, an inverted cone-shaped discharger, *b*, and a flattened tubular marker, *c*. The cylindrical portion *a* is constructed with a bottom, *a'*, through which a number of perforations, *p*, are made, which are of different sizes for different kinds of seeds. Inside of the box *a* is a cylindrical seed-vessel, *n*, which has one hole, *q*, through its bottom, rising from one end of which are two lugs, *r r*, that are separated by a short space. The hole *q* is oblong, and larger than the largest hole through the bottom *a'* of the box *a*. The upper end of the seed-vessel *n* has an annular flange, *n'*, secured to it, on which will be printed the names of the different kinds of seeds which the machine

is capable of planting, which names are arranged over the proper holes *p* through the bottom *a'* of box *a*. The seed-vessel *n* is circularly adjustable, for bringing its hole *q* over any one of the holes *p*, and by means of a screw, on which is a thumb-nut, *t*, the seed-vessel can be secured in any desired position. B is the removable cover to the seed-vessel, and *s* is a centrally-arranged shaft, carrying four curved arms, *j* and *j'*. These arms all sweep over the hole *q*, and their ends pass between the lugs *r r*, which latter arrest the seeds, and allow the arms *j* to spring over them. The spring-arm *j* has a flat foot-piece, *i*, formed on its lower end, which sweeps around in the same path as the ends of the arms *j*, and presses the seeds through the holes *p q*. The falling seeds are conducted into the furrow made by the flattened tube *c*, through this tube and the cone *b*, and are covered by means of wings *g¹* and a pressure-plate, *g²*. The plate *g²* and the wings *g¹* are connected to a gage-shoe, *g*, by means of a bent spring, *g³*. These parts are adjustably applied to the tube *c*, for regulating the depth it is desired to plant the seeds. C C designate handles, which are secured into sockets formed on the box A, and which have two props, D D, connected to them by pivots. As the machine has only one supporting-wheel, F, the props are necessary to keep it in an upright position when the handles are not held by an attendant. E E are two parallel arms, which afford bearings for the shaft *e* of the wheel F; and *d* represents a concentric circle of teeth, with which a pinion spur-wheel, *f³*, engages, which pinion is keyed on the shaft *f²* of another pinion, *f¹*. The shaft *f²* has its bearings in a frame-bar, J, which bar is rigidly secured to the top of box A, and extends across this box, and affords an upper bearing for the shaft *s*. The spur-wheel *f* on shaft *s* engages with the pinion *f¹* on shaft *f²*, and thus receives rapid rotation from wheel F.

What I claim as new, and desire to secure by Letters Patent, is—

1. The cylindrical and adjustable vessel *n*, having the annular flange *n'* and a perforation

through its bottom, and applied inside of the cylindrical portion of the box A, in combination with the perforated bottom *a'* and revolving stirrers and dischargers *j j'*, substantially as described.

2. The foot *i*, on the seed-discharging arm *j'*, combined with the agitators *j*, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ELBRIDGE G. MATTHEWS.

Witnesses:

ARTHUR D. McCLELLAN,
HENRY BACON.