E. J. DICKEY.

Seed-Planter.

No. 6,049. Patented Jan. 23, 1849.

Fig. 1.

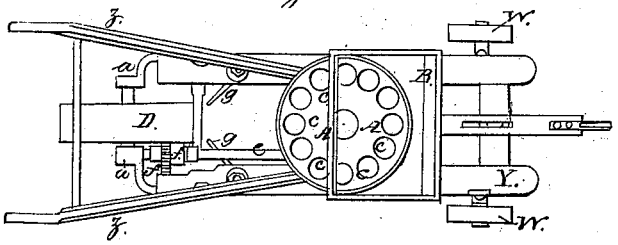


Fig. 2.

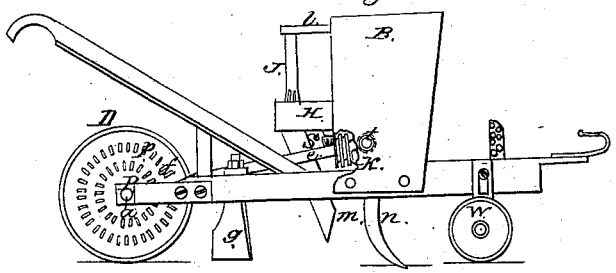


Fig. 3.

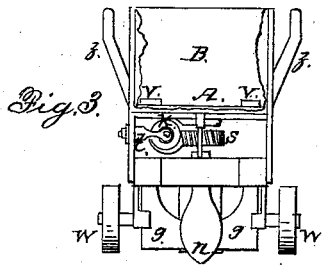
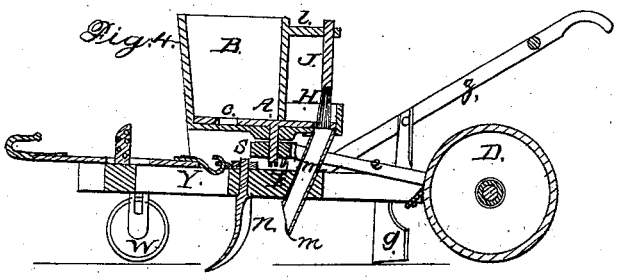


Fig. 4.



UNITED STATES PATENT OFFICE.

E. J. DICKEY, OF HOPEWELL COTTON WORKS, PENNSYLVANIA.

IMPROVEMENT IN SEED-PLANTERS.

Specification forming part of Letters Patent No. **6,049**, dated January 23, 1849.

To all whom it may concern:

Be it known that I, EBENEZER J. DICKEY, of Hopewell Cotton Works, in the county of Chester and State of Pennsylvania, have invented a new and Improved Corn-Drill; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a top view; Fig. 2, a side elevation; Fig. 3, an end elevation with a portion of the seed-box broken out, and Fig. 4 is a vertical longitudinal section.

Similar letters indicate like parts in all the figures.

The nature of my invention consists in constructing a corn-drill or seed-planter in such a manner that but a single kernel will be deposited at a time in the drill.

y y are the side pieces of the truck-frame of my corn-drill, connected to the bearing-wheels *w w* and main driving-wheel D, as represented in Figs. 1 and 2.

B is the seed-box, secured to the side pieces, *y y*, of the truck-frame.

H is a semicircular cup, secured to the rear side of the base of the seed-box.

A is a circular plate passing through an aperture under the rear side of the seed-box B, and resting on the bottom of the seed-box and cup H, as represented in Figs. 1 and 4.

c c are a series of apertures through the plate A, near its periphery. The thickness of the plate A and the size of the apertures *c c* are such that but one kernel of corn will rest in the apertures at once.

m is an inclined conducting-tube, inserted through the base of the cup H in such a position that the apertures *c c* will pass over the mouth of the same as the plate A is revolved. Recesses *v v* (see Fig. 3) are cut out of the lower edge of the back side of the seed-box B, immediately over the series of apertures *c c* in the plate A, and corresponding with the same in width and depth.

J is a vertical brush descending from the arm *l*, projecting from the rear side of the seed-box, and is placed immediately over the mouth of the conducting-tube *m*.

n is the cultivator-point for opening the drill for the reception of the corn, placed immediately in front of the conducting-tube *m*.

g g are wings in the rear of the conducting-tube for closing up the drill and covering the corn.

The circular plate A is revolved as follows:

X, Fig. 4, is an axle descending from the center of the plate A through the base of the seed-box.

s is a cog-wheel on the lower end of the axle X.

e is an inclined shaft, having an endless screw, *k*, on its front end working into the cog-wheel *s*, and a pinion, *f*, on its rear end working into and driven by either of the series of cogs *p p*, projecting from the side of the central driving-wheel, D. The pivot at the front end of the shaft *e* works in the box *t*, and the one at its rear end is let into one of the jaws *a*, which receive the journal of the axle of the driving-wheel D.

The operation of my corn-drill is as follows: When the plate A is put in motion, the seed-box being previously filled with corn, each aperture *c* will be filled in passing through the seed-box. The recesses *v v* in the rear side of the box are of such a size that they allow the kernel deposited in each of the recesses *c c* to pass through the same without friction, and frequently an extra kernel will pass out into the cup H, resting on the one deposited in one of the apertures *c*. When the apertures *c*, filled with corn, reach the mouth of the conducting-tube *m*, the brush J brushes back any surplus corn that may rest upon the revolving plate and forces the kernel in the aperture through the same into the conducting-tube *m*, which deposits the kernel in the drill immediately in the rear of the cultivating-point *n*. The wings *g g* then close the drill, and the broad face of the driving-wheel D passes over and presses down the surface of the same. Should there accumulate a surplus quantity of corn in the lateral cup H, it will fall into the recesses *c c* in the revolving plate after they have passed the mouth of the tube *m* and the brush J, and will be conducted through the recess *v* on that side back into the seed-box B.

I adapt my machine to the planting of cot-

ton or other seeds by varying the size of the apertures in the revolving-plate A and making the recesses *v v* in the lower edge of the rear side of the seed-box of a size corresponding with the same.

The pinion *f* is secured to the axle *e* in such a manner that its position can be readily adjusted so as to work into either of the series of cogs *p* on the wheel D, and thereby vary the speed of the revolving plate A and regulate the distance between the kernels or seeds deposited in the drill. I generally place five sets of cogs (more or less) on the side of the driving-wheel D.

z z are the handles for guiding my improved corn-drill.

It will be perceived that the person who guides the corn-drill can at all times watch the operation of the same, and can detect and remedy any imperfection or irregularity in its movements, which is an important feature of my invention, distinguishing it from all other seed-planters.

Having thus fully described my improved corn-drill or seed-planter, what I claim therein as new, and desire to secure by Letters Patent, is—

The combination and arrangement of the grain-box B, the cup H, the rotating perforated plate A, the elastic brush J, and the recesses *v v* in the lower edge of the rear side of the grain-box, placed in such a manner that the operation of the said parts is brought immediately under the eye of operator, for causing a single kernel to be deposited at a time in the drill as the machine is moved forward, substantially in the manner herein set forth.

E. J. DICKEY.

Witnesses:
Z. C. ROBBINS,
A. STEINWEHR.