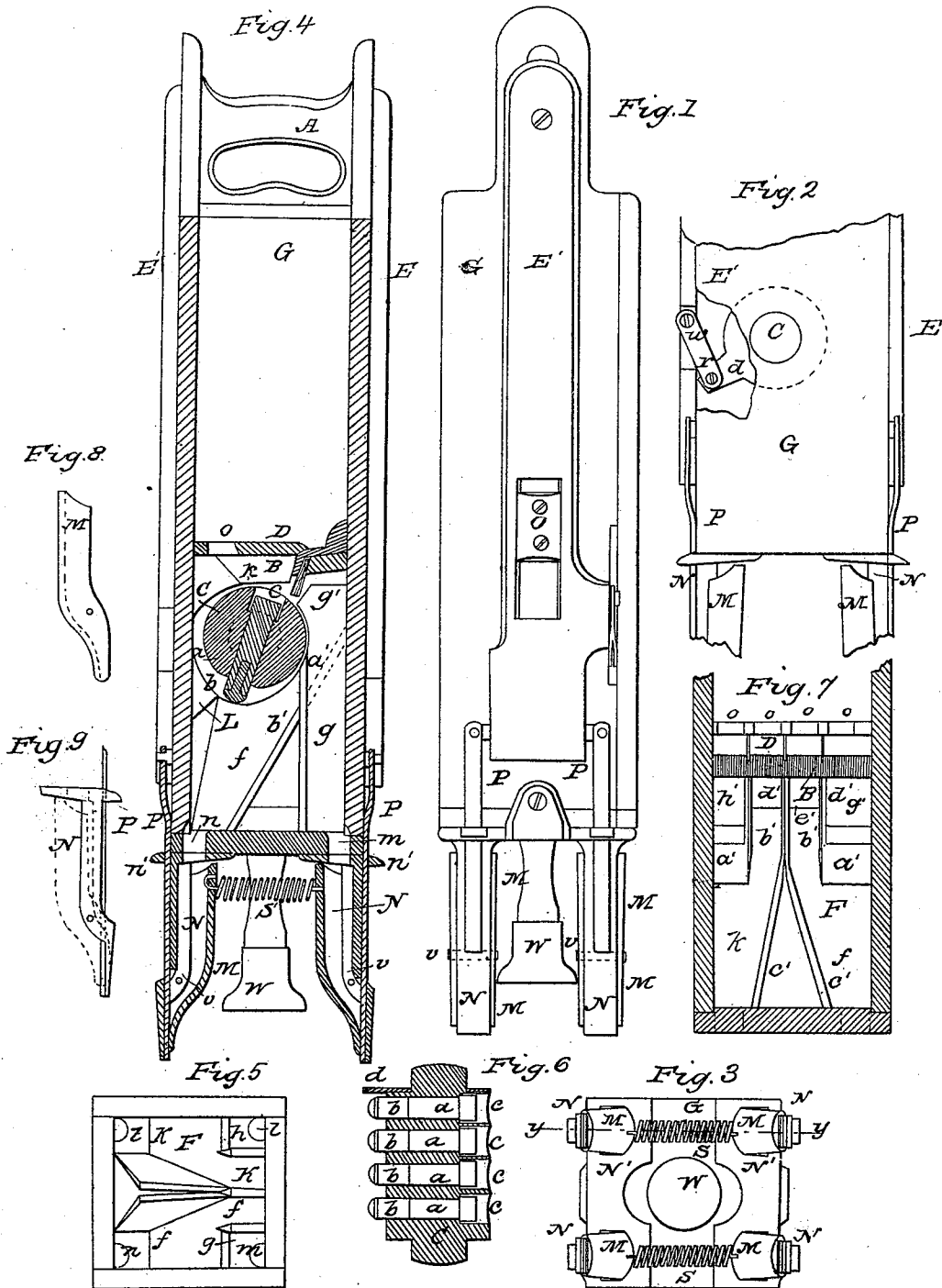


S. L. DENNEY.

Hand Seeder.

No. 15,035.

Patented June 3, 1856.



UNITED STATES PATENT OFFICE.

SAMUEL L. DENNEY, OF LANCASTER, PENNSYLVANIA.

IMPROVEMENT IN HAND CORN-PLANTERS.

Specification forming part of Letters Patent No. 15,025, dated June 3, 1856.

To all whom it may concern:

Be it known that I, SAMUEL L. DENNEY, of the city and county of Lancaster, and State of Pennsylvania, have invented a new and Improved Hand Corn-Planter; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification—

Figure 1 being a side elevation; Fig. 2, an elevation of a portion of the front side of planter, with a small part of the casing removed; Fig. 3, a bottom view of the planter; Fig. 4, a vertical section in the line *yy* of Fig. 3; Fig. 5, a top view of a four-way conducting-funnel; Fig. 6, a sectional view of the planting-cylinder C detached from the planter; Fig. 7, a vertical section of the lower portion of the planter, showing in section the perforated false bottom D of the seed-box, and side views of the brush B and of the four-way funnel F; and Figs. 8 and 9 are views representing one of the planting-receptacles detached.

Similar letters indicate like parts in all the figures.

The respective movements of my improved planter are combined with a rectangular box, G, and with each other in such a manner that four separate kernels of corn are deposited at an equal and proper distance from each other at each downward movement of said planter, substantially as hereinafter set forth. Eduction-apertures *m n l t* are formed in each angle of the bottom of the box G, which communicate with improved planting-receptacles placed underneath them, and combined with the bottom of said box and with each other in the manner represented in the accompanying drawings.

Each planting-receptacle is composed of an incising-tooth, N, combined with a hinged vibratory pouch-piece, M. The incising-teeth N of the planting-receptacles descend from the plates N' N', which are bolted to the bottom of the box G. Each pouch-piece M is hinged to its respective incising-tooth N by means of the pivot *v*, which passes through apertures in the lips of said pouch-piece and through an eye-hole in said tooth. The lips of the pouch-pieces M of the planting-receptacles so closely embrace the edges of the incising-teeth that they prevent the soil from entering said receptacles and obstructing the movements of said pouch-pieces. The upper ends of each pair of pouches

are combined with each other by means of a spring, S, which causes the lower ends of said pouches to perfectly close the lower ends of the planting-receptacles.

A piston-rod, P, is combined with each planting-receptacle by passing through an aperture in the outwardly-projecting flange *n'* from the upper end of each tooth N, and through an aperture in the shoulder formed by the offset in said tooth, as shown in Fig. 4. Each pair of the piston-rods P P is jointed to a sliding slat, E, which works on the outer side of the box G. The said sliding slats E E are connected to each other at their upper ends by the handle A, which works in slots in the upward-projecting portions of the sides of the box, as shown in Fig. 1. The lower ends of the said sliding slats E E are guided by means of the lugs O projecting from the sides of the box G and working in vertical slots in said slats.

A four-way funnel, F, rests upon the bottom of the box G, whose four ways *f g h k* are of such a shape that at their upper ends they each receive the kernel of corn that may be ejected from one of the mouths of the perforations in the cylinder C and conduct the same to the aperture in the bottom of the box leading to the appropriate planting-receptacle. The kernels of corn will be ejected from the mouths of the two outer perforations in the cylinder C through the apertures *g' h'*, Fig. 7, above the upper ends of the vertical partitions *a' a'* of the funnel, and, falling in the vertical passages *g h* to the apertures *l m* in the bottom of the planter, they will pass into the planting-receptacles placed beneath said apertures. The kernels of corn will be ejected from the mouths of the central perforations in the cylinder C into the funnel-ways *f k*, formed by the vertical partitions *d' e' d'*, the inclined boards *b' b'*, and the diverging partitions *e' e'*, which will conduct the said kernels to the apertures *n t* in the bottom of the planter, leading to the planting-receptacles situated beneath said apertures.

The bottom D of the seed-box is situated a short distance above the cylinder C, and a suitable number of perforations, *o o*, are formed in said bottom to admit the kernels of corn freely to the cylinder C; but the said perforations should not be of such a size as to allow so great a quantity of corn to rest upon said cylinder as to obstruct its free movements.

When the cylinder C is in the position shown

in Fig. 4 the weight of the pistons *a a a*, which work loosely in the diametrical perforations in said cylinder, will cause them to drop to the positions represented in said figure and form cups above the upper ends of said pistons for the reception into each of a kernel of corn. A brush, *B*, descending from the bottom *D* of the seed-box to the periphery of the cylinder *C*, shuts off the space above the said cylinder from the four-way funnel and prevents the passage of any corn to said funnel save what is carried forward in the mouths of the perforations in said cylinders.

To insure the instant ejection of the kernels of corn from the cups in the cylinder *C*, the lower ends of the pistons *a a a* are made to project a short distance below the periphery of said cylinder, and a curved cam-piece, *L*, is secured to the side of the box *G* in such a position that when the said cylinder is turned upon its axis to carry the seed-cups under and beyond the brush *B* the said lower ends of the pistons *a a a* will strike against the said cam-piece *L* and be forced inward a sufficient distance to project the kernels of corn from the respective seed-cups of which the said pistons form the bottom.

An arm, *d*, projecting from one end of the cylinder *C*, is jointed to one of the sliding-slats *E* by means of the bridle-piece *e*.

It will therefore be perceived that when the

slides *E E* and the handle *A* are elevated to their highest position the said movement will turn forward the cylinder *C* to discharge the kernels of corn from the seed-cups, and will elevate the piston-rods *P P* a sufficient distance to enable the kernels of corn to fall to the bottom of the planting-receptacles and below the lower end of each of said piston-rods. The downward movement of the said slides and handle will cause the piston-rods to descend and open the pouch-pieces of the planting-receptacles and discharge therefrom the kernels of corn, and at the same time the cylinder *C* will be thrown into the position shown in Fig. 4, to receive another charge of corn into the seed-cups for the next forward movement of said cylinder.

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

The combination of the planting-cylinder *C*, the pistons *a a*, and the funnel *F*, substantially in the manner and for the purpose herein set forth.

The above specification of my new and useful improvement in hand planting-machines signed and witnessed this 21st day of March, 1856.

SAML. L. DENNEY.

Witnesses:

Z. C. ROBBINS,

ARTH. C. WATKINS.