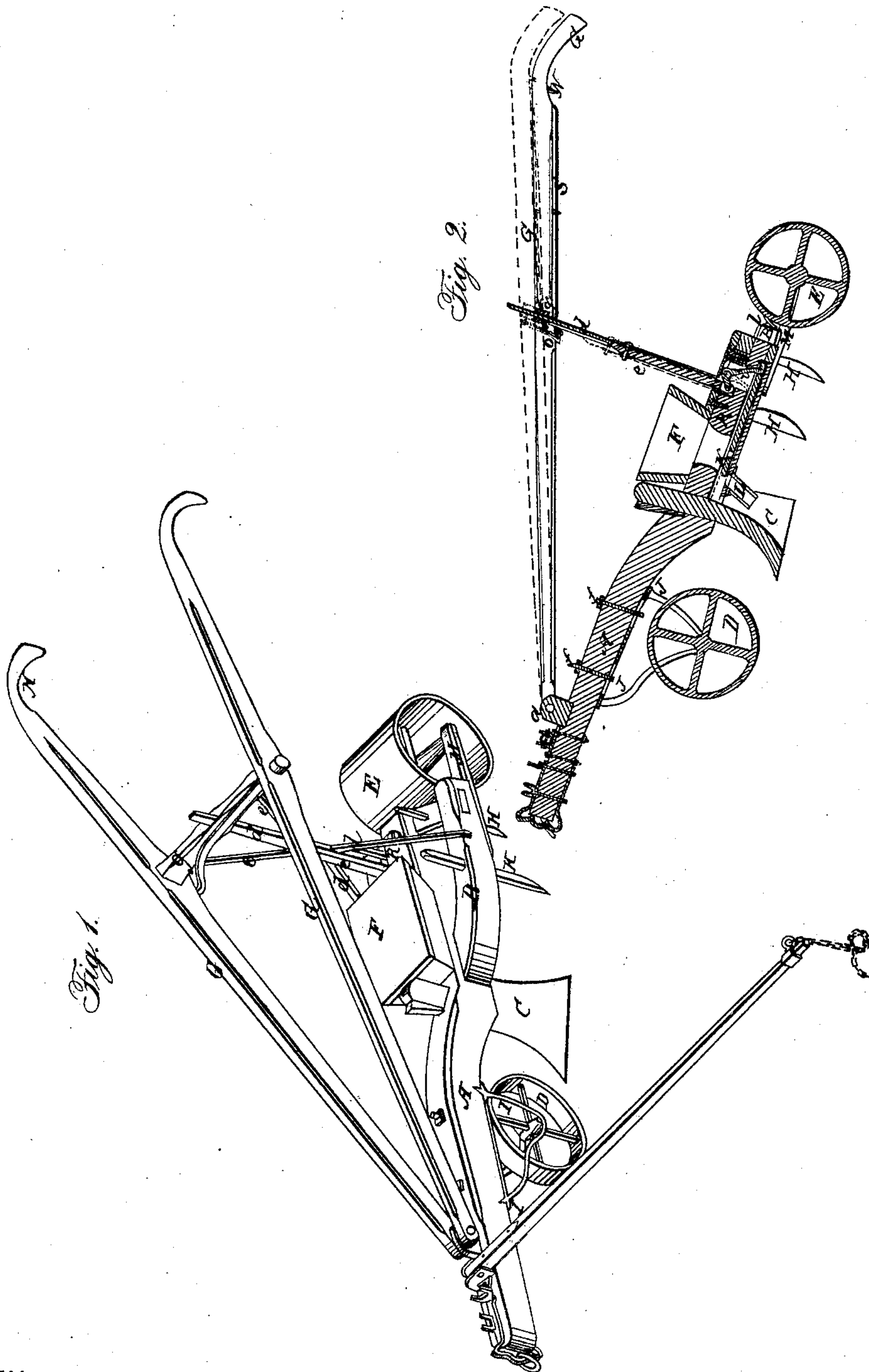


J. ROBINSON.

Seed Planter.

No. 27,929.

Patented Apr. 17, 1860.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN ROBINSON OF ELI, OF SHARPTOWN, MARYLAND.

IMPROVEMENT IN SEED-PLANTERS.

Specification forming part of Letters Patent No. 27,929, dated April 17, 1860.

To all whom it may concern:

Be it known that I, JOHN ROBINSON OF ELI, of Sharptown, of Somerset county, in the State of Maryland, have invented certain Improvements in Seed-Planters; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in certain improvements in seed-planters, to be hereinafter more fully described.

To enable others skilled in the art to make and use my invention, I shall proceed to describe its construction and operation, reference being had to the accompanying drawings, in which—

Figure I is the perspective and Fig. II the sectional view. In Fig. II the black lines show the machine, as hereinafter described, with the handles G G down and the valve *k* shut. The red lines show the handles up and the seed just dropped.

A is the beam, secured to the frame-work B and supported by the wheels D and E.

F is the seed-hopper, secured on the frame-work at its junction with the beam, containing the valve or slide *k*, to be operated, as hereinafter described, by the bars *e* and *d*.

L is the delivery-spout, through which the seeds drop out of the hopper when the handles are up.

D is the guiding-wheel, hung in an adjustable stand, I I, and fastened to the beam by bolts *f f*.

C is the share in front of the hopper, which can be raised and lowered at pleasure, being kept in position by means of a wedge.

H H are the covering-blades, secured to frame in rear of the share.

E is the covering-roll, the axle of which is mounted between two horizontal arms, M M, attached in the rear beneath the frame by screws, and *l* its scraper, at right angles to the arms and parallel to the plane of the roll E.

R is the valve-box.

b is a shaft at right angles to the beam, pivoted at its butt to a shoe, *b'*, in such manner as to extend laterally on either side. On the extremity of this shaft is arranged a sliding collar, which may be adjusted by a scale to any point on said shaft, and from which is

pendent a chain of suitable length and weight to mark its course.

The handles G G are hinged at the point *a* on the beam A, and farther up united by the horizontal cross-bar *g*. In the center of this bar *g* is formed a slot, through which passes the steadying-rod *d*. This rod *d* diverges in the middle into two parts, fastened to the opposite sides of the frame-work B. From each side of the cross-piece *g* descend two arms, *e e*, of a bifurcated rod, which concentrate about half-way between bar *g* and box R, continuing down into box R, and attached at its lower end to a crank-lever, *i*. Said lever *i* is pivoted at its angle to a stationary stud, (see Fig. 2,) and its lower extremity, extending into a slot in the rear end of valve *k*, is made to impart a reciprocate motion to said valve, as will be presently explained more fully. On the front side of cross-bar *g* is located a clutch-rod, *o*, secured at one end to the face of said bar, so that its other end has a continual tendency to spring from it, while the other is connected with a wire, *s*, passing immediately beneath the right-hand operator's handle G, and connected with a trigger or finger-lever, N. At the center of said clutch-rod *o* is a projecting pin, *p*, which is accommodated by a hole in the upper end of the rod *d*. I have already described the method by which the handles are made to operate (through the medium of bar *d* and angle-lever *i*) the seed-valve. When the operation is to be checked, (which is frequently necessary,) or, in other words, when the handles G G are to be locked, so as not to affect said machine, this is accomplished by means of the clutch-rod *o* and its attachment (above alluded to) in the following manner:

If the seed-planter is desired to run without dropping seeds, the operator has only to pull back with the forefinger of the right hand trigger N, which then, through the rod *s*, draws the clutch-rod *o* in contact with the cross-bar *g*, causing pin *p* to pass through the hole in bar *d*, whereby this bar is firmly locked with the bar *e*.

The machine as described is so constructed that it opens the furrow by the share C, drops the seed from the hopper F through the valve *k* whenever the operating-handles G G connecting with the rod *e*, fastened as described to the cross-beam *g*, are raised. The harrows

H H cover the seed up, after which the roll E, which is kept constantly clean by the scraper I, smooths the soil over. The shaft b in front of the beam A marks even distances at right angles to the furrows by the chain trailing on the ground, as described, while the indicating or guiding wheel D drops successively into each of the cross-furrows, thus denoting to the operator the exact time to lift the handles for depositing the seed. The share which opens the furrows can be raised or lowered at will, so as to cut any desired depth without variation, and the same may be done with the covering-harrows, while the stand I I, which carries the indicating or guiding wheel D, adjust-

able as before described, may be arranged, in accordance with the speed of the motor, at a greater or less distance from the share C.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows:

The combination of the clutch-rod o and wire s with trigger N at the handle G, the whole arranged and operating in connection with the adjustable indicating-wheel and dropping devices, substantially as described.

JOHN ROBINSON OF ELI.

Witnesses:

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