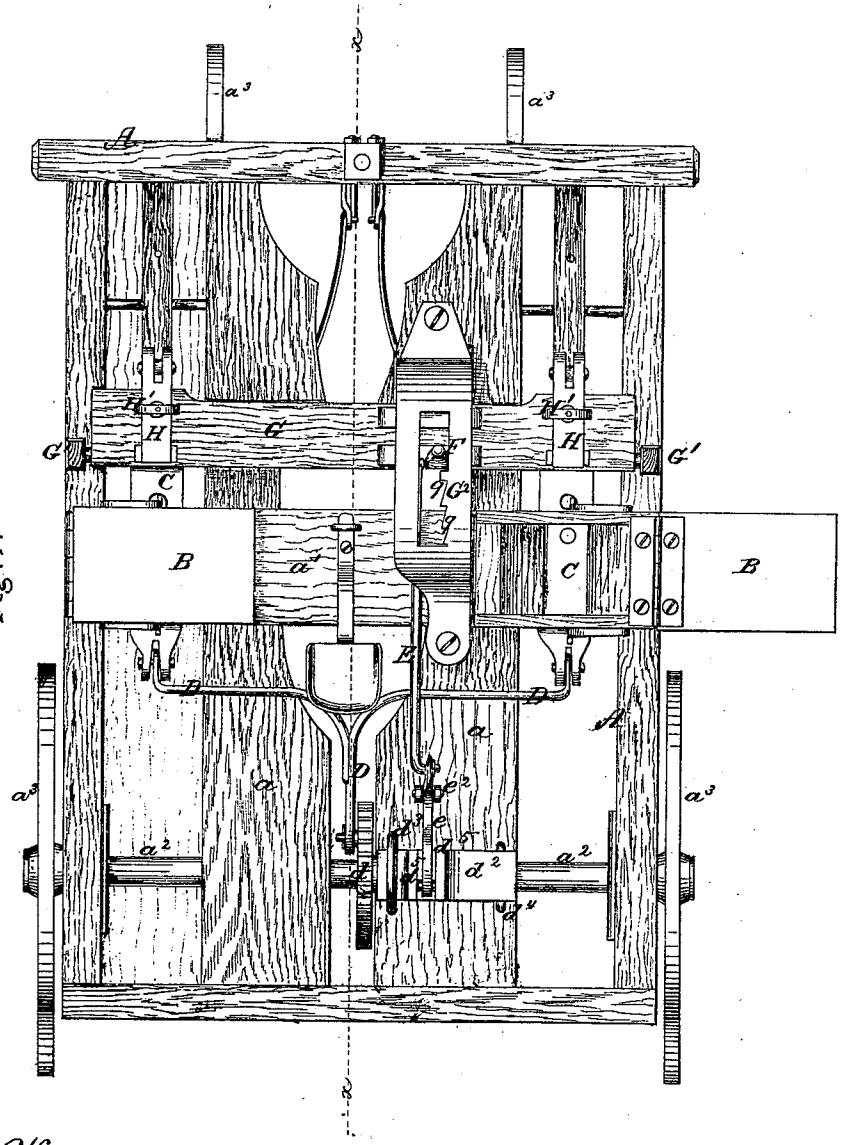
L. Becker,

2. Sheets. Sheet. 1.

Corn Planter.

No. 111,510. Patented Feb. 7. 1871.

Fig. 1.



Witnesses:

Herm. Lauten.

Fred. Artos

Inventor:

Leander Becker.

2. Sheets, Sheet 2.

L. Becker,

Corn Planter.

No. 111,510 Patented Feb. 7, 1871.

Fig. 2.

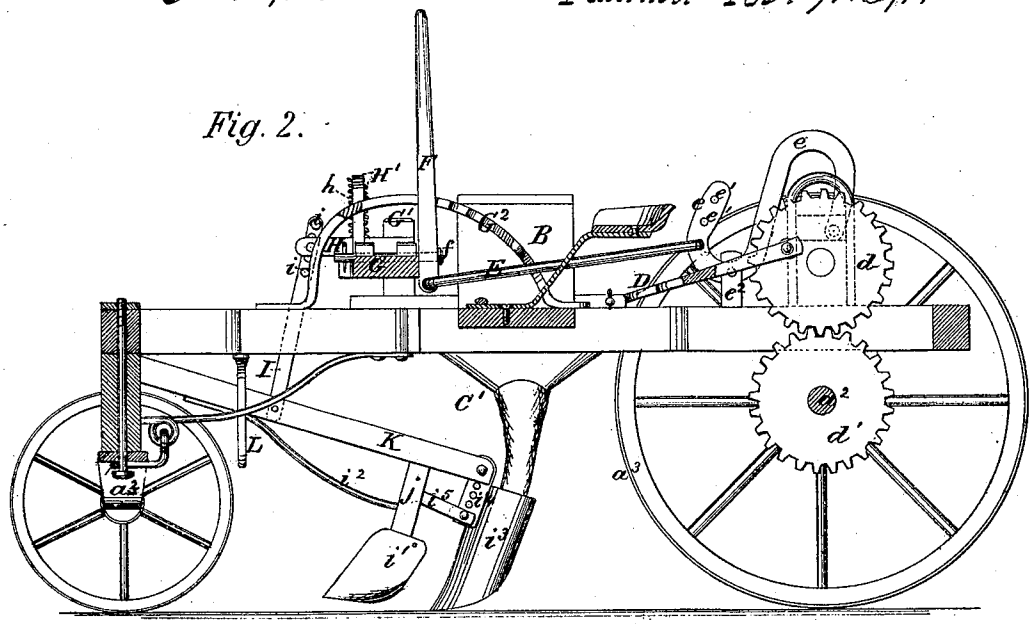
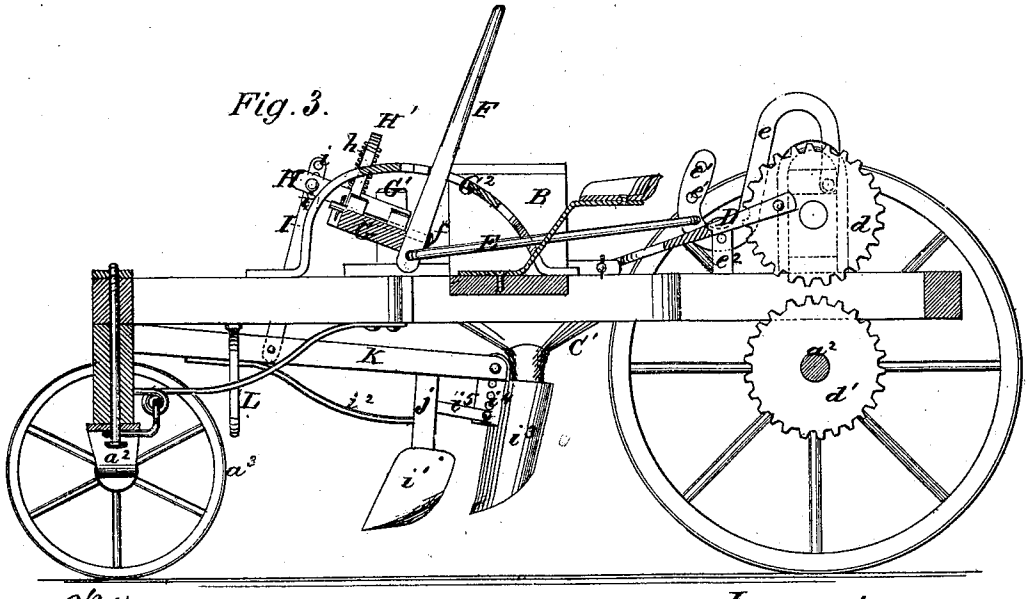


Fig. 3.



Witnesses:

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LEANDER BECKER, OF JACKSON TOWNSHIP, PENNSYLVANIA.

Letters Patent No. 111,510, dated February 7, 1871.

IMPROVEMENT IN CORN-PLANTERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, LEANDER BECKER, of Jackson township, in the county of York and State of Pennsylvania, have invented a certain new and useful Improvement in Corn-Planters; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing forming a part of the same, and in which—

Figure 1 represents a plan view of my invention.

Figures 2 and 3, sheet No. 2, are longitudinal sections thereof, taken through the line *x x* of fig. 1.

This invention relates to an improvement in corn-planters, and consists of devices, to be hereinafter fully set forth, by means of which the cultivator-teeth or shovels, the corn-drills and spouts, are raised or depressed, and the agitator-bars, with holes for feeding the corn to be planted to the seed-spouts, are simultaneously thrown in and out of operation as the above parts are raised or depressed, and of devices by means of which the corn-drills and cultivator-shovels or teeth may be set at any desired angle or inclination with the line of draft, and also allowed to readily yield vertically should they be brought into contact with obstacles.

Similar letters of reference in the several figures indicate corresponding parts of my invention.

To enable those skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, which is as follows:

In the accompanying drawing, consisting of sheets Nos. 1 and 2—

A represents a frame rectangular in form, and supplied with two longitudinal bars *a a*, placed a short distance apart, and transverse bar a^1.

The frame, which is mounted upon the axles a^2 a^2, supplied with the wheels a^3 a^3, is secured to the former in the ordinary manner.

B B are the boxes or receptacles for the corn, secured upon the transverse board a^1, and furnished at the top with hinged lids and at the bottom with passages for the corn.

C C are the agitator-bars, which are also supplied with passages for the corn, which, when the said bars are operated, will be made to come in contact with the openings in boxes B B, allowing the seed in the said boxes to pass through them and enter the corn-spouts *c' c'*, which are secured to the lower side of the board a^1, having openings through them.

D is a connecting-bar, having the ends of each of its right-angular portions attached to the agitator-bars C C in a suitable manner, and the end of its handle or central portion connected to a pinion, *d*, near its periphery, as seen in figs. 2 and 3.

The pinion *d* gears with another pinion d^1, firmly secured to the rear axle.

It is the object of the connecting-bar D, which receives motion through the pinions *d* d^1, to operate the agitator-bars C C.

The axle of the pinion *d* has its bearing within a journal-box d^2, which is secured to one of the boards *a* of frame A by means of staples d^3 and d^4, so as to allow it to have vertical motion, or nearly so, the object of which being to allow the pinion *d* to be disengaged from the pinion d^1 on the rear axle.

E is a connecting-bar, bent or curved at each end, and entering apertures in the lever F and an S-shaped bar, *e*, which is provided with a series of apertures, *e' e'*, the object of said apertures *e' e'* being to permit the bar E to be attached to the S-shaped bar *e* at various points, in order that the pinion *d*, to the axle of which it is fastened by the journal-box d^2, may be elevated at different heights.

The bar or lever *e* is loosely secured at one end to the journal-box d^2 by means of a small bar passing through an aperture in said bar *e* and entering recesses cut in shoulders d^5 d^5, formed on the said journal-box.

The lever *e* has its fulcrum in an upright, e^2, fastened to one of the boards *a*.

The lever F, which is connected with the S-shaped bar or lever *e* by the connecting-bar E, as already described, has its fulcrum upon the revolving bolt *f*, passing through the transverse pivoted bar G, to which it is keyed, and is for the purpose of both throwing into and out of gear the pinion *d* with the pinion d^1, communicating motion, and elevating or depressing the bar G, carrying the cultivator-shovels, consequently giving a like motion to the said shovels or teeth.

The ends of the pivoted bar G are reduced, forming projections thereon which enter apertures in the uprights G^1, thereby allowing said bar to be freely operated or raised and depressed.

Through the elongated, slotted portion of the curvilinear metal bar G^2 passes the lever F, which can be held therein at any desired point by means of the serrations *g g* cut therein, see fig. 1. This bar G^2 is fastened to one of the bars *a* of the frame A.

H H are short bars or blocks, pivoted at one end to the upper side of the long bar G, and supplied at their opposite ends with recesses to receive the upper ends of the bars I I, supplied with a series of apertures, *i i*.

Embracing the blocks or bars H H, and entering the bars G, are staples H' H'.

h h are spiral springs, surrounding pins passing through apertures in the blocks H H, and confined at their upper ends by means of the staples H' H', and pressing at their lower ends against the upper side of the said blocks, the object of said springs being to allow the cultivator-teeth and standards to readily yield should they come in contact with any obstacle

while in operation, they being connected to the blocks H H having said springs.

K K are the cultivator-standards or drag-bars, which are recessed at their outer or upper ends to receive projections (not shown) secured to the lower side of the front part of the frame A, they being held thereto by pins, and suspended from the blocks H H by means of the perforated bars I I. By means of the perforations in the bars I I and pins the cultivator-standards K K can be placed at any angle or inclination with the line of draft, making a shallow or deep furrow by the shovels i^1 i^1 attached to the standards K K at a point near their lower ends, and firmly held thereto by a metallic brace, i^2 i^2, and legs or bars j j. If the ground be of a soddy character the shovels i^1 i^1 will cut it, and, followed by the drill i^3, which protects the grains of corn, they will carefully be deposited in the proper place.

The drills i^3 i^3, which receive the corn from the spouts C' C', are supplied with a series of apertures, i^4 i^4, by means of which and pins they are connected to the standards K K and metallic braces i^5 i^5, said braces being fastened at their opposite ends to the legs j j of shovels i^1 i^1. They can also, by means of these apertures, be placed at any desired point above or below the plane of the lower or under side of the shovels.

L L are pendent braces attached to the frame A, and embracing the cultivator-standards, the object of which being to form guides for said standards.

Having thus described my invention,

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

1. The lever F, connecting-rod E, S-shaped bar or lever e, journal-box d^2, pinion and axle d, and pinion d^1, all combined, constructed, and operating as and for the purpose set forth.

2. In combination with the above, the bifurcated connecting-bar D and agitator-bars C C, arranged to operate substantially as and for the purpose described.

3. The lever F, in combination with the pivoted transverse bar G, perforated connecting-bars I I, and standards K K, with teeth i^1 and corn-drill i^3 i^3, constructed and operating substantially as and for the purpose set forth.

4. The combination of the pivoted blocks or bars H H, staples H' H', and springs h h with the perforated connecting-bars I I of the cultivator-standard drag-bars K K, substantially as and for the purpose described.

In testimony that I claim the foregoing corn-planter I have hereunto set my hand this 10th day of December, 1870.

LEANDER BECKER.

Witnesses:
E. D. ZIEGLER,
JNO. A. METZELL.