T. SPARKS.

CORN-PLANTER.

No. 188,430. Patented March 13, 1877

Fig. 1.

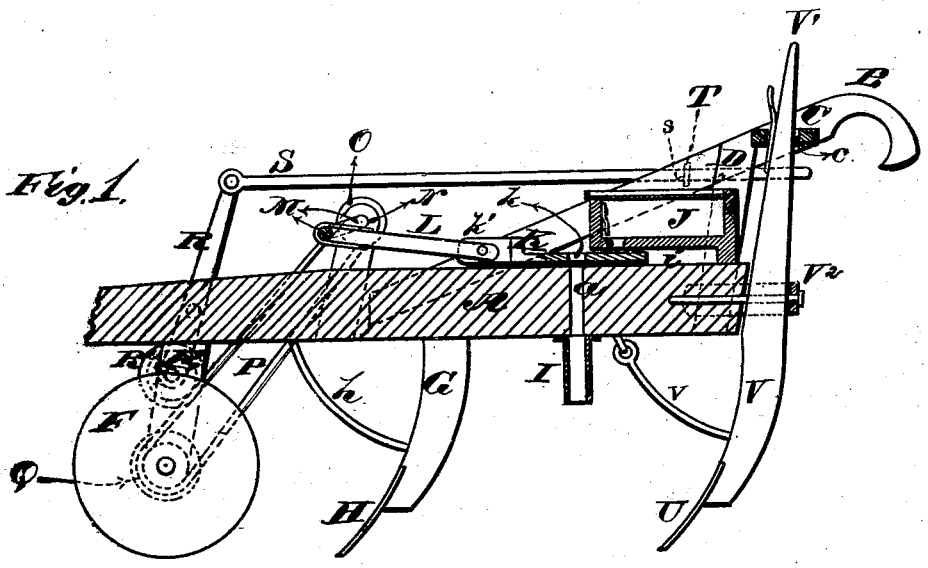
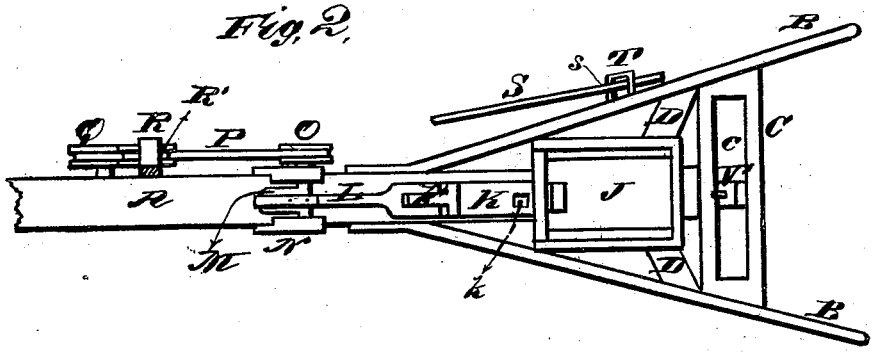


Fig. 2.



WITNESSES

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THOMAS SPARKS, OF KENTONTOWN, KENTUCKY.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. **188,430**, dated March 13, 1877; application filed January 6, 1877.

To all whom it may concern:

Be it known that I, THOMAS SPARKS, of Kentontown, in the county of Robertson and State of Kentucky, have invented a new and valuable Improvement in Corn-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 central vertical section of my corn-planter, and Fig. 2 is a plan view thereof.

This invention relates to corn-planters. The nature of said invention consists in making the covering-shovel laterally vibratory, as hereinafter more fully set forth.

In the annexed drawings, A designates the beam of my corn-planter; B, two plow-handles, secured to opposite sides of the middle thereof; C, a slotted cross-piece, connecting said handles, and D two braces sustaining the rear ends of said handles, the lower ends of the said braces being rigidly attached to the rear end of said beam A, on opposite sides thereof. To the under side of said beam, near the front thereof, I attach two knees or long brackets, E, between which a small transporting-wheel, F, is journaled. Behind said wheel, and at or near the middle of said beam A, a plow-standard, G, is secured thereto. Said standard carries a furrowing-plow, H, and is provided with a curved brace, *h*. I designates a dropping-tube, arranged behind furrowing-plow H, so as to deposit the corn in the furrow made thereby. Said tube is attached to the under side of beam A, and forms an exterior continuation of a vertical passage, *a*, indicated in Fig. 1, which extends up through said beam. Said dropping-tube I is supplied with grain, by means of the following devices: J designates a seed-box, placed upon the rear end of beam A, and secured thereto in any suitable manner. At the bottom of said box there is an opening, *i*, extending to the front thereof, and in this space, *i*, a feeding-slide, K, reciprocates longitudinally. Said slide is provided with a pocket, *k*, which receives, at each rearward movement, a charge of corn from seed-box J, and deposits the same, at each forward movement, in dropping-tube I. This reciprocating longitudinal motion is given to said slide by means of a pitman, L, which is operated by a crank-shaft, M, journaled in two uprights, N N, rigidly secured to said beam A. One end of said crank-shaft is extended beyond its upright N, and provided with a grooved pulley, O, which receives motion through an endless band, P, from a similar pulley, Q, on the extended axle of transporting-wheel F. Thus each rotation of the latter wheel causes a charge of corn to be deposited in the furrow made by plow H.

The joint between feeding-slide K and pitman L is made by means of a T-shaped piece, *k'*, attached to the front end of the former. Piece L embraces the long tongue or shank of piece *k'*, and the two are pivotally connected, so that said pitman may change its inclination as its rear end is raised or lowered, and transmit a longitudinal reciprocatory motion to said slide without binding or straining.

In case the power-transmitting band or cord P becomes stretched, so as not to operate satisfactorily, it is tightened by the following mechanism: R designates a tightening-lever, pivoted to the side of beam A, and carrying in its bifurcated lower end a small grooved wheel, R', which is arranged to bear against said cord or band. The upper end of said tightening-lever is pivotally attached to the bifurcated front end of a long rod, S, which is provided on its under side, near its rear end, with a series of notches, *s*. Teeth may be substituted for said notches, and in either case they are adapted to engage with the lower part of a fixed metal guide or staple, T, secured to one of the said handles B. Said guide or staple also supports the rear end of said long operating rod S. By sliding said rod S forward, and locking it at the desired point, the said endless band or cord P is kept sufficiently taut to operate satisfactorily.

The grain, after being dropped as hereinbefore described, is covered by a covering-plow, U, which is carried by the lower end of a standard, V, pivoted to the rear of beam A, so as to be capable of lateral vibration, and strengthened or braced by a band or clevis, V^2. The upper end of said standard is ta-

pered to form a handle, V^1, which extends up through the slot *c* in cross-piece C. Said handle and cross-piece are provided with any suitable locking devices, (for instance, a rack and catch-piece,) in order that the said handle may be secured in any desired position. Standard V is strengthened by a pivoted brace, *v*, which may also be vibrated laterally. The lateral vibratory adjustability of said covering-plow U enables the operator to cover the furrow and grain from either side. Both the belt-tightening and the plow-adjusting devices may be operated from the rear of the corn-planter without inconvenience or delay.

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

Pivoted standard V, provided with covering-shovel U and handle V^1, in combination with beam A, band V^2, and pivoted brace *v*, substantially as described, and for the purpose set forth.

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

THOMAS SPARKS.

Witnesses:
M. B. NEWMAN,
J. W. HARDING.