H. W. MEYERHOFF.

CORN-PLANTER.

No. 189,766. Patented April 17, 1877.

Fig. 1.

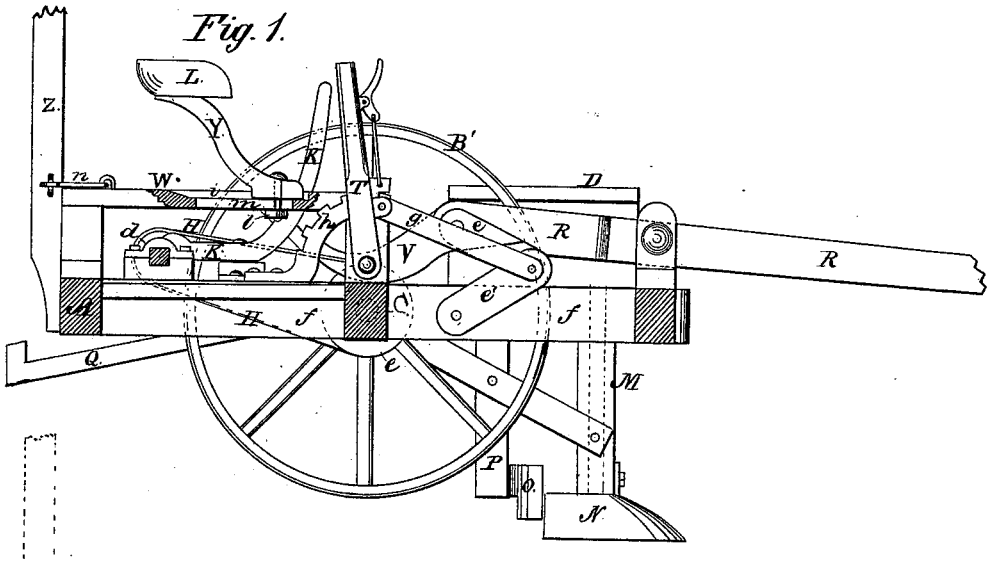
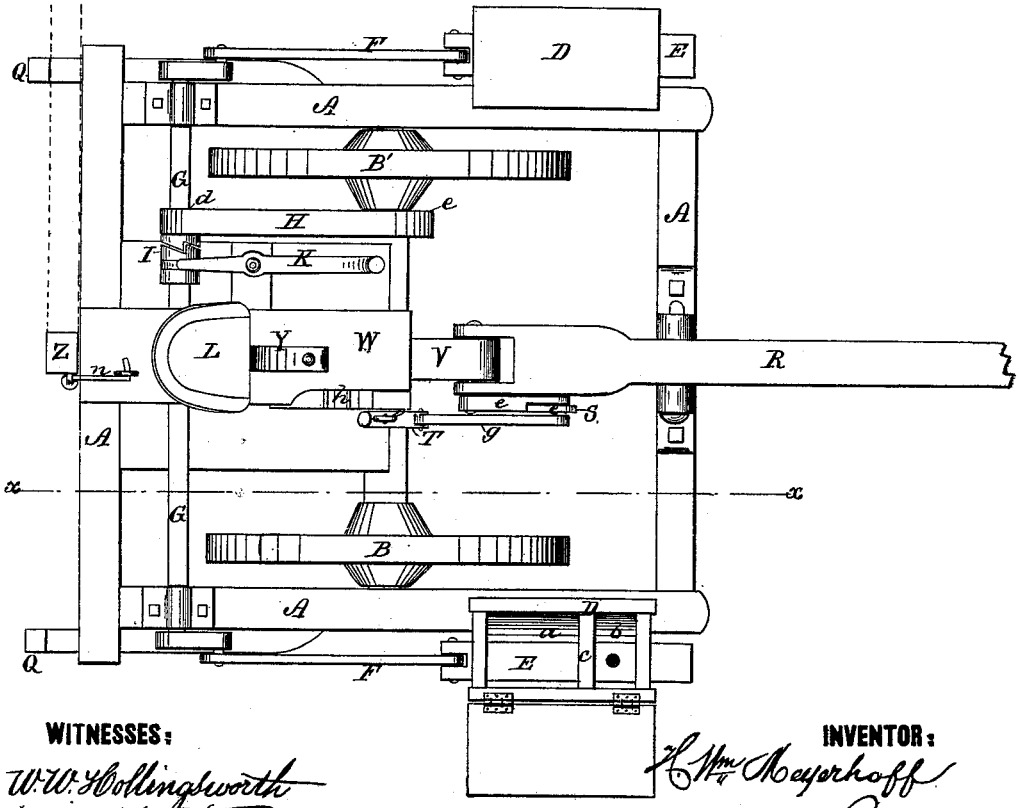


Fig. 2.



WITNESSES:

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H. WILLIAM MEYERHOFF, OF WAVERLY, IOWA.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. **189,766**, dated April 17, 1877; application filed January 24, 1877.

To all whom it may concern:

Be it known that I, H. WILLIAM MEYERHOFF, of Waverly, in the county of Bremer and State of Iowa, have invented a new and useful Improvement in Corn-Planters; and I do hereby declare that the following is a full, clear, and exact description of the same.

The invention is an improvement in that class of seeders in which the tongue may be adjusted vertically at various angles, to vary the depth of the furrow opened for the deposit of the seed.

The invention relates particularly to the means for adjusting the angle of the tongue, and preventing its pivot being subjected to too great lateral strain.

In the accompanying drawing, forming part of this specification, Figure 1 is a sectional elevation of my improved planter on the line *x x* of Fig. 2. Fig. 2 is a plan view of the planter.

The rectangular frame A is supported by wheels B B′, which are mounted on the centrally-placed axle C. The seed-boxes D are attached to the side bars of the frame, near the front, and are divided into two compartments, *a b*, by a partition, *c*. The apertured seed-slides E are reciprocated by rods F, which connect them with the arms of the rotating shaft G. The latter derives its motion from the transporting-wheel B′, through the medium of a belt or band, H, which passes around pulleys *d e* on the shaft and wheel-hub, respectively. The shaft G may be thrown into and out of gear with the wheel B′ by means of the clutch I and the hand-lever K, which is located in convenient proximity to the driver's seat L. As the shaft G rotates, the seed-slides make a reciprocating movement, and thus convey the seed from the reservoir-compartment *a* into the smaller compartment *b*, where it is discharged into the hollow standard M, and is thereby guided into the furrows opened by the shovels N, attached to the standards. A notched or winged seed-coverer, O, is attached to a standard, P, directly in rear of the hollow standard M.

The tongue R is pivoted to the front cross-bar of the frame A, so that it may be adjusted in a vertical plane. The rear end of the tongue is adjusted higher or lower by means of a toggle-joint mechanism, S, and a pivoted pawl-lever, T. The toggle-arms *e e′* are pivoted, respectively, to the tongue and the central bar *f* of frame A, and the lever T is connected to the joint thereof by link *g*. The spring-pawl of the lever engages or locks with the curved rack-bar *h*, so that the lever T can be held fixed in any adjustment. It will be seen that by shifting the said lever on its pivot the toggle-arms *e e′* will be caused to assume a greater or less angle to each other, or brought into alignment vertically, according to the inclination given to the lever, and the rear end of the tongue will be thereby raised or lowered correspondingly. The tongue being supported at its front end from the necks of the draft-animals, it results that by thus changing its horizontal angle, the frame A will be tilted, the front end of the frame A will be raised or lowered, and the furrow-openers caused to enter the ground at greater or less depth. Therefore, by changing the angle of the tongue by aid of the toggle mechanism above described, the depth at which the seed is deposited can be regulated at will, according to the requirements of the soil and other modifying conditions.

A curved bar, V, is pivoted to the rear end of the tongue, and projects backward into a mortise or guide-slot in the pedestal W, to which the driver's seat L is secured. The function of this bar is to prevent too severe lateral strain on the pivot of the tongue. It is therefore practically a jointed extension of the tongue.

The driver's seat L is attached to a curved inclined standard, Y, the foot of which enters a long shallow groove, *i*, in the pedestal W, and is secured by a clamp-bolt, *l*, which passes through an elongated slot, *m*, in the bottom of said groove. The seat L can, therefore, be adjusted forward or back, as required, to accommodate the driver, or to balance the frame, or for other purpose.

A marker-bar, Z, is pivoted to the rear end of the frame A, and held upright, when not required for use, by a detachable fastening, *n*.

When in horizontal position it is supported by bars Q, attached to the sides of the frame.

What I claim is—

In a corn-planter, the combination of the frame and tongue pivoted on the upper side of the front bar thereof, the toggle-arms *e e'*, link *g*, pawl-lever T, rack-bar *h*, and the curved pivoted extension V of the tongue, working in guides, as shown and described, to operate as and for the purpose specified.

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Witnesses:
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