2 Sheets—Sheet 1.

S. RYDBECK.
Corn-Planter.

No. 196,938. Patented Nov. 6, 1877.

Fig 1

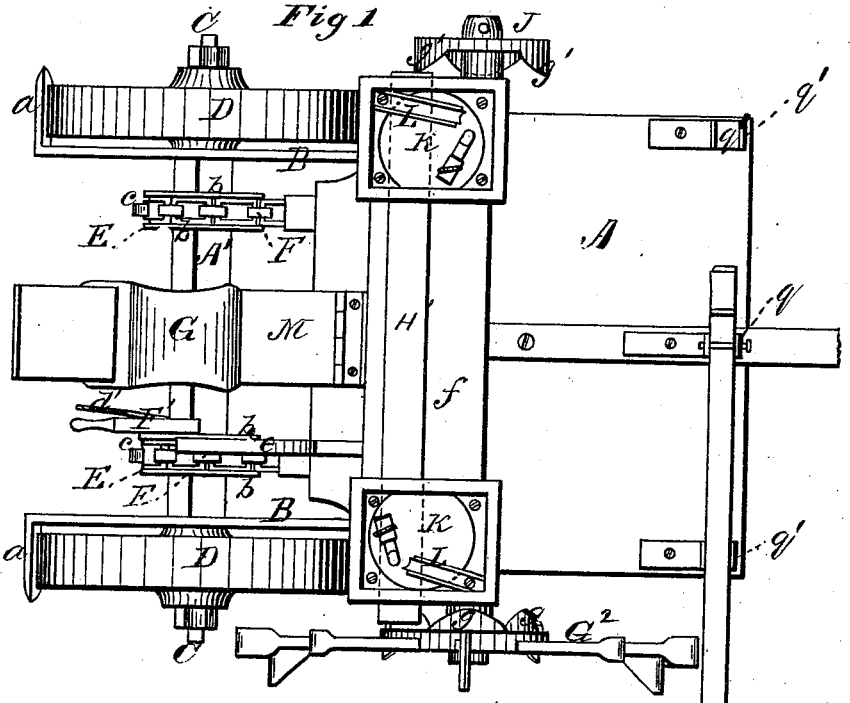
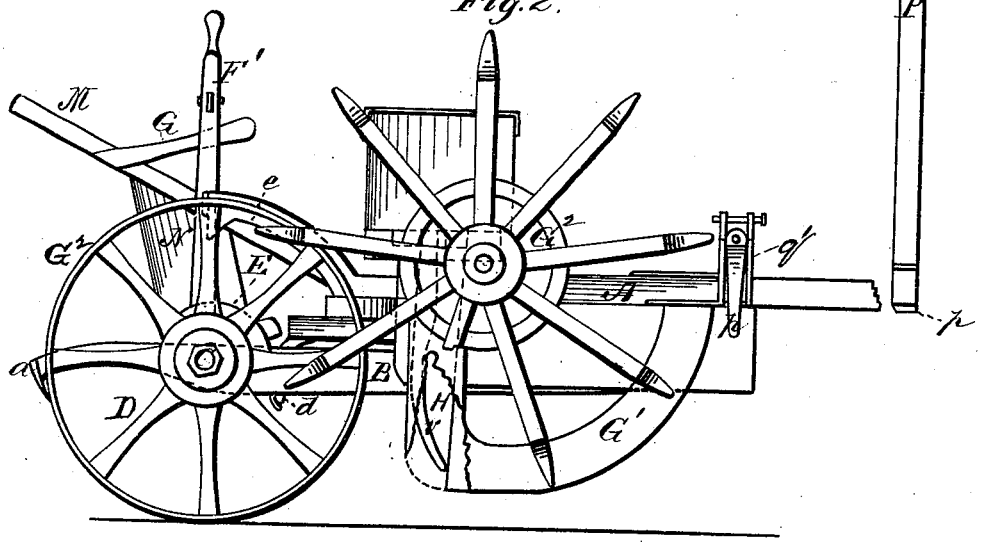


Fig. 2.



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Walter Dellar

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Sven Rydbeck,
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Attorney.

2 Sheets—Sheet 2.

S. RYDBECK.

Corn-Planter.

No. 196,938. Patented Nov. 6, 1877.

Fig. 3.

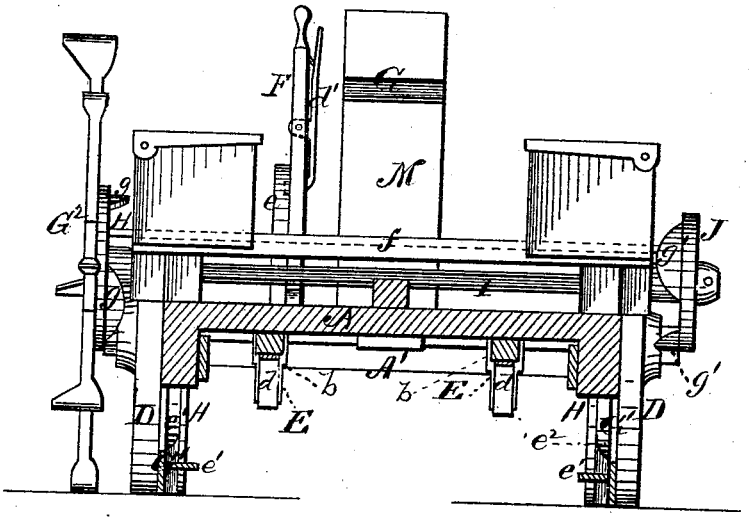


Fig. 4.

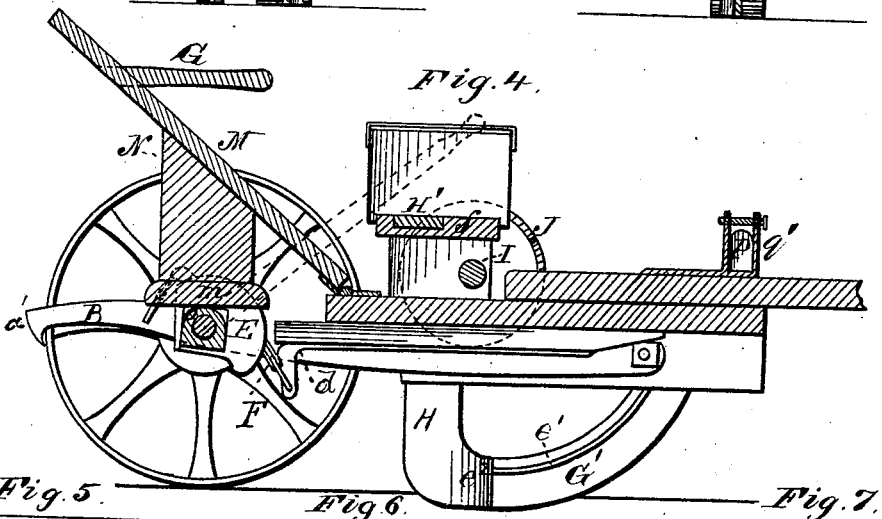


Fig. 5.

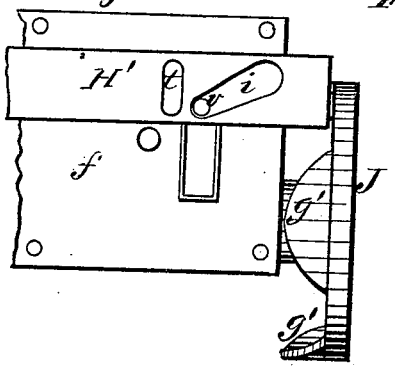


Fig. 6.

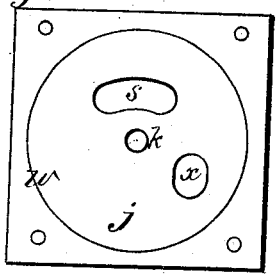


Fig. 7.

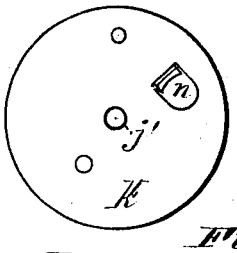
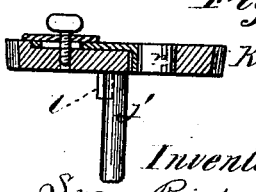


Fig. 8.



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UNITED STATES PATENT OFFICE.

SVEN RYDBECK, OF RED WING, MINNESOTA.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. **196,938**, dated November 6, 1877; application filed June 16, 1877.

To all whom it may concern:

Be it known that I, SVEN RYDBECK, of Red Wing, in the county of Goodhue and State of Minnesota, 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 top view of my invention. Fig. 2 is a side view thereof. Fig. 3 is a cross-sectional view. Fig. 4 is a longitudinal central vertical section; and Figs. 5, 6, 7, and 8 are detail views.

This invention has relation to improvements in corn-planters; and it consists in certain novel means whereby the platform carrying the dropper mechanism and the wheel actuating said mechanism are raised from the ground in turning at the end of a row or in driving from or to a field; and it also consists in a seed-box having a circular rabbet, a central bearing, a curved slot, and a drop-opening, in combination with a disk having a spindle, a spur, a drop-opening, a reciprocating slide, and a transverse slot adapted to receive said spur, and in the arrangement and novel construction of the various supplemental devices, as will be hereinafter more fully described.

In the annexed drawings, the letter A designates the platform of my improved riding double-row corn-planter, having at each side a strong metallic bar, B, pivoted at its front end to the side-beams of the platform, and extended to the rear to afford bearings for the shaft C of two broad-treaded transporting-wheels, D. Bars B also project rearwardly beyond the wheel, and are turned outward, as shown at *a*, thus forming scrapers, which prevent undue accumulation of earth upon the tread of the wheels. The shaft C is extended through a wooden tree, A′, upon which are rigidly secured, in any suitable manner, two spaced metallic sectors, E, having edge flanges *b*, and, intermediate thereto, a strong recurvate hook, *c*. The under side of the platform is provided with two longitudinal ribs, upon which are rigidly secured angular metallic plates *d*, to the lower end of which is rigidly, but movably, secured one end of an open-link chain, F. This chain passes around the sectors between flanges *b*, and engages the hook *c*, aforesaid.

F′ represents a lever rigidly secured to the tree A′, and extending up therefrom within reach of the driver upon the seat G. It is provided with a spring-actuated latch, *d′*, that engages the end of a rearwardly-projecting beam, *e*, upon the platform. When this lever is thrust to the rear, the tree A′ rotates upon the shaft C, and the chains F are wound around the sectors, thereby raising the platform bodily upward, and causing the runners G^1 and the driving-wheel G^2 to clear the ground, when the machine may be turned or driven to any desired point. In this position the end of the catch *d′* engages the beam *e* aforesaid, and holds the platform in the raised position. The runners G^1 are provided upon their inner faces with horizontal guard-plates e^1, that prevent them from burying too far in soft soil, and at their heels with openers e^2, that form the furrows into which the corn is dropped from the spout H, in rear of said openers. The rear wall *v* of the spout is pivoted to the side walls thereof, about midway of its length, for the purpose of opening and closing the lower end thereof at the proper moment, and its upper end is engaged in an oblique slot, *i*, in a transverse slide, H′, arranged in ways upon the platform in front of the transporting-wheels. This slide is caused to reciprocate by means of a driving-wheel, G^2, applied upon a transverse shaft, I, under the slide-board *f*, having a number of spaced cams, *g*, that engage the adjacent end of said slide in succession. The backward movement of the latter is had through a disk, J, having a number of cams, *g′*, alternating with those on the hub of the driving-wheel, applied upon the remaining end of the shaft I, and rotating therewith. The reciprocation of the slide opens and closes the dropper-spout alternately and at the proper interval. The bottom *w* of the grain-boxes is provided with a circular rabbet, *j*, having a central opening, *k*, in which is journaled a central spindle, *j′*, upon a disk, K, and a lateral curved opening, *s*, through which a spur, *l*, upon

said disk engages a transverse slot, *t*, in said slide. It has, also, a third opening, *x*, directly above the spout, that, at each reciprocation of the slide, is brought into line with a perforation, *n*, in the disk. This latter oscillates horizontally in its seat in the box, and constitutes the pocket, by means of which a planting of corn is segregated from the mass in the boxes. At each oscillatory movement of the disk the pocket *n* passes under a fixed "striker," L, secured to the stationary part of the bottom, and any excess of grain for a hill is effectually prevented. In lieu of the cam-disk J, above described, I may apply a second driving-wheel, if I so elect, without changing the nature of my invention.

The driver's seat above mentioned is formed on an inclined rearwardly-extending board, M, hinged to the rear edge of the platform, and supported from the axle by means of a prop, N, having a shoe, *m*, bearing upon a rounded portion, *o*, of said axle. By this means the driver's weight is entirely removed from the vertically-adjustable platform to the axle of the machine, and in raising the same comparatively little effort is required.

In order to space the rows equally I have devised the following "marker:" It consists of a beam, P, having at each end a downwardly-projecting finger, *p*, that is arranged at the front end of the platform at right angles to its length. This beam extends through a central guide, *q*, into which it is confined by a suitable pin, and, when extended to either side of the platform, is received in an open guide, *q'*, at each lateral edge thereof, that holds the beam in proper position for accurately laying off the rows. This marker is manipulated by means of a rope secured at each end to the extremities of the beam.

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

1. The combination, with the platform A, pivoted arms B, and the shaft C journaled therein, of the sleeve or tree A' on axle C, the sectors E, having a peripheral groove, and a hook, *e*, a lever, F', and chains F, secured at one end to the platform, passing around the sectors, and engaging with the hook, substantially as specified.

2. The seed-box having a circular rabbet, *j*, a central bearing, *k*, a curved slot, *s*, and a drop-opening, *x*, in combination with a disk, K, having a spindle, *j'*, a spur, *l*, and a drop-opening, *n*, and a reciprocating slide having a transverse slot, *t*, adapted to receive said spur, substantially as specified.

3. The driver's seat G, hinged to the rear end of the vertically-adjustable platform A, overhanging the axle, and provided with a prop bearing thereon, substantially as and for the purpose specified.

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

SVEN RYDBECK.

Witnesses:
S. ANDERSON,
CHRIS. GRAHAM.