2 Sheets--Sheet 1.

L. ROERIG.

Corn-Planters.

No. 146,477. Patented Jan. 13, 1874.

Fig. 1.

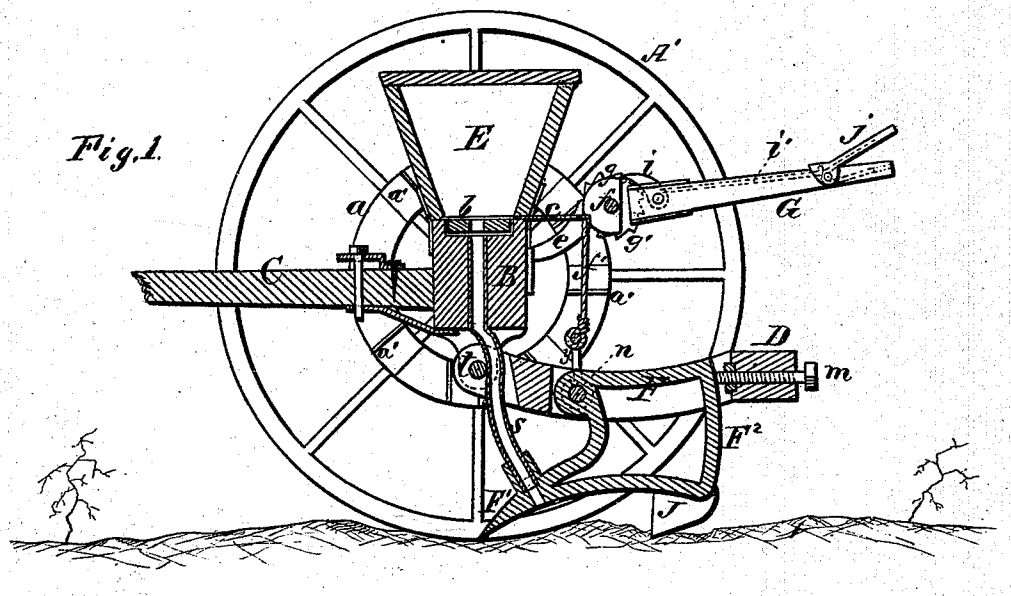
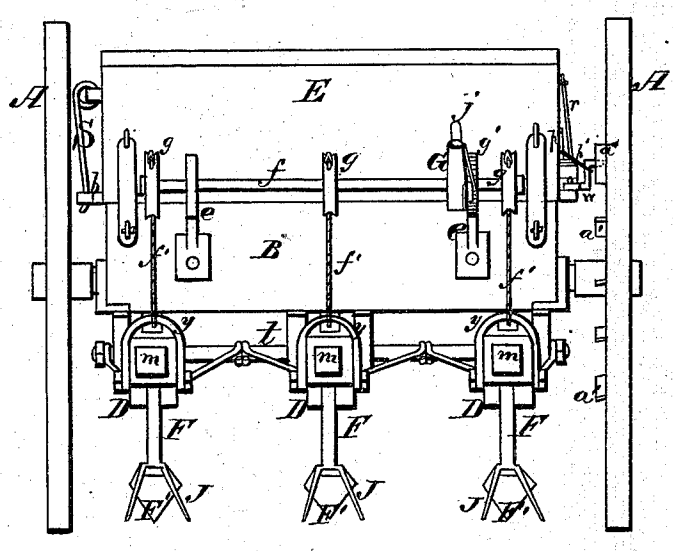


Fig. 2.



Witnesses,
E. A. Bates.
George E. Graun.

Inventor.
Laurence Roerig.
Chipman & Fosmer & Co
Attys.

2 Sheets--Sheet 2.

L. ROERIG.

Corn-Planters.

No. 146,477. Patented Jan. 13, 1874.

Fig. 3.

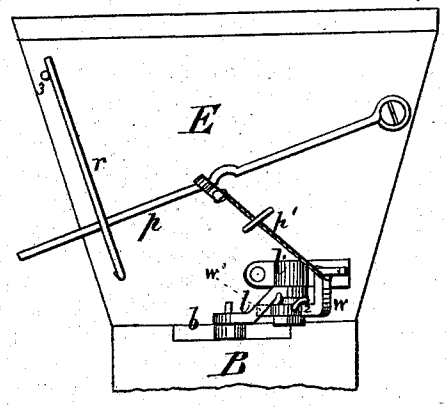
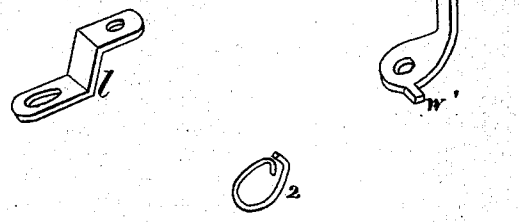


Fig. 4.



WITNESSES
E. A. Bates.
George E. Upham.

By

INVENTOR
Lawrence Roerig
Chipman Fawcett & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

LAWRENCE ROERIG, OF WINNEBAGO AGENCY, MINNESOTA.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. **146,477**, dated January 13, 1874; application filed November 1, 1873.

To all whom it may concern:

Be it known that I, LAWRENCE ROERIG, of Winnebago Agency, in the county of Blue Earth 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 sectional view of my corn-planter. Fig. 2 is a rear view of the same. Figs. 3 and 4 are detail views.

This invention relates to improvements in corn-planters, wherein the grains of corn are discharged in regulated quantities from hoppers by means of tappets on a transporting-wheel acting on a seed-slide, the grains being conducted from the hoppers into the ground through flexible tubes connected to drill-openers. My invention consists in a novel means for regulating the depth for receiving the shovels or drill-teeth, which are applied to hinged drag-bars, as will be hereinafter explained.

The following is a description of my improvements:

In the annexed drawings, A A′ represent two transporting-wheels, which are applied on short axles secured to ends of an axle-tree, B. C is a draft-tongue, which is rigidly secured to the axle-tree at the middle of its length; and E is a hopper-box, which is constructed with several hoppers having inclined sides. This hopper-box is hinged to the front edge of the axle-tree, and secured by hasps and staples, or by hooks, to the back of this axle-tree. The upper side of the axle-tree B is grooved longitudinally, and into the groove a perforated seed-slide, *b*, is fitted to receive endwise movement. Through one end of this slide *b* a spring, S, is applied for moving it in one direction, and to the other end of this slide a pin is fixed, which passes through a vibrating slotted arm, *l*, that is pivoted to a bracket, *l′*, on the end of the hopper-box E next the wheel A′. There is pivoted loosely to the pin, to which arm *l* is keyed, a right-angular arm, *w*, having a tongue, *w*, on one end, which arm is connected by a chain, *p′*, to a lever, *p*. This lever *p* is pivoted to the end of hopper-box E, and held against the same by a spring, *r*. Between the two arms *l* and *w* a spring, 2, is applied, and its ends bent so as to hold the arm *w* out in a position to be struck by tappets *a′* on a ring, *a*, which is secured to the inner side of wheel A′. The curve F^2 is designed to be of an eccentric shape, to prevent the pressure on the plow from throwing it upward without depending on frictional contact alone. When lever *p* is raised and adjusted on a pin, 3, the arm *w* will be drawn in out of the range of the tappets *a′*, and the slide *b* will not be moved. When the machine is moved backward, the spring 2 will allow the arm *w* to yield when struck by the tappets without deranging the parts. D D D represent drag-bars, which are pivoted to a rod, *t*, beneath the axle-tree B, and extend out in rear thereof, and are self-adjusting vertically. To each one of these bars D an open standard, F, is connected by a pivot, *n*, and to the front angle of this standard a shovel, F^1, is secured, in rear of which are covering-wings J. Each standard F is applied to a slot made vertically through its bar D, at the rear end of which slot is an adjusting-screw, *m*, which is tapped through the rear end of the bar, so as to bear against the rear curved end F^2 of the standard, as shown in Fig. 1. It is by means of the screws *m* and the curved ends F^2 of the standards F that the depth required for the shovels to run in the ground can be regulated. The drag-bars D are connected, by means of chains *f′* and bails *y*, to grooved segments *g* on a horizontal transverse rod, *f*, which has its bearings in brackets *e*, secured to the rear side of axle-tree B. G is a hand-lever, which is pivoted on the rod *f* alongside of a ratchet-wheel, *g′*, which is keyed on this rod. A pawl, *i*, is pivoted to the lever G, for engagement with the ratchet-wheel *g′*, which pawl is connected by a rod, *i′*, to a key-lever, *j*, acted on by a spring, and arranged near the free end of lever G. By vibrating this lever G, the drag-bars D can be raised and the shovels lifted

free from the ground. The grains of corn are conducted from the hoppers through flexible tubes *s*, and discharged in rear of the shovels F^1 into the ground, and, by means of slides *c*, the discharge can be regulated.

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

The standards F, carrying shovels F^1 and coverers J, and constructed with rear curved ends F^2, in combination with set-screws *m* and drag-bars D, as and for the purposes described.

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

LAWRENCE ROERIG.

Witnesses:
J. C. CURRYER,
CHAS. N. BELL.