K. M. CHRISTRUP & C. F. SCHNEIDER.

CORN-PLANTER.

No. 192,737. Patented July 3, 1877.

FIG. 1.

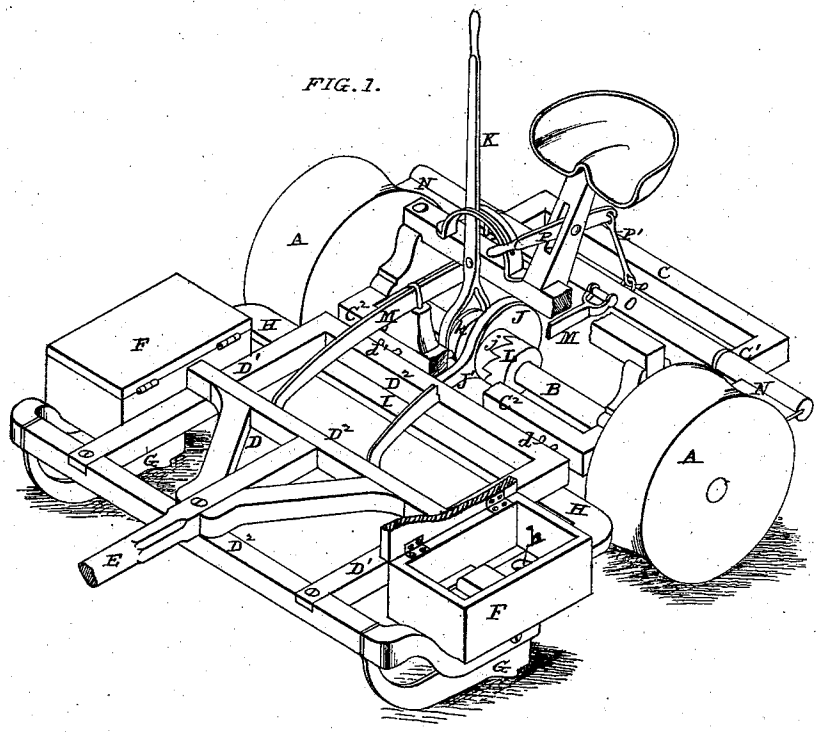
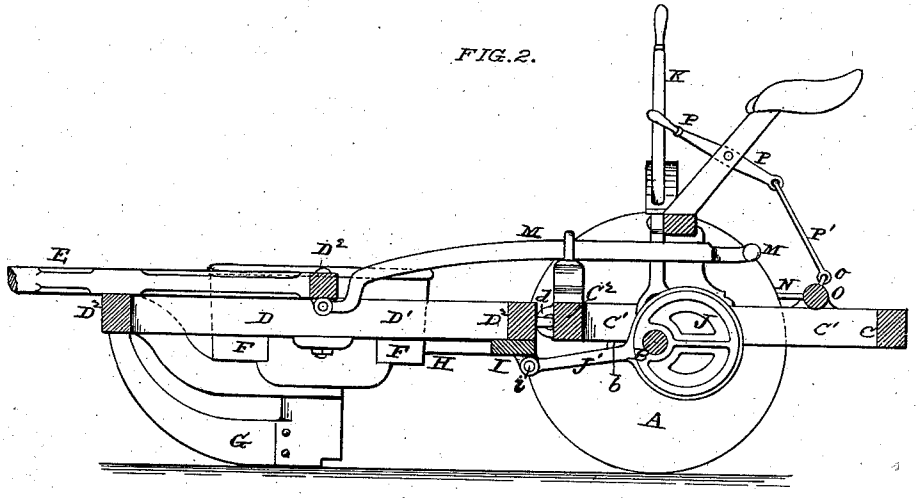


FIG. 2.



ATTEST:

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KNUD M. CHRISTRUP AND CHARLES F. SCHNEIDER, OF ST. LOUIS, MISSOURI; SAID SCHNEIDER ASSIGNOR TO FRED. KORUPKAT, OF SAME PLACE.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. **192,737**, dated July 3, 1877; application filed March 20, 1877.

To all whom it may concern:

Be it known that we, KNUD M. CHRISTRUP and CHARLES F. SCHNEIDER, both of the city and county of St. Louis and State of Missouri, have invented certain new and useful Improvements in Corn-Planters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.

Our improvement relates to that class of corn-planters called "check-row" corn-planters. The invention consists in combining with the rear frame of a corn-planter peculiar means for connecting the operating mechanism with the seed-slides on the forward frame. The device consists of an eccentric having a ratchet-face engaging with a clutch on the axle, a collar to which is attached a lever, and a jointed and laterally-sliding eccentric rod or arm for operating the seed-slides, all arranged as hereinafter described.

In the drawings, Figure 1 is a perspective view. Fig. 2 is a longitudinal section.

A A are the ground-wheels. These are set the distance asunder of the space between the rows of corn. The wheels A have concave treads, so as to leave the earth compressed over the corn in a rounded ridge. The wheels are fast to the axle-shaft B, so as to cause its rotation as the machine is drawn along. Said axle-shaft has bearings *b* beneath the side bars C^1 of the wheel-frame C.

D is the front or opener frame hinged at *d* to the rear frame. To frame D the tongue E is attached. The frame B consists of side bars D^1 and transverse bars D^2.

To the side bars D^1 the seed boxes or hoppers F are attached, and to these boxes are attached wedge-shaped furrow-openers G. Through the seed-hoppers, just above the bottoms of the same, work the seed-slides H, connected together at their rear ends by a transverse bar, I. The bar I is connected by a hinge, *i*, at its center to the eccentric-rod J′ of the eccentric J, in which the axle turns, except when the ratchet-face *j* of the eccentric is engaged with a ratchet-collar, L, which is fast upon the axle-shaft.

The arm or eccentric rod J′ is adapted to slide laterally on the pintle of the hinge *i*.

The eccentric is moved endwise upon the shaft to engage or disengage the clutch by a lever, K, connected to a collar, *k*, upon the eccentric hub. Thus, when the clutch is engaged the eccentric turns with the axle and drives the seed-slides, and when the clutch is disengaged the eccentric and seed-slides remain at rest. M are foot-levers fulcrumed on the front bar C^2 of the rear or wheel frame, and secured at their front ends to a bar, D^2, of the fore frame D. These levers extend backward such a distance as to give the necessary purchase, so that the weight of the driver will lift the front frame so as to allow the machine to be turned freely at the ends of the rows or to be moved from place to place.

N are scrapers that fit the edge or tread of the driving-wheels A. These scrapers are secured to the ends of a transverse rock-shaft, O, having an arm, *o*, connected to a treadle-lever, P, by a pitman, P′. The arrangement is such that on the lever P being depressed by the foot, the scrapers are thrown away from the wheels, and by raising the end of the lever P the scrapers are brought in contact with the edge of the wheels, to remove any dirt that may have adhered thereto.

It will be observed that the joints *d* allow the frames D and C a certain vertical movement irrespective of each other, so that the irregular movements of the frame C, resulting from the wheels running over obstructions, is not communicated in an injurious degree to the frame D, and consequently the openers run steadily in the ground.

The seed-slides H have the usual seed-openings *h* extending through them, and which, by the endwise reciprocation of the slides, are brought in connection with the seed-hole in the bottom of the hoppers to discharge the seed through such holes, from whence it drops into the furrow formed by the opener. No special novelty is claimed in the construc-

tion of the seed-openings, and no further description of them is needed.

We claim—

The combination, with the frames C and D of the device for operating the seed-slides, consisting of the eccentric J, having a ratchet-face, *j*, for engaging with clutch L on the axle, a jointed arm or eccentric rod, J′, adapted to slide laterally on the pintle of a hinge, *i*, the collar *k*, lever K, bar I, and the seed-slides H, all arranged substantially in the manner described, and for the purpose set forth.

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Witnesses:
SAML. KNIGHT,
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