



# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN ATTACHMENTS FOR CORN-PLANTERS.

Specification forming part of Letters Patent No. **190,830**, dated May 15, 1877; application filed April 7, 1877.

### *To all whom it may concern:*

Be it known that I, WILLIAM R. CUNNINGHAM, of La Fayette, in the county of Tippecanoe and State of Indiana, have invented a new and valuable Improvement in Attachments for 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 front elevation of my attachment for corn-planters; and Fig. 2 is a plan view, part sectional, thereof.

This invention relates to corn-planters which are operated by ropes stretched across a field; and it consists in the construction and arrangement of certain "checking" or regulating attachments, hereinafter particularly set forth and claimed.

In the accompanying drawings, A designates the frame of my planter, which is provided with furrow-openers or runners B B, and with seed-boxes C C, the latter being arranged, respectively, at each end of the main cross-beam A' of said frame A. D designates a feeding-slide, operating alternately in said seed-boxes, and supported by said cross-beam A'. Said slide is provided with transversely-arranged troughs or doubly-flanged plates E E'. F designates an upper cross bar or beam, somewhat longer than beam A', and supported thereby on metal standards G G. In the middle of said bar F a vertical shaft, H, is journaled, which carries a large grooved horizontal pulley, I, above said bar, and a horizontal gear-wheel, J, below said bar. This wheel J carries a downwardly-extending eccentric wrist-pin, K, which turns within trough or doubly-flanged plate E. By engaging with the sides of said trough said wrist-pin gives the requisite reciprocatory motion to feeding-slide D. Said wrist-pin is screwed into a socket in said wheel, and may be transferred therefrom to a socket in a smaller cog-wheel, L, which gears with said wheel J. Said wrist-pin is then in position to operate on trough or double-flanged plate

E'. In this case the reciprocations of slide D are more frequent, and in consequence the planting is much more rapid. By using several of these gear-wheels (all journaled in bar F) and the corresponding troughs, the planting may be regulated at will.

Large pulley I is circumferentially grooved, and has its lower flange I' extended and slightly curved upward, to prevent the operating-rope M from slipping from said pulley in case of loosening. Said rope passes almost entirely around said pulley, and then both parts of said rope pass between small guide-pulleys or tightening-pulleys N N, which are journaled on a cross piece, O, attached to an arm, P, extending from bar F. At each end of said bar F is a similar cross-piece, O', on which a pair of guide-pulleys, Q, are journaled. Said rope passes forward through one pair of said guide-pulleys, Q, and backward through the other pair of the same. One pulley of each pair is in front of the other, and each one of each pair serves alternately as a guide, according to the direction in which said planter is moving.

As the vehicle proceeds across the field, rope M turns pulley J, and thus operates the wrist-pin and slide already described.

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

1. The combination, with the gear-wheels J L, of different diameters, and provided with the transferable wrist-pin K, of the seed-slide D, having the trough-plates E E', pulley I, and rope M, substantially as and for the purpose set forth.

2. The combination, with the gear-wheels J L, of different diameters, and provided with the transferable wrist-pin K, and the seed-slide D, having the trough-plates E E', of the grooved pulley I, having an extended lower flange, I', pulleys Q Q N N, and rope M, substantially as described.

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

WILLIAM R. CUNNINGHAM.

Witnesses:

EDWARD GROENENDYKE,  
CHAS. GROENENDYKE.