

J. R. DAVIS.

Corn-Planter.

No. 40,610.

Patented Nov. 17, 1863.

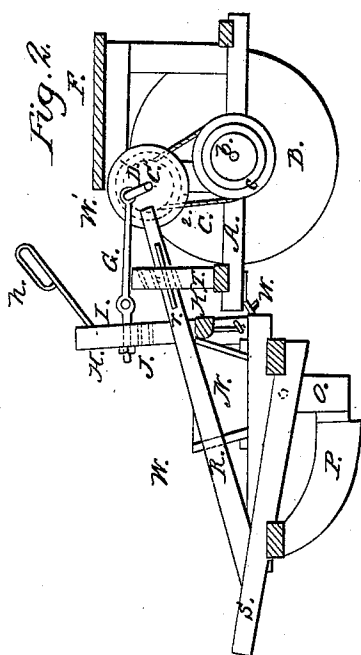


Fig. 2.

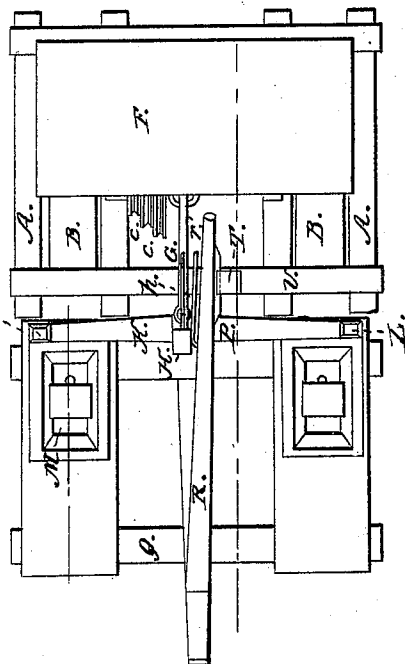


Fig. 4.

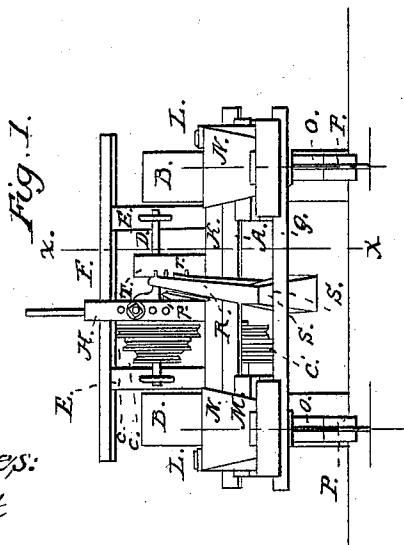
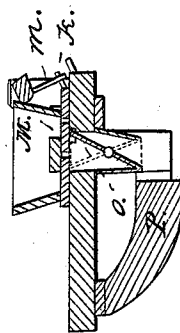


Fig. 1.

Fig. 3.



Witnesses:  
Charles Smith  
J. Sheffer

Inventor:  
J. R. Davis  
by *[Signature]*

# UNITED STATES PATENT OFFICE.

JOHN R. DAVIS, OF BLOOMFIELD, IOWA.

## IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. 40,610, dated November 17, 1863.

To all whom it may concern:

Be it known that I, JOHN R. DAVIS, of Bloomfield, in the county of Davis and State of Iowa, have invented a certain new and useful Improvement in Corn-Planters; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a front view of a corn-planter embodying my invention. Fig. 2 is a vertical longitudinal section thereof in the line *x x*, Fig. 1. Fig. 3 is a detached view exhibiting the interior construction of the hopper. Fig. 4 is a plan or top view.

The object of this invention is to produce a machine whereby the respective operations of marking or furrowing the ground and automatically depositing the grains of corn therein may be more readily and economically performed.

The invention consists in the employment of cone-pulleys driven by one of the wheels of the machine, and working in combination with suitable accessory devices in such a manner that the grain-depositing mechanism is operated with much greater facility and regularity.

In order that others skilled in the art to which my invention appertains may be enabled to fully understand and use the same, I will proceed to describe its construction and operation.

In the accompanying illustration, *W W'* may represent respectively the front and rear sections of the machine, hinged together at *w*, as clearly shown in Fig. 2. The rear section is supported upon wheels *B B'*, mounted each upon a separate shaft journaled in the pieces *A*, and thus adapted to revolve independently of each other.

*C C'* represent cone-pulleys, the former of which is keyed upon the inner end of the shaft *b* of the driving-wheel *B*, and the latter upon a crank-shaft, *D*, journaled at each end in a suitable box in the uprights *E E*, which uprights also serve to support the front of the driver's seat *F*. The grooves *c* in the pulleys *C C'* constitute a series of sheaves of various diameters, the object of which will be hereinafter explained. Motion is transmitted from the pulley *C* to the pulley *C'* by the elastic band *C<sup>2</sup>*.

To the crank *D'* of the shaft *D* is connected

a pitman, *G*, attached at its other end to a post or upright, *H*, by means of an adjustable staple or hook, *I*, the screw-threaded shank of which passes through an orifice in said post, and is secured therein by a nut, *J*. The post *H* may be provided with a series of similar orifices to permit the needful vertical adjustment of said hook *I*.

*h* represents a hand-lever rigidly attached to the upper end of the post *H*. The post *H* rises from a rock-shaft, *K*, journaled in the uprights *L L*.

*N N* are hoppers mounted upon the front section of the machine.

*M M* are seed-slides fitted in the bottom of the hoppers *N N*, and reciprocated by staples *m* and links *k*, connecting them with the ends of the rock-shaft *K*.

*O O* are the conducting-tubes, provided with valves *o* in customary manner.

*P P* are the runners, connected at front to the cross-beam *Q* and at back to the tubes *O O* in any desirable manner, and employed to support the front section of the machine and produce furrows for the reception of the seed.

*R* represents a lever, which is rigidly attached to the stationary tongue *S*. This lever projects in a backward direction and terminates in suitable proximity with the seat of the driver in order that he may elevate or depress it for the purpose of causing the runners or plows to work deeper or shallower, as occasion may require, and when thus elevated or depressed the said lever may be securely adjusted in position by a plate or bar, *r*, with which its rear end is furnished, taking into notches formed in a post, *T*, rising from a cross-beam, *U*, of the rear section, *W'*, and held therein by a spring, *r'*.

Operation: The team being started forward, an oscillating motion is communicated from the wheel *B* to the post *H* and bar *K* through the medium of the pulleys *C C'*, crank *D D'*, and pitman *G*, whereby a reciprocating motion is imparted to the slide *M*. The speed with which the slide *M* is reciprocated, and consequently the intervals at which the seed is deposited in the ground, may be varied by shifting the elastic band *C<sup>2</sup>* upon the pulleys *C C'*.

It will be seen that when it is desired to arrest the operation of the seed-dropping mechanism, this can be instantly accomplished by simply detaching the pitman *G* from the hook

I; or, if preferred, by throwing the band C<sup>2</sup> off either or both pulleys.

It will also be apparent that as the runners are attached to the front section, W, of the machine, the depth at which they are designed to work may be effectually regulated by the lever R, the post T in which it is held being located on the rear section, W'.

Having thus described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

The employment or use of the cone-pulleys C C' and elastic band C<sup>2</sup>, in combination with the crank D', pitman G, post H, and bar K, with their accessories, for imparting a variable reciprocating motion to the slide M, arranged and operating substantially as set forth.

JOHN R. DAVIS.

Witnesses:

A. J. AUGDEN,  
AMOS STECKEL.