

(No Model.)

2 Sheets—Sheet 1.

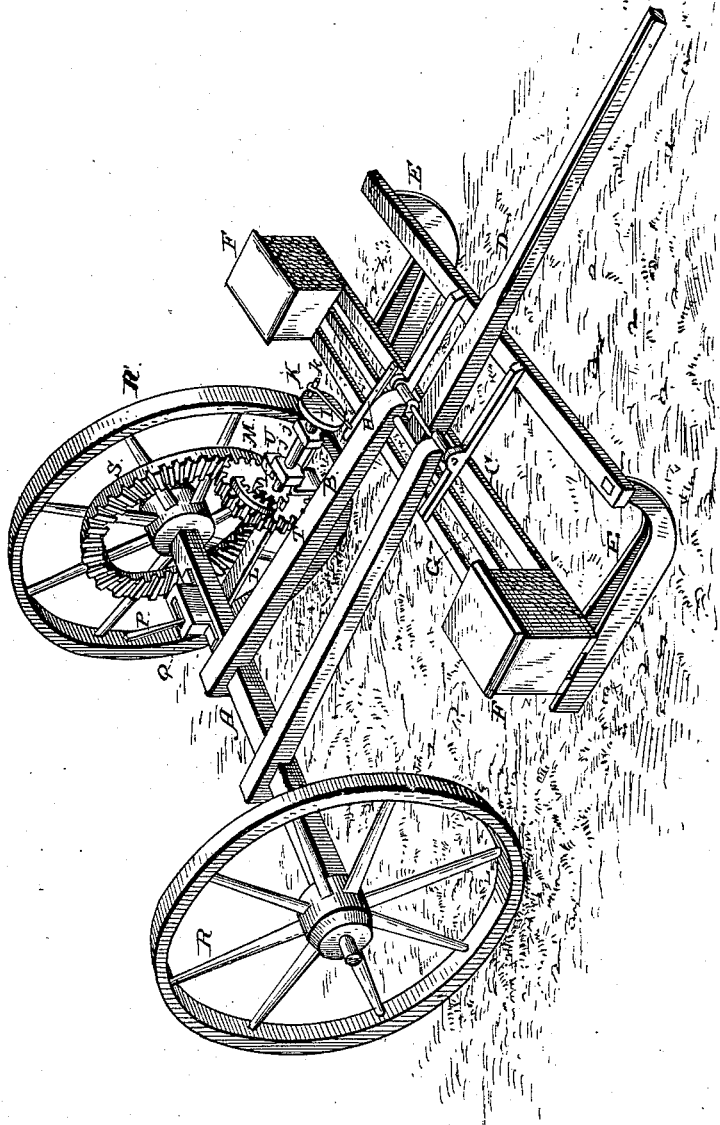
J. DE BUTTS.

CORN PLANTER.

No. 307,183.

Patented Oct. 28, 1884.

Fig. 1.



WITNESSES:

*W. Reynolds*  
*W. R. Haight*

INVENTOR

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BY *W. H. Babcock*

ATTORNEY

(No Model.)

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2 Sheets—Sheet 2.

CORN PLANTER.

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Fig. 2.

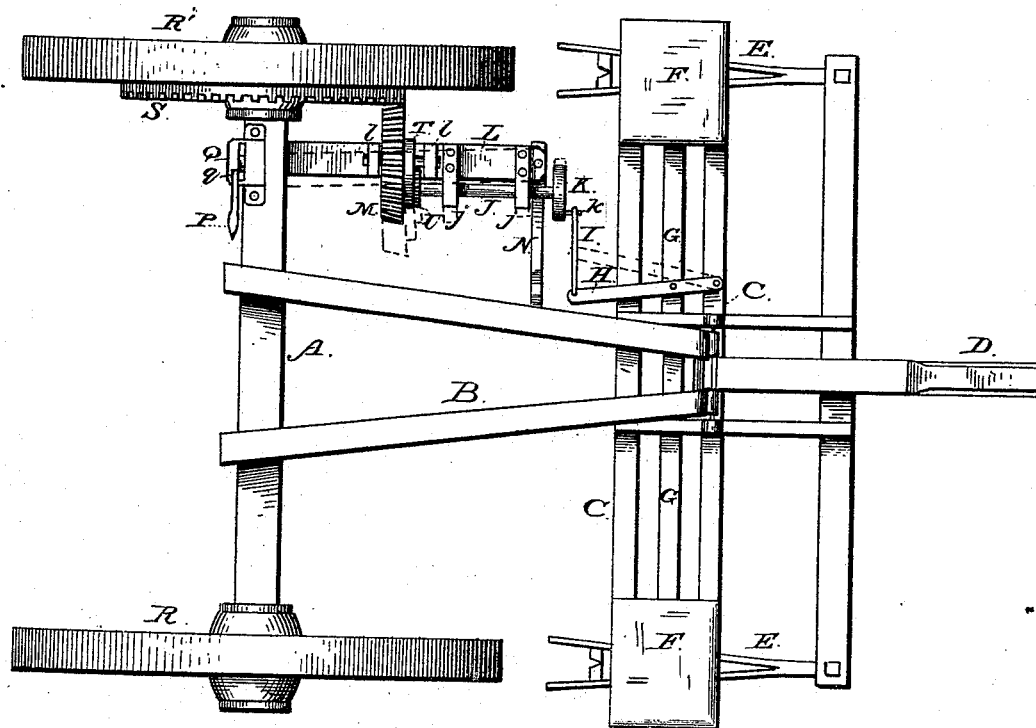


Fig. 3.

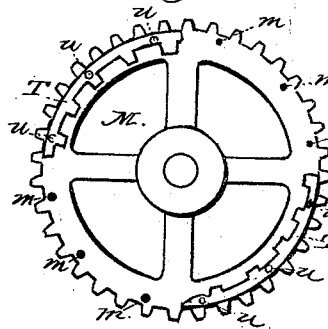


Fig. 4.

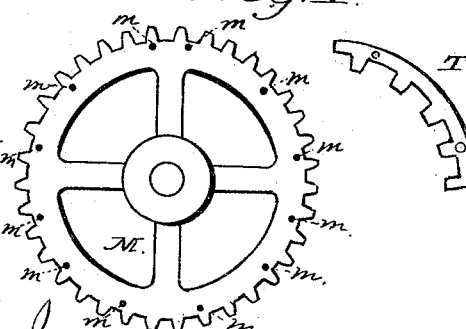
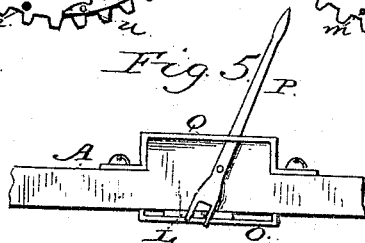


Fig. 5.



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# UNITED STATES PATENT OFFICE.

JOHN DE BUTTS, OF CENTREVILLE, MARYLAND.

## CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 307,183, dated October 28, 1884.

Application filed June 28, 1884. (No model.)

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

Be it known that I, JOHN DE BUTTS, a citizen of the United States, residing at Centreville, in the county of Queen Anne and State of Maryland, have invented new and useful Improvements in Corn-Planters, of which the following is a specification.

This invention relates to planters for corn or other seed, and more particularly to that class of such planters in which the seed-slide is operated by one of the transporting-wheels through intermediate gearing and other suitable devices.

The said invention consists in the combination, with a seed-slide and transporting-wheels, of a detachable toothed segment or segments rotated solely by one of said transporting-wheels, a pinion or cog-wheel which engages with said segment, and devices whereby said pinion drives said seed-slide, substantially as hereinafter set forth.

The said invention further consists in the combination, with a seed-slide and transporting-wheels, of a detachable internally-toothed rotating segment, a pinion meshing with said segment and driven intermittently thereby, and devices whereby said seed-slide is driven by said pinion, substantially as hereinafter set forth.

The said invention consists, finally, in a gear-wheel carried by one of the transporting-wheels and a second gear-wheel meshing therewith, in combination with a detachable internally-toothed segment or segments attached to the latter wheel, a shaft provided with a pinion which meshes with said segment or segments, a movable bar which supports said shaft and said segment-carrying wheel, a shifting-lever, and seed-dropping devices, substantially as hereinafter set forth.

In the accompanying drawings, Figure 1 represents a perspective view of a corn-planter embodying my invention. Fig. 2 represents a plan view of the same. Fig. 3 represents a detail view of the regulating-wheel and segments, two of the latter being in place. Fig. 4 represents a detail view of this wheel with the segments detached and arranged in proximity thereto, and Fig. 5 represents a detail view of the shifting-lever and guide.

The same letters of reference indicate the same parts in the several figures.

A designates the axle of the corn-planter, to which is attached the main frame B, having a supplemental or seed frame, C, hinged to its forward end. To this latter frame the pole D is attached, and said frame C is supported at each side by shoes E, above which the seed-boxes F are arranged.

G designates the seed-slide, which reciprocates transversely of the machine, its ends entering said seed-boxes and uncovering the outlet of one or the other of them alternately after the usual manner. This slide is operated by a short lever, H, which is pivoted at the forward end to said frame C, and attached near its middle to said slide. The other end of said lever is attached to a transversely-operating pitman, I, which receives motion from a longitudinal shaft, J, mounted in bearings *jj* and provided with a terminal disk, K, and eccentric wrist-pin *k*, to which the outer end of said pitman is journaled or loosely secured. These bearings are supported by a plate or bar, L, which is arranged longitudinally of the machine and supports also the bearings of the journals or gudgeons of a gear-wheel, M. Said bar or plate L has its forward end pivoted to a rigid bar, N, which is secured to main frame B, so as to allow horizontal pivotal motion to the other end of said bar. This latter end is free to move horizontally for a short distance in a guideway, O, attached to the under side of axle A, and is provided with a vertical shifting-lever, P, which is pivoted to said axle. This lever works above its pivotal point in a slotted piece, Q, which has an enlargement of its slot at its inner end, *q*, forming a shoulder for engaging and locking said lever at that point.

R R' designate the transporting-wheels of the planter, the latter being also the driving-wheel of the seed-dropping apparatus. To effect this, said wheel R' has attached to its side, or formed therewith, a crown gear-wheel, S, which meshes with wheel M aforesaid when the latter is thrown into its outermost position by turning the upper end of lever P inward, as aforesaid. The forward face of said wheel M is provided at intervals with series of screw-

holes *m* for the attachment of segments *T*—one to each series. These segments are internally toothed and provided with screws *t*, which pass through holes in them and enter the said screw-tapped holes or recesses *m*. On the rear end of shaft *J* is a pinion, *U*, which meshes with said segments. The wheel *M* is preferably adapted to receive four of these segments, (though I do not restrict myself to any particular number,) and all of these may be applied and used together, or I may use any less number desired. As each of these segments comes in contact with said pinion and turns it, the seed-slide *G* is caused to reciprocate by the action of shaft *J*, pin *k*, pitman *I*, and lever *H*, and the frequency of this action is obviously increased or diminished by the addition of said segments to said wheel or their removal therefrom.

When it is desired to transport the corn-planter from place to place without operating it, I simply move outward the handle of the shifting-lever *P*, thus turning the bar *L* inward on its pivot and removing wheel *M* from engagement with wheel *S*. While said bar *L* is shifting from one position to another, as above stated, the devices mounted thereon of course preserve their own positions unchanged and are always ready for action.

This planter requires no cord or wire to operate it, the gear-wheels, segment or segments, and seed slide being driven solely by the rotation of the proximate transporting-wheel. So far as I am aware, however, I am the first to use an internally-toothed detachable segment or segments attached to one of the gear-wheels of a corn-planter.

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

1. In combination with a seed-slide and transporting-wheels, a detachable toothed segment or segments caused to rotate solely by the rotation of one of said transporting-wheels, a pinion or cog-wheel which engages with said segment, and intervening devices whereby said pinion drives said seed-slide, substantially as set forth.

2. In combination with a seed-slide and transporting-wheels, a detachable internally-toothed segment or segments attached to a wheel that rotates as the planter moves forward or backward, a pinion which meshes with said segment or segments, and devices whereby said segment and pinion drive said seed-slide, substantially as set forth.

3. A wheel, *M*, having one or more internally-toothed segments on its side, in combination with the shaft *J*, provided with pinion *U*, which meshes with said segment, a gear-wheel carried by the transporting-wheel for driving said wheel *M*, a movable bar which supports said shaft and said wheel *M*, a shifting lever, and seed-dropping devices, all substantially as set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JNO. DE BUTTS.

Witnesses:

A. G. HARLEY, Jr.,  
J. F. ROLPH.