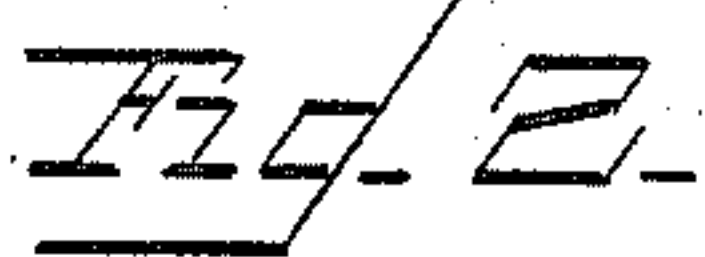
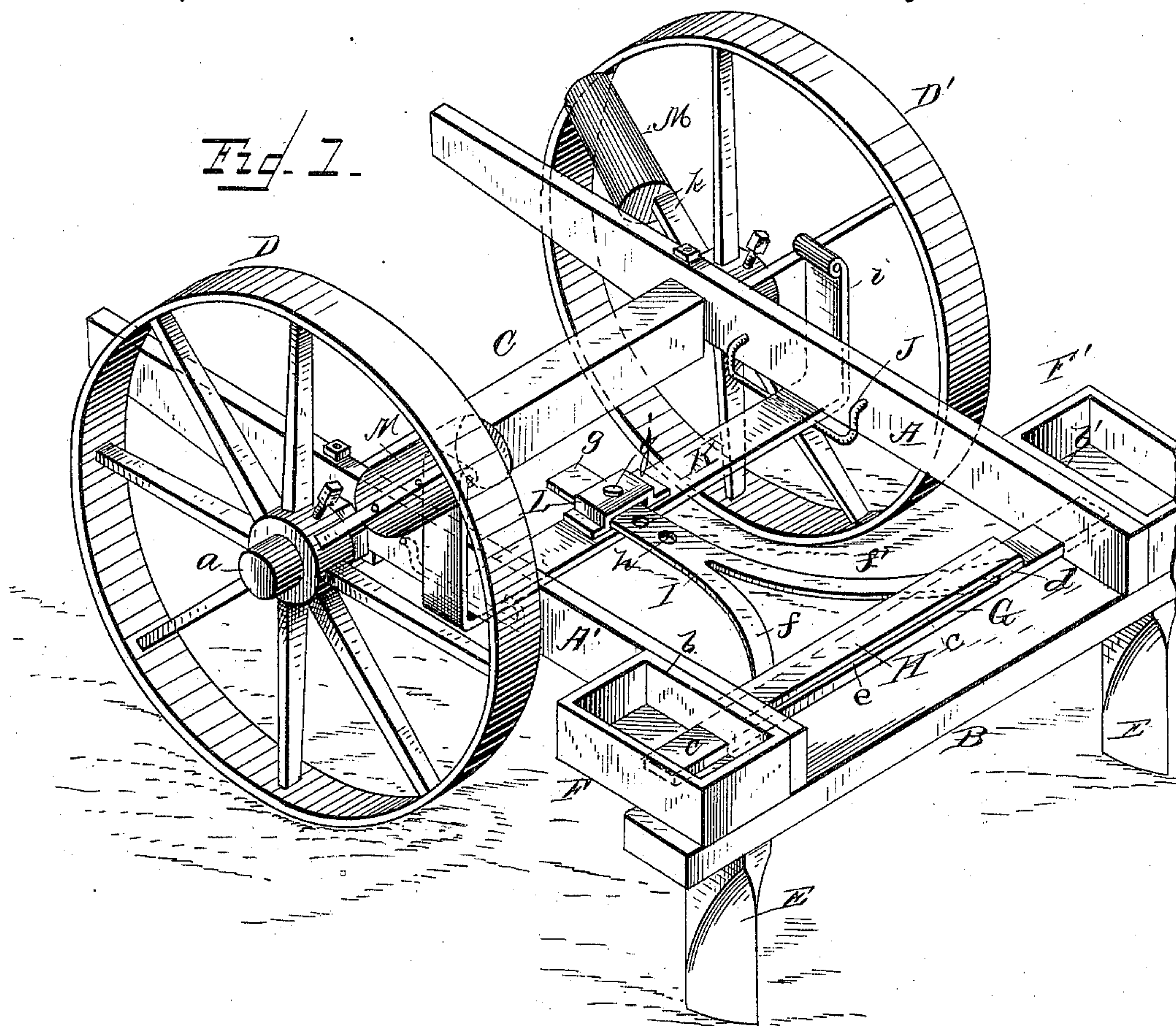


(No Model.)

W. LYONS.
CORN PLANTER.

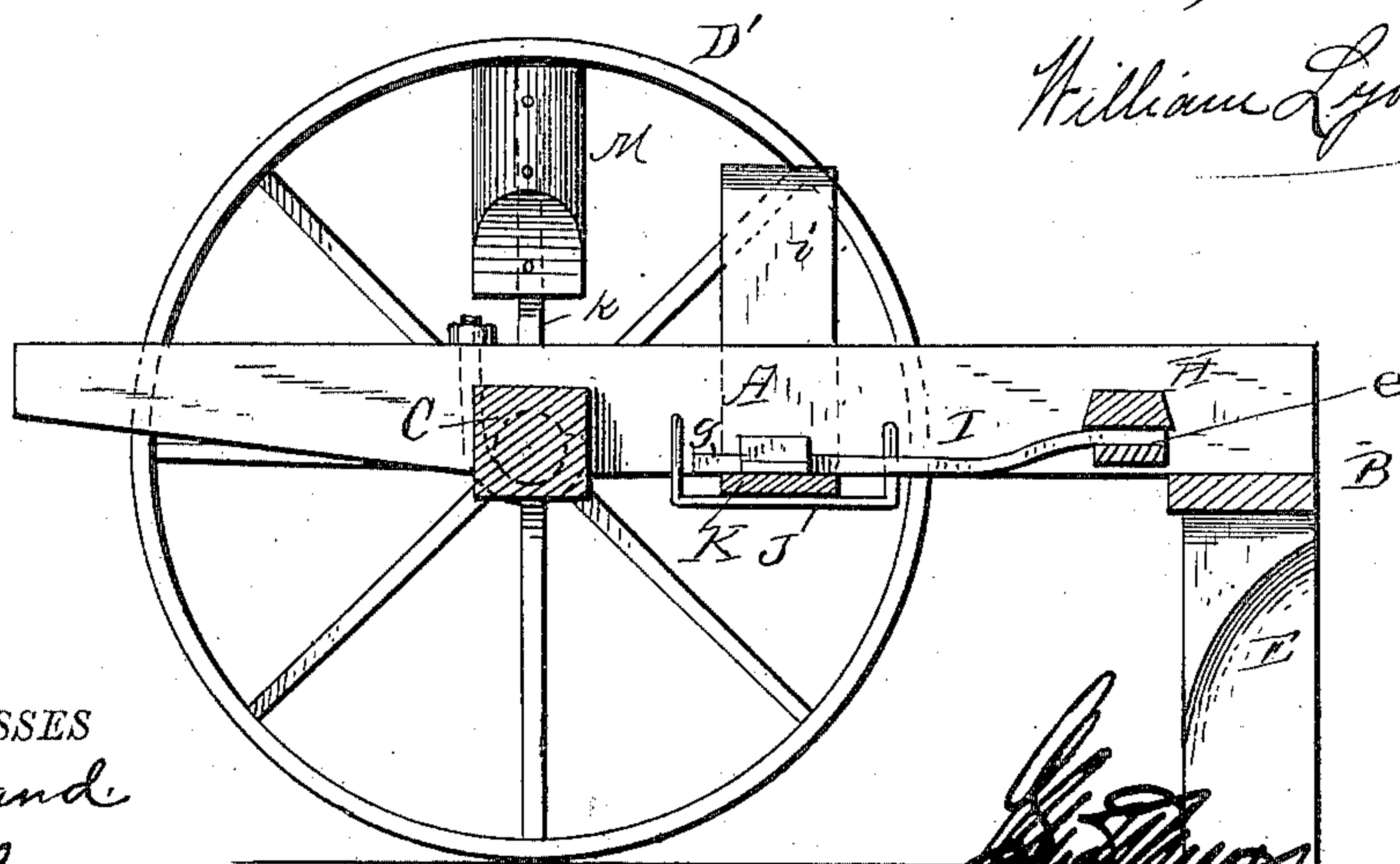
No. 302,856.

Patented July 29, 1884.



Inventor.

William Lyons.



WITNESSES

F. L. Ourand.

E. W. Johnson

Attorney

UNITED STATES PATENT OFFICE.

WILLIAM LYONS, OF TIBLOW, KANSAS.

CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 302,856, dated July 29, 1884.

Application filed March 20, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LYONS, a citizen of the United States of America, residing at Tiblow, in the county of Wyandotte and State of Kansas, have invented certain new and useful Improvements in Corn-Planters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention has reference to corn-planters; and it consists in the improvements hereinafter fully described and set forth.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of a corn-planter embodying my improvements, and Fig. 2 is a central longitudinal section.

The frame of the machine consists of side bars, A A', front bar, B, and axle C. The spindles *a* of the axle C project from each side of the frame, and have mounted thereon the carrying-wheels D D'. Furrow-openers E E' depend from the under side of the bar B, near each end thereof, and upon the upper side of said bar B, immediately over the furrow-openers, are located the seed-hoppers F F'. The perforations in the seed-hoppers are so arranged in the bottom of the same as to drop the grain immediately in the rear of the furrow-opener. The inner side, *b b'*, of the seed-hoppers contain openings near the bottom of the hoppers, through which openings extend the ends *c* of a horizontal seed-slide, G, the said ends *c* being designed, when the said slide G is reciprocated, to intermittently uncover the perforations in the bottom of the hopper and periodically drop the grain. Blocks *d* are secured upon the upper side of the slide G, between the bars A A', and have connected to their upper faces a plate, H, which forms a horizontal recess, *e*. A metallic plate, I, is bifurcated to form curved members *f f'*, the extremities of which rest in the recess *e* against the blocks *d*, and has a front portion constituting a shank, *g*, provided with a series of perforations, *h*. Rods J, having their ends embedded in or otherwise

secured to the inner faces of the bars A, depend therefrom, so as to act as hangers for a horizontal plate, K, arranged transversely across the frame, and bent up at the ends to form vertical arms *i*. A yoke-bracket, L, secured centrally upon the plate K, receives the shank *g* of the bar I, and has a bolt, *j*, which engages one of the perforations *h* thereof. Blocks M are bolted to one of the spokes *k* of each of the carrying-wheels D D', near the periphery of the same, and are adapted, as said wheels are rotated by the movement of the machine, to alternately come in contact with the vertical arms I of the plate K and horizontally reciprocate the same. This reciprocating movement is imparted to the slide G by the members *f f'* of the bar I. By changing the bolt-connection *j* from one perforation *h* to another, the reciprocating movement of the feed-slide G can be regulated, as the members *f f'* converge toward each other, and hence they can be adjusted so as to move in the slot *e* for a greater or less period before contacting with the blocks *d*. It will also be obvious that the various features and improvements herein described can be readily applied to any existing machine without requiring any material change or alteration of the same.

I claim—

1. The combination, in a corn-planter, of a frame carrying the seed-hoppers, a seed-slide reciprocating through the sides of the same, and slotted as described, a bifurcated bar, the bifurcated ends of which rest in said slot and are adjustably connected to the reciprocating devices, and thus permit the bifurcated portion of said bar to be adjusted in the said slot, substantially as set forth.

2. The combination, in a corn-planter having seed-hoppers and slotted slide, as described, of a bifurcated bar, the bifurcated ends of which rest in the slot of the said slide, and having a shank portion provided with a series of perforations, a plate suspended in brackets secured to the sides of the machine, and having a bracket carrying a bolt adapted to engage one of the perforations in the bifurcated bar, to permit the bifurcated portion of said bar to be adjusted in the slot of the said seed-slide, and devices for reciprocating said plate, substantially as and for the purpose set forth.

3. The combination, in a corn-planter hav-
ing seed-hoppers and slotted seed-slide, as de-
scribed, of a bifurcated bar, the bifurcated ends
of which rest in the slot of the said slide, and
5 having a shank portion provided with a series
of perforations, a plate suspended in brackets
secured to the sides of the machine, and hav-
ing a bracket carrying a bolt adapted to en-
gage one of the perforations in the bifurcated
10 portion of said bar to be adjusted in the slot

of the said seed-slide, and vertical arms on said
plate, adapted to be struck alternately by
blocks bolted to the spokes of the carrying-
wheels, substantially as set forth.

In testimony whereof I affix my signature in 15
presence of two witnesses.

WILLIAM LYONS.

Witnesses:

FRANK WARNER,
JOHN J. BAKER.