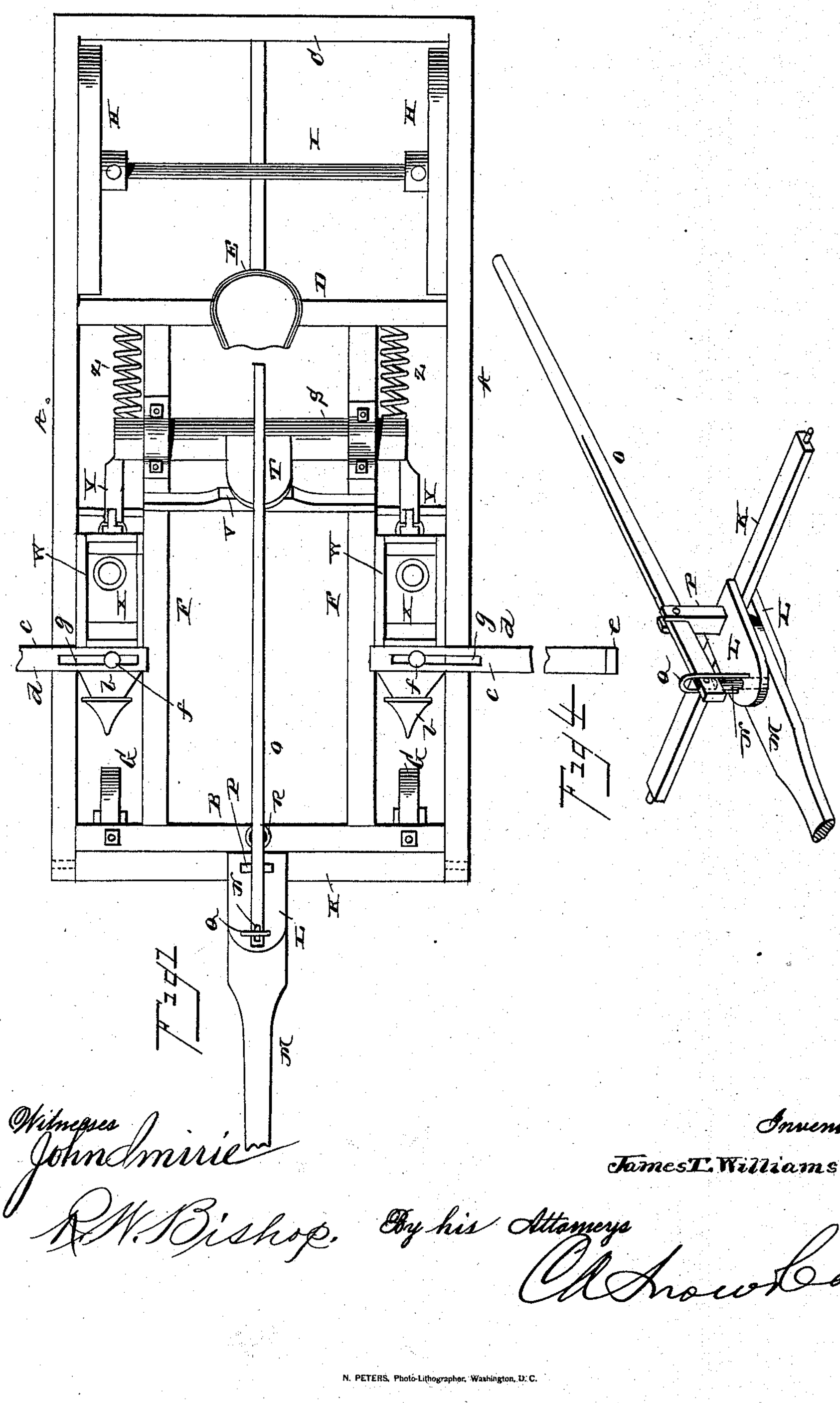
(No Model.) 2 Sheets—Sheet 1.

J. T. WILLIAMS.

CORN PLANTER.

No. 413,311. Patented Oct. 22, 1889.



Witnesses
John Smirie
R. W. Bishop.

Inventor
James T. Williams
By his Attorneys
A. Snow & Co

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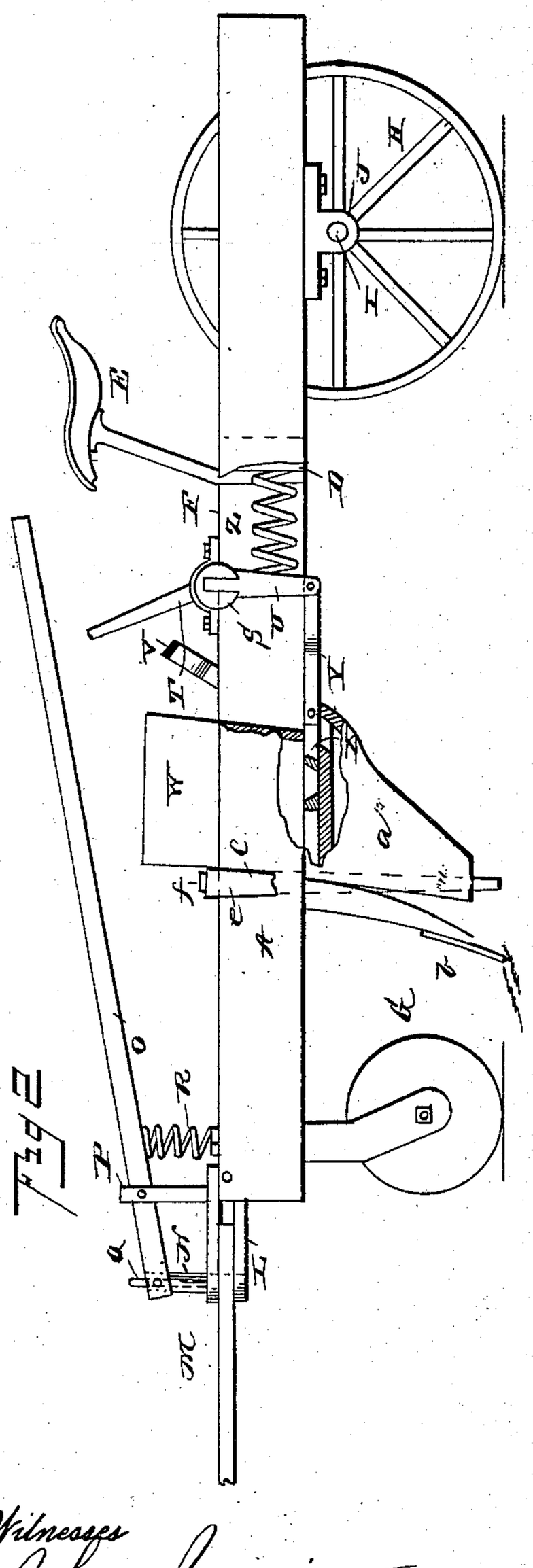

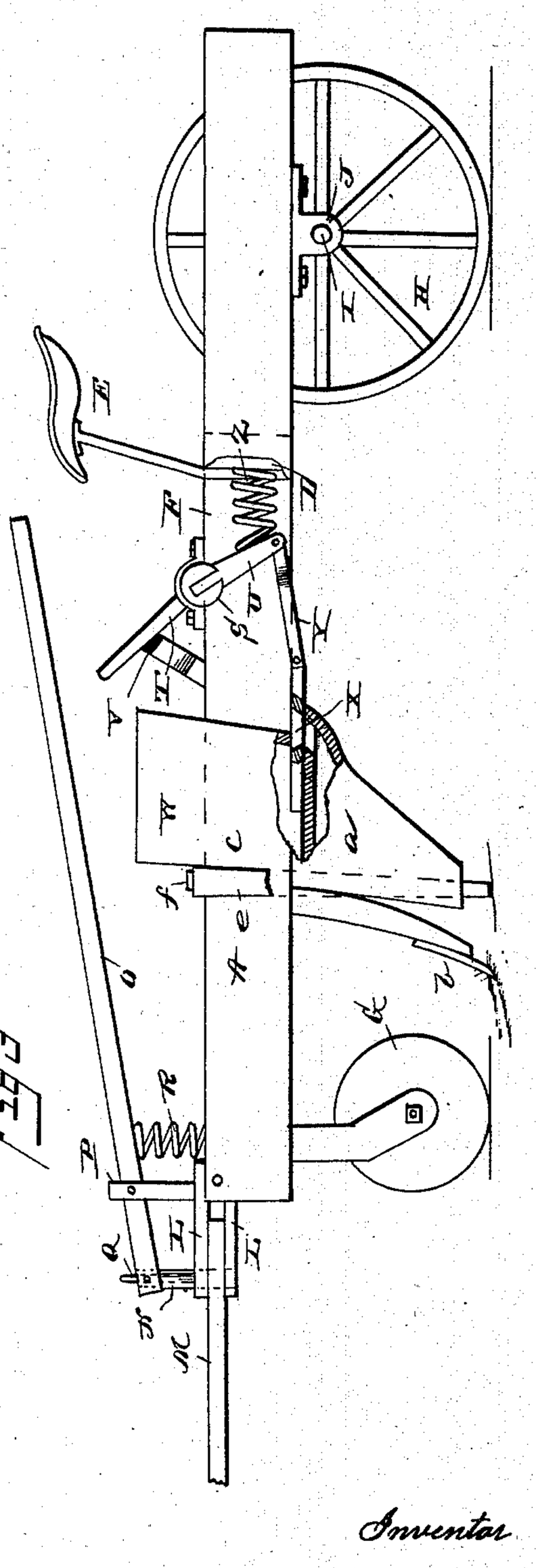

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UNITED STATES PATENT OFFICE.

JAMES T. WILLIAMS, OF CADDO MILLS, TEXAS.

CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 413,311, dated October 22, 1889.

Application filed April 25, 1889. Serial No. 308,506. (No model.)

To all whom it may concern:

Be it known that I, JAMES T. WILLIAMS, a citizen of the United States, residing at Caddo Mills, in the county of Hunt and State of Texas, have invented a new and useful Corn-Planter, of which the following is a specification.

My invention relates to improvements in corn-planters; and it consists in certain novel features hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a plan view of my improved corn-planter. Fig. 2 is a side view with a part broken away. Fig. 3 is a similar view showing the parts in a different position. Fig. 4 is a detail perspective view of the tongue and the lever for releasing the same.

The frame of my improved planter consists of the side beams A A, the cross-bars B C, connecting the front and rear ends of the same, the intermediate cross-beam D, on which the driver's seat E is supported, and the inner longitudinal beams F F, arranged parallel with and adjacent to the side beams A and extending between the cross-bars B D. The front cross-bar B is arranged a slight distance in rear of the front extremities of the side beams, so as to provide room for the vibratory cross-bar of the tongue-support. The front end of the frame is supported by the casters G G, which have their spindles loosely mounted in the front cross-bar B, so that they can freely turn from side to side to steer the machine. The rear wheels H are keyed on the axle I, which has its ends journaled in bearing-boxes J, secured to the side beams A. These rear wheels H can be readily shifted along the axle, so that they can be caused to run directly in rear of the planting tubes or boxes, and thereby pack earth over the seed, or can be adjusted inward out of the path of the planting-boxes when it is not desired to have the earth packed over the seed.

The tongue-support consists of the vibratory bar K, having its ends journaled in the front extremities of the beams A, and provided at its center with the forwardly-extending plates L, between which the tongue M is pivoted. The tongue is pivoted between the plates L by a pivot-pin N, which is secured to the front end of a lever O, as shown. This lever O is fulcrumed on a standard P, erected on the upper plate L, and extends backward to within convenient reach of the driver. The front end of the lever plays in a slotted standard or guide Q, so as to be prevented from moving laterally, and it is normally depressed so as to hold the pivot-pin through the tongue by a spring R, arranged between the lever and the front cross-bar B, as clearly shown.

In front of the driver's seat I journal, upon the longitudinal beams F, the rock-shaft S, which is provided at its center with the upwardly-projecting pedal T, and has the crank-arms U at its ends, as shown. The pedal T is adapted to be pressed forward by the foot of the driver, so as to rotate the rock-shaft and thereby plant the corn, and its downward and forward motion is limited by the stop or rest V, secured upon the beams F, in advance of the rock-shaft and adjacent thereto. Between the beams F and A, in advance of the crank-arms U, I secure the seed-boxes W, and the seed-slides X, arranged in the bottoms of the seed-boxes, are connected with the lower ends of the crank-arms U by the pitmen Y, and the said crank-arms are normally pressed forward, so as to hold the seed-slides within the boxes by the springs Z, which have their front ends secured to the crank-arms and their rear ends secured to the cross-bar D, as clearly shown. The seed-boxes are extended below the side beams A, and the planting tubes or chutes *a* are secured to these lower extended portions of the seed-boxes.

In front of each seed-box I arrange the plow or furrow-opener *b*, and upon the upper end of each plow I secure the gage *c*, which consists of the horizontal bar *d*, projecting from the frame of the machine, and the vertical arm *e*, depending from the end of the said horizontal arm. The horizontal arm is secured adjustably upon the upper end of the plow by means of a set-screw *f*, passing through a longitudinal slot *g* in the horizontal arm of the gage into the end of the plow, so that the gage can be adjusted to project more or less from the side of the frame, accordingly as it is desired to have the rows closer together or farther apart.

In practice, the seed-boxes are filled with the corn and the machine is drawn along the

field, with the end of the vertical arm of the gage moving in the furrow or row adjacent to the line to be planted. As the machine is drawn over the point where it is desired to plant, the operator presses the pedal downward and forward, thereby rotating the rock-shaft so as tó swing the crank-arms rearward and thereby withdraw the seed-slides from the seed-boxes, as will be readily understood. When the seed-slides are withdrawn, they remove a small quantity of corn, which drops into the chute and through the same into the ground. The rock-shaft is returned to its normal position by the springs Z, as will be readily understood.

From the foregoing description it will be seen that I have provided a corn-planter which is simple in its construction, efficient in its operation, and is strong and durable. The corn will be planted positively and rapidly by the mechanism described, and as the machine is free of complicated arrangements the necessity for frequent repair is obviated. Should the team become unmanageable, the lever O is operated to release the pivot-pin and allow the tongue to be withdrawn, while the vibratory bar allows the tongue to yield readily to the motion of the animals, so that there will be no chafing of the neck.

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

The combination of the frame, the seed-boxes secured thereon, the horizontally-moving slides in the bottoms of the seed-boxes, the rock-shaft mounted transversely on the frame in rear of the seed-boxes and having depending crank-arms at its ends, the pitmen connecting said crank-arms with the slides, the treadle projecting upward from the center of the rock-shaft, the springs arranged in rear of the crank-arms between the same and a cross-bar of the frame, the stop arranged transversely on the frame in advance of the rock-shaft and in the path of the treadle, and the seat secured on the frame in rear of the rock-shaft and adjacent to the treadle, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JAMES T. WILLIAMS.

Witnesses:
WILSON L. COOPER,
ANDREW K. SHERRILL.