

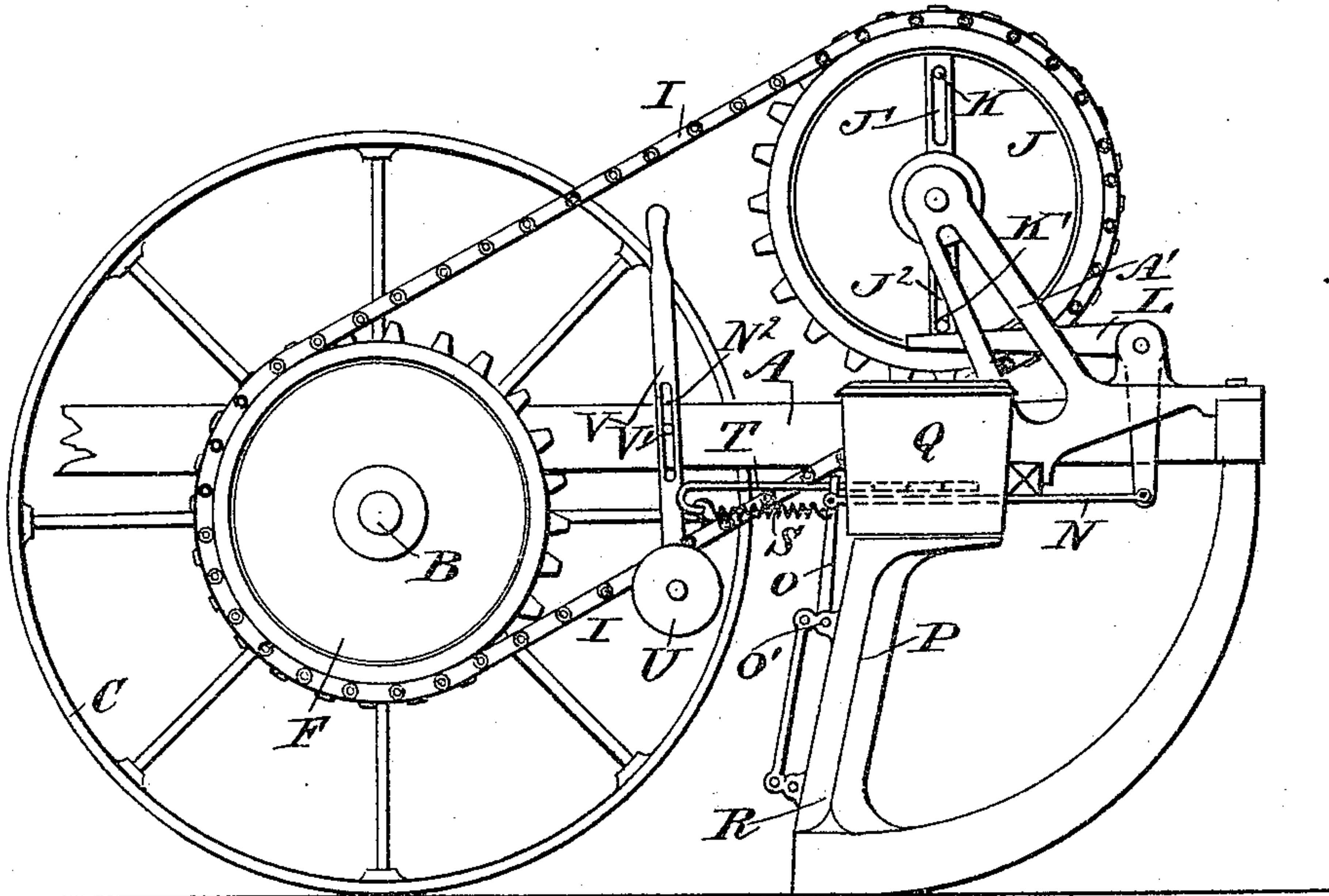
(No Model.)

O. A. BERIO.  
CORN PLANTER.

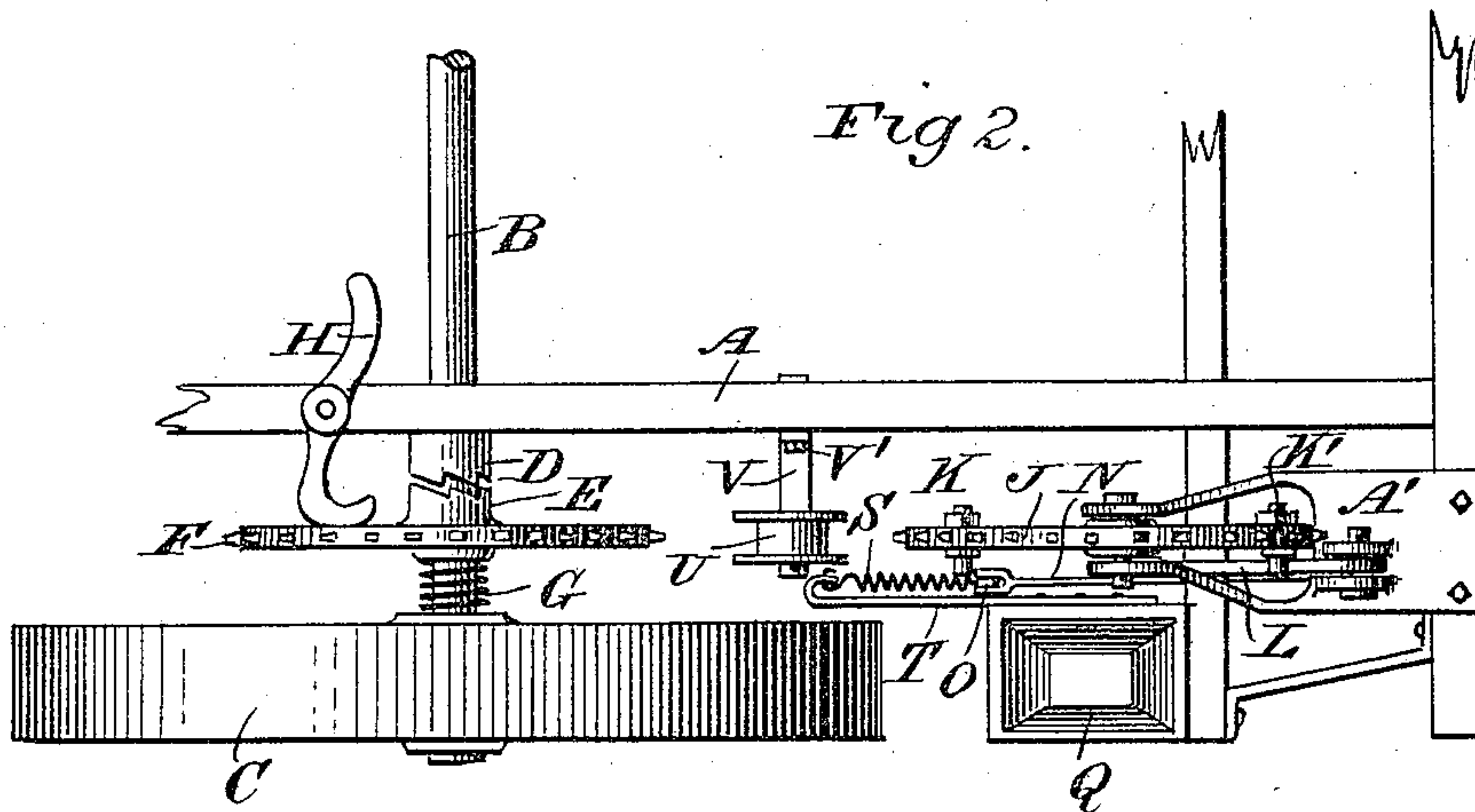
No. 459,671.

Patented Sept. 15, 1891.

*Fig 1.*



*Fig 2.*



WITNESSES:

*Paul Johnst*  
*C. Sedgwick*

INVENTOR

*O. A. Berio*  
BY *Munn & Co*  
ATTORNEY.



# UNITED STATES PATENT OFFICE.

OMER A. BERIO, OF STURGIS, KENTUCKY.

## CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 459,671, dated September 15, 1891.

Application filed May 16, 1891. Serial No. 392,974. (No model.)

*To all whom it may concern:*

Be it known that I, OMER A. BERIO, of Sturgis, in the county of Union and State of Kentucky, have invented a new and Improved  
5 Check-Row Attachment for Corn-Planters, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved check-row attachment  
10 specially designed for use on corn-planters, and which is simple and durable in construction, very effective in operation, and arranged to drop the seed in hills any desired distance apart.

15 The invention consists of certain parts and details and combinations of the same, as will be hereinafter fully described, and then pointed out in the claim.

Reference is to be had to the accompanying  
20 drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a side elevation of the improvement, and Fig. 2 is a partial plan view of the  
25 same.

The corn-planter is provided with a suitably-constructed frame A, in which is journaled the axle B, carrying the usual drive-wheels C. On the axle B near one of the  
30 drive-wheels is secured a clutch D, adapted to engage a corresponding clutch E, formed on one face of a sprocket-wheel F, mounted to rotate loosely on the axle B and adapted to be pressed inwardly by a spring G, so as  
35 to hold the clutch E in engagement with the clutch D.

In order to throw the two clutches D and E out of mesh, a foot-lever H is provided, pivoted on the main frame A and adapted to en-  
40 gage with one outer end the inner face of the sprocket-wheel F, so as to move the same outwardly against the tension of the spring G to throw the clutch E out of mesh with the clutch D. (See Fig. 2.) The inner end of the  
45 lever H is under the control of the operator's foot, so as to enable the operator to throw the said clutches in and out of mesh whenever desired. Over the sprocket-wheel F passes a sprocket-chain I, also passing over a sprocket-  
50 wheel J, journaled in a bracket A', secured to the main frame A. In the web of the

sprocket-wheel J are formed radial slots J' and J<sup>2</sup>, arranged diametrically opposite each other, as is plainly shown in Fig. 1, the said slots containing adjustable studs or pins K 55 or K', adapted to be moved nearer to or farther from the center of the wheel J, according to the distance the corn is to be planted apart. The outer projecting ends of the pins K and K' are adapted to engage alternately 60 one arm of a bell-crank lever L, pivoted on the bracket A', and connected at its other arm by a link N with the valve-lever O, pivoted at O' to the shoe P, supported from the main frame A and carrying the seed-box Q. 65

On the lower end of the valve-lever O is held a slide-valve R, adapted to move in and out of the shoe P, so as to drop a quantity of corn to the ground through the lower end of the shoe. The upper end of the lever O is 70 connected with one end of a coiled spring S, held on an arm T, projecting from the seed-box Q.

In order to tighten the sprocket-chain I, a tightening-pulley U is provided, journaled on 75 an arm V, held adjustably on the main frame A by means of a suitable bolt V', passing through a slot in the said arm V.

The operation is as follows: When the corn-planter is moved over the ground and the 80 foot-lever H is out of engagement with the sprocket-wheel F, then the spring G holds the clutch E of the said sprocket-wheel in engagement with the clutch D, secured on the axle B. The rotary motion of the latter is thus 85 transmitted by the said clutches D and E to the sprocket-wheel F, which by the sprocket-chain I imparts a rotary motion to the sprocket-wheel J, so that the two pins K and K' alternately engage the free end of the upper- 90 most arm of the bell-crank lever L to impart a swinging motion to the same, the respective pin dropping off the end of the arm to permit the latter to fly back to its former position, caused by the action of the spring S. The 95 swinging motion of the bell-crank lever L causes a swinging motion of the valve-lever O by the connection of the latter with the link N, pivoted to the said bell-crank lever. The swinging motion of the lever O causes 100 the valve R to slide in and out of the shoe P, so that a quantity of seed is dropped to the

ground whenever the said valve is opened. By adjusting the pins K and K' in the slots J' and J<sup>2</sup>, so as to bring the said pins nearer to the center of the wheel J, the seed is  
5 dropped more frequently, the hills being a less distance apart. This is caused by the pins passing sooner over the end of the uppermost arm of the bell-crank lever L at the  
10 time the said pins are nearer to the center than when they are farther from the same.

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

15 A corn-planter comprising a frame, an axle, drive-wheels thereon, the runner having a spout P leading down from the seed-box and provided with a valve R, a vertically-swing-

ing lever O, connected by link O' with said valve, the longitudinally-extending rod N, pivoted at its rear end to the upper end of 20 said lever, the vertically-swinging bell-crank lever L, to the lower end of the vertical arm of which the forward end of rod N is pivoted, the wheel J above the said lever, operated from the drive-wheels and provided with ad- 25 justable pins K K', projecting across the rearward-extending horizontal arm of the bell-crank lever L, and the spring S for returning the said bell-crank lever to its normal position, substantially as shown and described.

OMER A. BERIO.

Witnesses:

H. M. DAVIS,

L. C. FLOURNOY.