

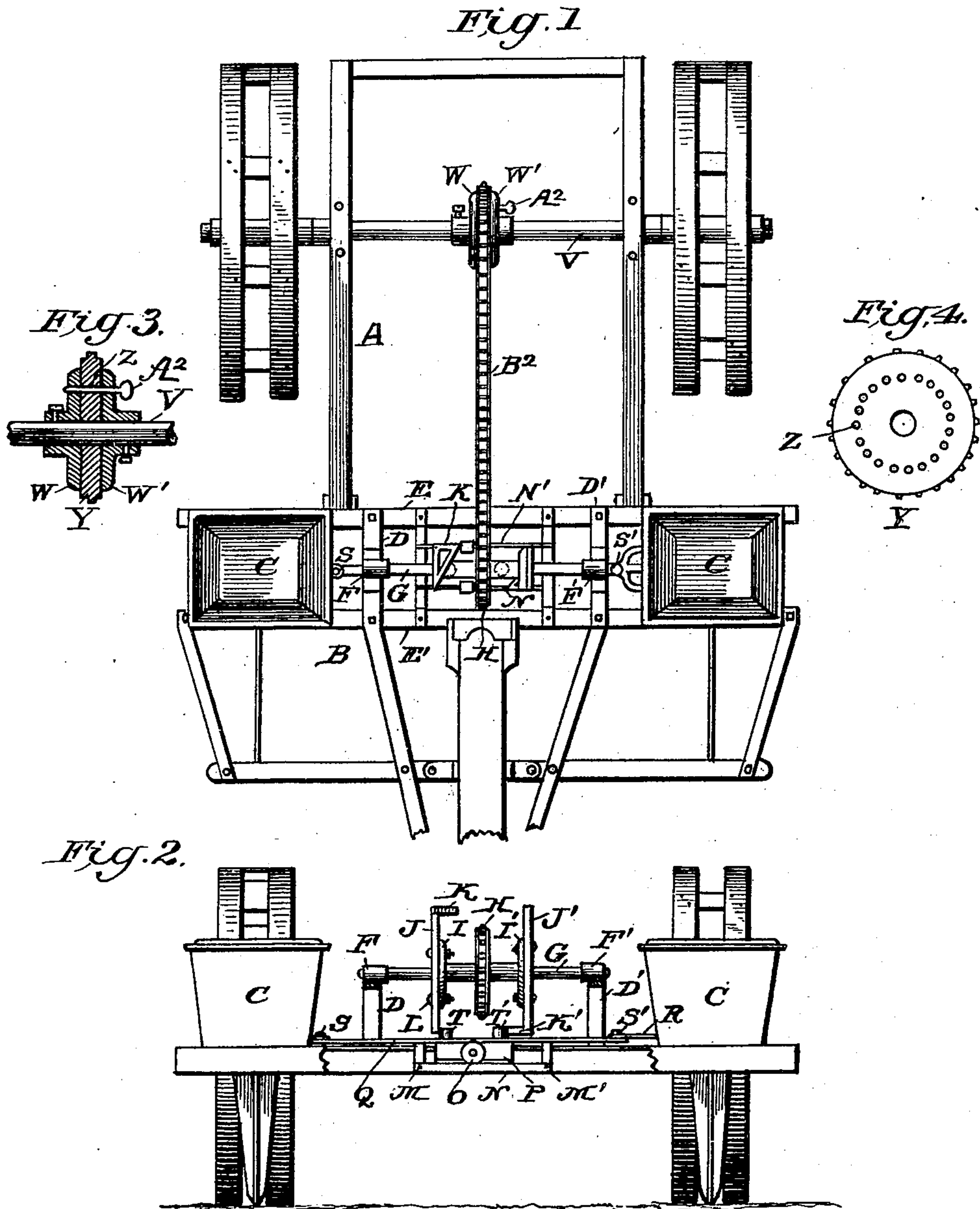
No. 682,120.

Patented Sept. 3, 1901.

J. W. TOBY.
CORN PLANTER.

(Application filed May 21, 1901.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN W. TOBY, OF RICHLAND COUNTY, OHIO.

CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 682,120, dated September 3, 1901.

Application filed May 21, 1901. Serial No. 61,279. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. TOBY, a citizen of the United States, residing in the county of Richland and State of Ohio, have invented certain new and useful Improvements in Corn-Planters, of which the following is a specification.

My invention relates to improvements in corn-planters; and the objects of my invention are, first, to provide a means to check-row corn and obviate the necessity of stretching wires or cords across the field to operate the dropping mechanism, also to construct the device so that it can be used for either check-row or drilling, and, second, to make a cheap, durable, and efficient means for the purpose stated. These objects I accomplish by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a top view of a check-row corn-planter, showing my improved mechanism for operating the attachment. Fig. 2 is a front view with portion of frame broken away to show more fully the construction and arrangement of the parts constituting my improvement. Fig. 3 is a sectional view of portions of axle and sprocket-wheel attachment. Fig. 4 is a side view of the driving sprocket-wheel.

Similar letters of reference indicate the several parts throughout the several views.

In the accompanying drawings, A indicates the frame, which may be of any design or ordinary construction, as I do not wish to claim or describe the construction of the planter, but only the improved mechanism for operating the dropping or planting devices now in general use.

B is the front frame, upon which are secured the seed-receptacles C.

D and D' are brackets bolted upon the cross-bars E and E', forming the frame B. The center of each bracket is provided with the boxings F and F', in which is journaled the shaft G. The said shaft is placed central between the rails E and E' and is provided with the sprocket-wheel H and the vertical flat disks I and I'. The said wheel and disks are secured rigid upon the shaft G. Each disk is provided with a flat bar J'. The said bars are provided with the cams K K', secured upon one end of the same. The said cams are wedge-shaped and are secured to the bars J

and J' at right angles with the same. The bar J' is secured rigid to the disk I', riveted or otherwise. The bar J is secured to the disk by the bolts L. The disk is provided with four holes, an equal distance apart, surrounding the circumference. The object will be fully explained in the operation of the machine.

M and M' are U-shaped brackets secured to the cross-rails E and E'. The said brackets are connected together by the metal bars N and N'. The said bars are secured edgewise to the vertical walls of the U-shaped brackets, one upon each side of the center, and are used as guides and upon which rolls the rollers O, journaled upon each side of the block P. A connecting rod or bar Q is secured upon the top of the truck-block P. Each end of the said bar is secured to the seed-slides R in the bottom of the corn-receptacles by the bolts S and S'.

Journaled upon the top of the connecting-bar between the cams K and K' are the vertically-positioned rollers T and T'. The said rollers rotate and overcome friction when the cams are operating the slides S.

Secured upon the axle V are the two flanged collars W and W', and between the said collars is placed the sprocket-wheel Y, loose upon the shaft. The said wheel is provided with any number of holes Z. The said holes surround the center. In the flanged collar W' is one hole which alines with the holes in the sprocket-wheel and in which is placed a pin or spring-bolt A² to lock the sprocket-wheel rigid with the shaft. A sprocket-chain B² connects the sprocket-wheels H and Y.

The accompanying drawings illustrate the machine connected to check-row corn. The motion of the shaft or axle V conveys motion to the sprocket-wheel H by the sprocket-chain B². The said motion rotates the cams K and K'. The wedge-shaped cams come in contact with the roller T', conveying a longitudinal sliding movement to the connecting-bar Q and block P. The weight of said bar and block is supported upon the track N by the grooved rollers Q. In check-rowing the cams K and K' are placed at the inside and opposite ends of the cam-levers J and J'. It will be readily seen that when the machine

is in motion the cam K will force the dropping-slides within the receptacles to the right and the cam K' to the left, causing a continuous reciprocating movement to the dropping-slides. When the end of the field is reached, the pin A² is withdrawn, allowing the axle V to rotate and allow the dropping mechanism to remain stationary. When the machine is turned and brought into line, the pin is placed in position, and the machine is then ready to operate. When the operator wishes to drill in the corn, the bolts L are removed. The cam-bar J is turned upon the shaft G one-quarter, so it will be at right angles to the bar J' and bolted rigid to the flange I. A cam is then secured upon the opposite end of each cam-bar. The machine will then drop four times to every revolution of the shaft G.

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

1. The combination with the frame and dropper mechanism, the dropping-slides connected together by a connecting-bar a block secured in the center and upon the under side of the said bar, the said block provided upon each side with grooved rollers, said rollers adapted to travel upon suitable trackways in line with the dropping mechanism, a cam mechanism embodying rotating disks, arms secured thereto and cams at right angles to said arms, the dropping-slides cam and mechanism operated from the main axle by suitable

sprocket-wheels and chain, substantially as set forth.

2. The combination with a main frame, axle, and supplemental frame for the dropping mechanism, brackets secured upon the supplemental frame between the dropping mechanisms, the said brackets supporting a shaft, the said shaft provided with flanged collars cam-levers secured to the flanged collars wedge-shaped cams secured upon the end of said levers, a sprocket-wheel secured upon the shaft centrally between the flanged collars, the slides in the dropping mechanism connected together by a suitable connecting-bar, a block secured in the center and upon the under side of the connecting-bar, cam contact-rollers journaled upon the top of the connecting-bar and block the block provided with a roller upon the under side of the same, and adapted to travel upon a suitable trackway secured in the supplemental frame between the dropping mechanism, the said mechanism operated by the rotation of the axle through sprocket-wheels and chain, the sprocket-wheel secured upon the axle adapted to be engaged and disengaged at the will of the operator, substantially as set forth.

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

JOHN W. TOBY.

Witnesses:

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