No. 649,256.

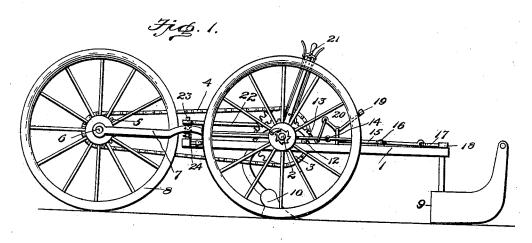
Patented May 8, 1900.

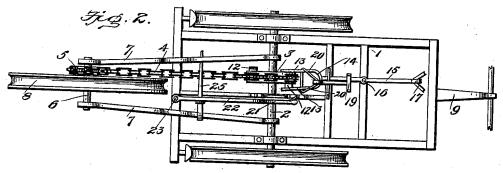
J. K. NORRIS.

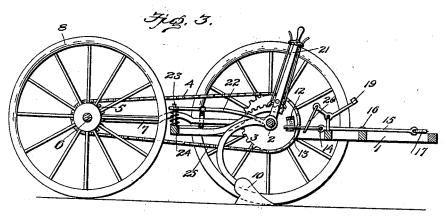
ATTACHMENT FOR CORN PLANTERS.

(Application filed Feb. 24, 1899. Renewed Mar. 8, 1900.)

(No Model.)







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UNITED STATES PATENT OFFICE.

JAMES K. NORRIS, OF MOUNT AYR, IOWA, ASSIGNOR OF ONE-HALF TO ADDISON C. PAYNE, OF SAME PLACE.

ATTACHMENT FOR CORN-PLANTERS.

SPECIFICATION forming part of Letters Patent No. 649,256, dated May 8, 1900.

Application filed February 24, 1899. Renewed March 8, 1900. Serial No. 7,930. (No model.)

To all whom it may concern:

Be it known that I, James K. Norris, a citizen of the United States, residing at Mount Ayr, in the county of Ringgold and State of Iowa, have invented certain new and useful Improvements in Attachments for Corn-Planters; and I do 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.

My invention relates to corn-planters, and more particularly to that class in which the features of a check-rower and drill are combined with the planter proper; and the object is to improve and simplify the construction and increase the efficiency of the device.

To this end the invention consists in the construction, combination, and arrangement 20 of the several elements of the planter, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings the same reference characters indicate the same parts

25 of the invention.

Figure 1 is a side elevation of my improved corn-planter, check-row attachment, and drill combined. Fig. 2 is a top plan view of the same. Fig. 3 is a central longitudinal section.

1 denotes a rectangular frame connected at its forward end to a corn-planter. (Not shown.)

2 denotes an axle journaled in the frame and provided with the usual carrying-wheels, 35 which are connected by a pawl-and-ratchet mechanism to the axle. 3 denotes a sprocket-wheel fixed on said axle so as to rotate with it, and 4 denotes a sprocket-chain extending to a similar though smaller sprocket-wheel 5, 40 fixed on a counter-shaft 6, journaled in the parallel arms 7 7, fulcrumed on the axle 2. The sprocket-wheel 3 is double the size of the sprocket-wheel 5, and 8 denotes a marker-wheel fixed on said counter-shaft and trail-45 ing behind the furrow-opener 9 and the leveler or coverer 10.

12 12 denote wedge-shaped blocks alternately secured on opposite sides of the sprocket-wheel 3, so as to alternately engage

50 the parallel arms 13 13 of the rectangular yoke 14, pivoted in the rear of the lever 15,

fulcrumed on the bolt 16, and the forward end of this lever is connected to a bracket 17, attached to the seed-slide 18.

19 denotes a foot-lever fulcrumed on the 55 frame and connected by the rods 20 20 to the yoke 14 to raise the latter out of the path of the blocks 12 when it is desired to throw the corn-dropper out of gear, and 21 designates a hand-lever fulcrumed on the axle and formed 60 with a rearwardly-extending arm 22, the end of which encompasses a stud-bolt 23, fixed on the frame.

24 denotes a spiral spring encompassing the bolt 23, and 25 designates a hook fixed to the 65 arm 22 and engaging the arms 7 7 to raise the wheel 8 clear of the ground at the end of a row and also when traveling from place to place.

The accompanying drawings show my in- 70 vention in the best form now known to me; but many changes in the details might be made within the skill of a good mechanic without departing from the spirit of my invention as set forth in the claim at the end 75 of this specification.

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

Letters Patent, is-

A corn-planter attachment comprising the 80 frame, the axle and the carrying-wheels, the sprocket-wheel fixed on said axle, the wedge-shaped blocks, carried by said sprocket-wheel, the parallel arms, the counter-shaft journaled in the free ends of said arms, the follower-wheel and the sprocket-wheel mounted on said shaft, the sprocket-chain, connecting said sprocket, the seed-slide-actuating lever, the yoke, pivoted in its rear end and in the path of said wedge-shaped blocks, the foot-lever operatively connected to said yoke and the hand-lever arranged to raise and lower the follower-wheel, substantially as shown and described.

In testimony whereof I have hereunto set 95 my hand in presence of two subscribing witnesses.

JAMES K. NORRIS.

Witnesses:
GEO. H. FINLEY,
A. C. PAYNE.