

(No Model.)

2 Sheets—Sheet 1.

C. STADTFELD.
CORN PLANTER.

No. 568,722.

Patented Sept. 29, 1896.

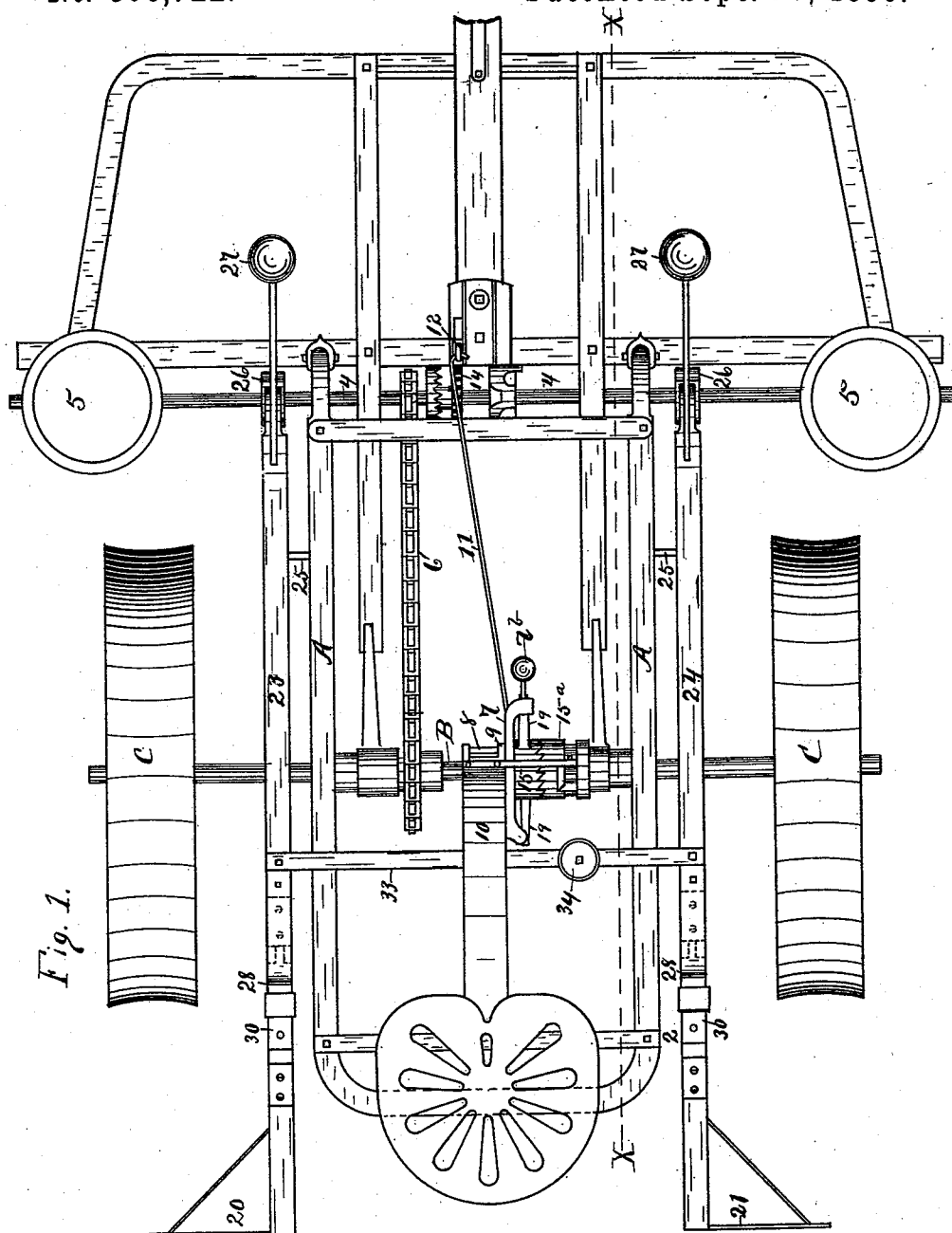


Fig. 1.

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INVENTOR:

By R. J. McCarty.

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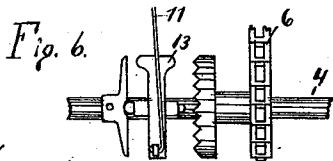
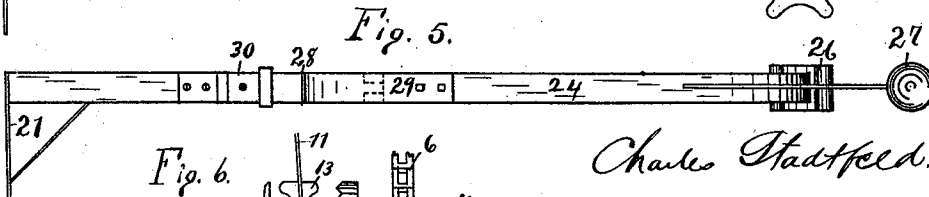
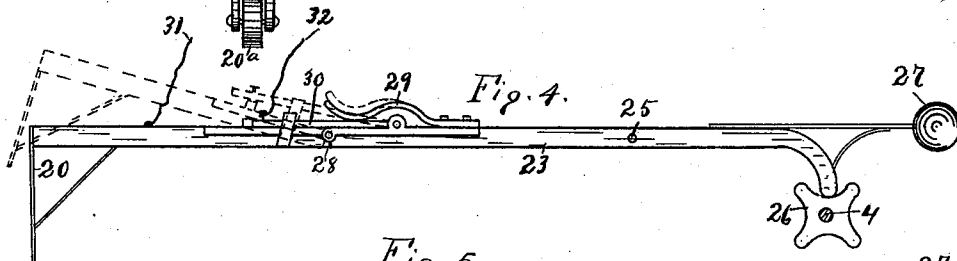
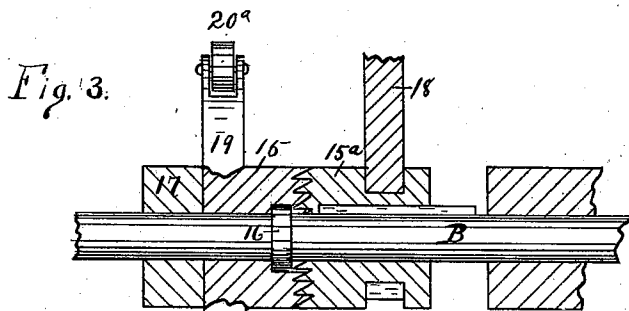
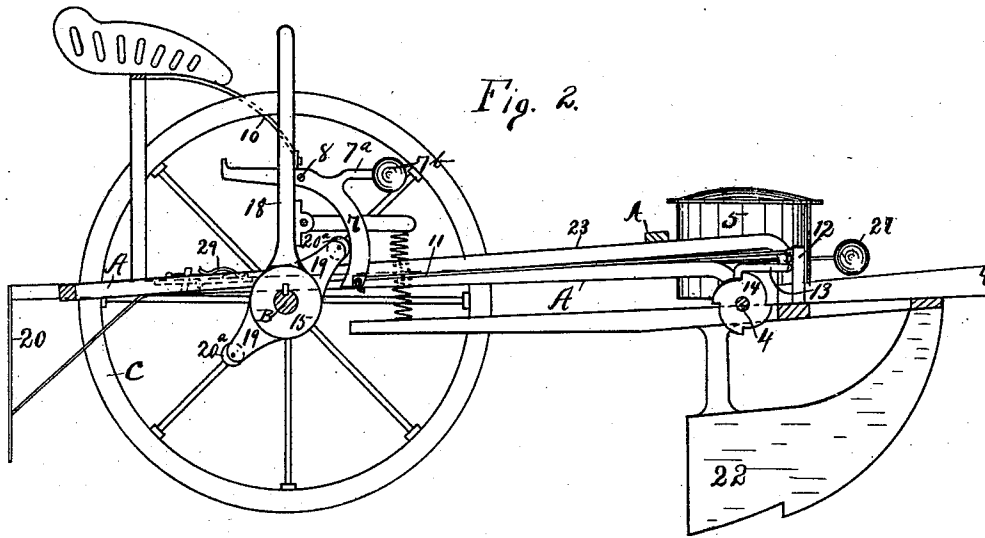
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2 Sheets—Sheet 2.

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WITNESSES:

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Grafton B. Kennedy

Charles Stadtfeld.

INVENTOR:

By R. J. McCarty,
his ATTORNEY:

UNITED STATES PATENT OFFICE.

CHARLES STADTFELD, OF DAYTON, OHIO, ASSIGNOR TO GEORGE O. WARRINGTON, OF SAME PLACE.

CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 568,722, dated September 29, 1896.

Application filed April 29, 1896. Serial No. 589,584. (No model.)

To all whom it may concern:

Be it known that I, CHARLES STADTFELD, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to new and useful improvements in corn-planters.

The object of the invention is to provide certain specific means for dispensing with the use of a check rower and marker, as will be more particularly described in the following specification, which is supplemented by the accompanying drawings, of which—

Figure 1 is a top plan view of a corn-planter having my improvements thereon. Fig. 2 is a sectional elevation on the line *x x* of Fig. 1. Fig. 3 is an enlarged horizontal section through the clutch mechanism carried on the axle. Fig. 4 is a detached side elevation, enlarged, of one of the hillers or dirt-scrapers. Fig. 5 is a top plan view of Fig. 4. Fig. 6 is an enlarged top view of the gearing on the dropper-shaft.

Similar letters of reference indicate corresponding parts in the several views.

The general construction of the machine, to wit, the carrying-frame and the seed-dropping mechanism carried on and actuated by the dropper-shaft, is similar to planters in general use. Therefore a detailed or minute description of these features is not necessary in this specification, and are only shown in the drawings to aid an intelligent understanding of the features involving the invention.

A designates the carrying-frame, B the axle, and C C the traction-wheels. The frame A supports the several parts of the machine, and the axle B carries the mechanism hereinafter described, through which an intermittent rotary motion is imparted to the mechanism on the dropper-shaft 4 and from said dropper-shaft to the revolving seed-plates (not shown)

below the seedboxes 5 5 in a well-known manner.

The dropper-shaft 4 is driven by a sprocket-chain 6 from the axle, and the said dropper-shaft is given an intermittent rotary movement through means of a gravitating arm 7, the shaft 8 of which is journaled in a bracket 9, that is attached to the lower portion of the seat-support 10. The arm 7 has a forward extension 7^a, which carries a weight 7^b.

11 designates a rod connected to the arm 7 and to a lever 12, which is pivoted to the frame and which carries a pivotal ratchet-pawl 13, that engages with a four-toothed ratchet-wheel 14 on the dropper-shaft. As hereinbefore stated, these features are common. The arm 7 is actuated, however, by means different from any heretofore employed, as follows: 15 and 15^a designate, respectively, clutch members which are mounted on the axle B. The former member is loosely mounted on said axle and is maintained in position by collars 16 17. The portion of the axle immediately inclosed by the member 15 may be slightly corrugated or roughened, in order that sufficient friction may be created to rotate said member 15 a sufficient extent to bring one or the other of the arms 19 19 adjacent to the arm 7 before both members of the clutch engage, and thereby avoid any lost motion of said arms 19 19 after the clutch has engaged. The latter member—to wit, 15^a—is splined on said axle and is brought in and out of gear with the adjacent member 15 by a handle-lever 18, that has a forked end loosely inclosing it.

19 19 designate rotary arms having anti-friction-rollers 20^a 20^a. These arms are carried by the clutch member 15. The arm 7 projects within the circuit of these arms 19 19 and is actuated thereby when the clutch members are engaged. This transmits motion to the dropper-shaft 4 at regular intervals, according to the diameter of the traction-wheels. For example, assuming that the circumference of said wheels is eight feet, the corn will be dropped four feet apart. If the circumference of said wheels is seven feet, the grain will be dropped three and a half feet apart, and so on. The grain dropped is hilled by hoes or scrapers 20 21, which lie in the

rear of the grain-shoes or furrow-openers 22. The hoes 20 21 are preferably shaped similar to a plowshare and are rigidly attached to the rear ends of pivotal bars 23 24, which lie
 5 parallel to and on each side of the carrying-frame and are pivoted at 25 to the sides of said frame. The forward ends of said bars curve downwardly and may carry each an antifriction-roller that rests upon cams 26 26,
 10 rigid on the dropper-shaft 4. The forward ends of said bars also carry weights 27, that may be adjusted to regulate the contact of the hoes with the ground. As shown in Figs. 4 and 5, the said bars each have a hinge-joint
 15 at 28, which is kept normally closed by means of spring 29, that presses on pivoted bolts 30, that lie across the upper sides of said joints. 31 and 32 designate ropes that are connected to the front ends of said bars and to the bolts
 20 30. These ropes extend within reach of the driver, and by means thereof the hoes may be raised from the ground, as shown in broken lines, Fig. 4, at such times as the machine is not in operation. The operation of said hoes
 25 to form a hill of dirt for each drop of corn is accomplished by the cams 26 26 on the dropper-shaft, and the distance apart of the hills formed corresponds to the distance between the drops of corn, which, as hereinbefore
 30 stated, is measured by the diameter of the traction-wheels.

33 designates a cross-piece connecting the two hoe or scraper bars, so that they may move in unison. 34 is a foot-tread on said
 35 cross-piece, by means of which manual power may be transmitted to the bars 23 24 to lower the hoes or scrapers at times when the dropper-shaft is not rotating, for example, in hilling the last drop of corn in the row as the machine is being turned. The dropping mechanism is actuated by throwing the hand-lever
 40 18 to bring the clutches in gear. This causes

the arms 19 19 to rotate, as hereinbefore described. The scraper-bars 23 24 in turn obtain the movement from the dropper-shaft 45 and a single drop of corn takes place in advance of the scraper.

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

1. In a corn-planter, the combination with the frame, and main axle, of scraper-bars pivoted to the sides of said frame, parallel with the ground-wheels, the forward ends of said bars being curved projecting in proximity to
 55 the dropper-shaft, and cams on said dropper-shaft adapted to come in contact with said curved ends to actuate said bars.

2. In a corn-planter, a main axle, a dropper-shaft, and clutch mechanisms mounted on
 60 said main axle, and dropper-shaft, in combination with two rotating arms carried by the clutch on said main axle, and provided with antifriction-rollers, an angular gravitating arm pivoted to the seat-standard in the path
 65 of the said rotating arms, and a connection between said gravitating arm, and the clutch mechanism on the dropper-shaft.

3. In a corn-planter, the combination with a frame, and a main axle, of weighted scraper-bars pivoted to the sides of the frame at points
 70 forward of the ground-wheels, and parallel with said ground-wheels, the said scraper-bars having their forward ends curved and projecting over the dropper-shaft, cams on
 75 said dropper-shaft adapted to actuate said scraper-bars.

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

CHARLES STADTFELD.

Witnesses:

GERTRUDE DRIGGS,
 R. J. McCARTY.