

H. PITTMAN.
CHECK ROW CORN PLANTER.

Patented Jan. 23, 1894.



Witnesses
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UNITED STATES PATENT OFFICE.

HARRISON PITTMAN, OF INDUSTRY, ASSIGNOR OF TWO-THIRDS TO JOHN MCCARTHY AND STEPHEN REED, OF ASTORIA, ILLINOIS.

CHECK-ROW CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 513,198, dated January 23, 1894.

Application filed September 5, 1893. Serial No. 484,862. (No model.)

To all whom it may concern:

Be it known that I, HARRISON PITTMAN, a citizen of the United States, residing at Industry, in the county of McDonough and State of Illinois, have invented a new and useful Check-Row Corn-Planter, of which the following is a specification.

My invention relates to improvements in check-row corn-planters, the objects in view being to provide a simple, durable, and inexpensive mechanism or attachment for the ordinary check-row corn-planter, whereby the same is designed to operate through the medium of the check-wire, the seed-mechanism, and accurately and efficiently drop seed; and, furthermore, to provide for an adjustment of the check-row mechanism, whereby the reciprocations of the seed-slide may be regulated.

With these and other objects in view the invention consists in certain features of construction hereinafter specified and particularly pointed out in the claims.

Referring to the drawings:—Figure 1 is a perspective view of a portion of a corn-planter embodying my invention. Fig. 2 is a central transverse vertical sectional view. Fig. 3 is a longitudinal sectional view of the cam-sleeve. Fig. 4 is a detail in perspective of the vibrating arm. Fig. 5 is a detail in perspective of one of the forked arms.

Like numerals of reference indicate like parts in all the figures of the drawings.

Any ordinary corn-planter frame may be employed in connection with my invention, and I have shown the same as applied to one of the usual forms, or rather have illustrated it in connection with so much of such framework as is necessary to illustrate the application of the device.

The framework 1 has mounted thereon the usual hoppers 2, in whose bottoms is located the transversely reciprocal seed-slide 3. The hoppers are connected, in the present instance, by front and rear bars 4, to render the same steady, and produce in connection with the hoppers an intermediate opening. From each hopper there rises at the outer end an inverted L-shaped standard 5, and each standard supports a cross-bar 6, the said cross-bars having intermediate transversely

opposite bearings 7 in which is mounted for rotation a transverse shaft 8. The transverse shaft 8 has its ends extending beyond its bearings, and has applied thereto and adapted for rotation therewith the forked arms 9, which, as shown, are slotted or bifurcated at their opposite ends. These forked arms are further provided upon their inner sides with pairs of pins 10 arranged diametrically opposite each other, and flat springs 11 are secured to the arms and bear upon the springs so that as the forked arms revolve with the shaft, each pin is brought under, elevates, and passes by the aforesaid springs. A pair of short stub-shafts 12 and single stub-shafts 13 extend from each bar 6 in front, and in rear, respectively, of the said shaft 8, and these shafts carry grooved rollers 14 which are in line with the bifurcations of the forked-arms. A check-wire 15 passes under the front roller, over the next, through the forked-arms, and over the rear rollers, as shown by dotted lines, Fig. 1. The center of the shaft is occupied by a cylindrical casting 16, the same having a bore 17 formed therein, which, as shown, is diagonally or at an angle to the axis of said casting. The exterior of the casting is provided at each side of its center with integral, annular bosses 18, and a binding-screw 19 passes through the casting beyond one of the collars and serves to secure the same upon the aforesaid shaft. A pitman arm 20 is provided with a half-bearing 21 that fits the rear side of this cylindrical casting, and a block 22, through the medium of screws 23, is provided with a half-bearing 24 which clamps the opposite or front side of said casting, the said pitman as a whole being loose. The pitman extends below the block and is provided with a channel 25 in its front face within which a series of holes 26 is formed. An L-shaped arm or bracket 27 is, through the medium of a screw 28, adjusted in the channel and to any of its holes, and has its lower horizontal portion provided with a series of perforations 29, any one of which engages with a vertical pin 30 projecting from the seed-slide 3. By reason of the series of holes in the lower portion of the bracket or L-shaped arm, the attachment can be fitted to any of

the corn-planters now in use that employ a reciprocating seed-slide, and through the medium of the adjusting-screw the bracket or arm may be elevated or lowered and hence
5 the length of stroke regulated so that the quantity of seed discharged may be as preferred. This completes the construction of the invention, and the operation will at once be understood.

10 The check-wire operates the forked-arms in the usual manner rotating the shaft 8. This rotation of the shaft 8 causes the cylindrical casting to vibrate by reason of the disposition of its bore, the pitman and bracket-arm, and
15 the latter reciprocates the seed-slide, dropping the seed at proper intervals.

From the foregoing description in connection with the accompanying drawings it will be seen that I have provided a very simple
20 construction of attachment that may be applied to any of the ordinary corn-planters now in use that include in their make-up a transversely reciprocating slide. It will furthermore be seen that I do not employ any fragile
25 parts, wheels, or gears that are liable to become impaired or broken.

By reason of the flat springs that operate upon the pins of the forked arms it will be seen that the forked-arms are moved inter-
30 mittingly, that is, only when engaged by a button on the check-wire, the springs serving to steady the forked arms, their shafts, and the parts operated thereby.

I do not limit my invention to the precise
35 details of construction herein shown and described, but hold that I may vary the same to

any degree and extent within the knowledge of the skilled mechanic.

Having described my invention, what I claim is—

1. The combination with the opposite hoppers, the seed-slide, the opposite standards, and the bars, of a transverse shaft journaled in the bars, bifurcated forked arms arranged on the opposite ends of the shaft, pins at the
45 inner ends of the forked-arms, flat springs arranged in the paths of the pins, check-wire guides in front and in rear of the forked arms, and motion conveying devices between the shaft and the seed-slide, substantially as
50 specified.

2. The combination with the opposite hoppers, the opposite superimposed bearings, the seed-slide arranged for movement under the
55 hoppers and having an intermediate vertical pin, of the transverse shaft arranged in the bearings, the diagonally bored sleeve mounted on the shaft and rotating therewith, the pitman-arm and block secured together each having a half bearing receiving a bored
60 sleeve, and an L-shaped bracket arm engaging the pin of the slide and adjustably mounted on the lower end of the pitman-arm, substantially as specified.

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

HARRISON PITTMAN.

Witnesses:

W. D. JANES,

G. W. GARRISON.