

(No Model.)

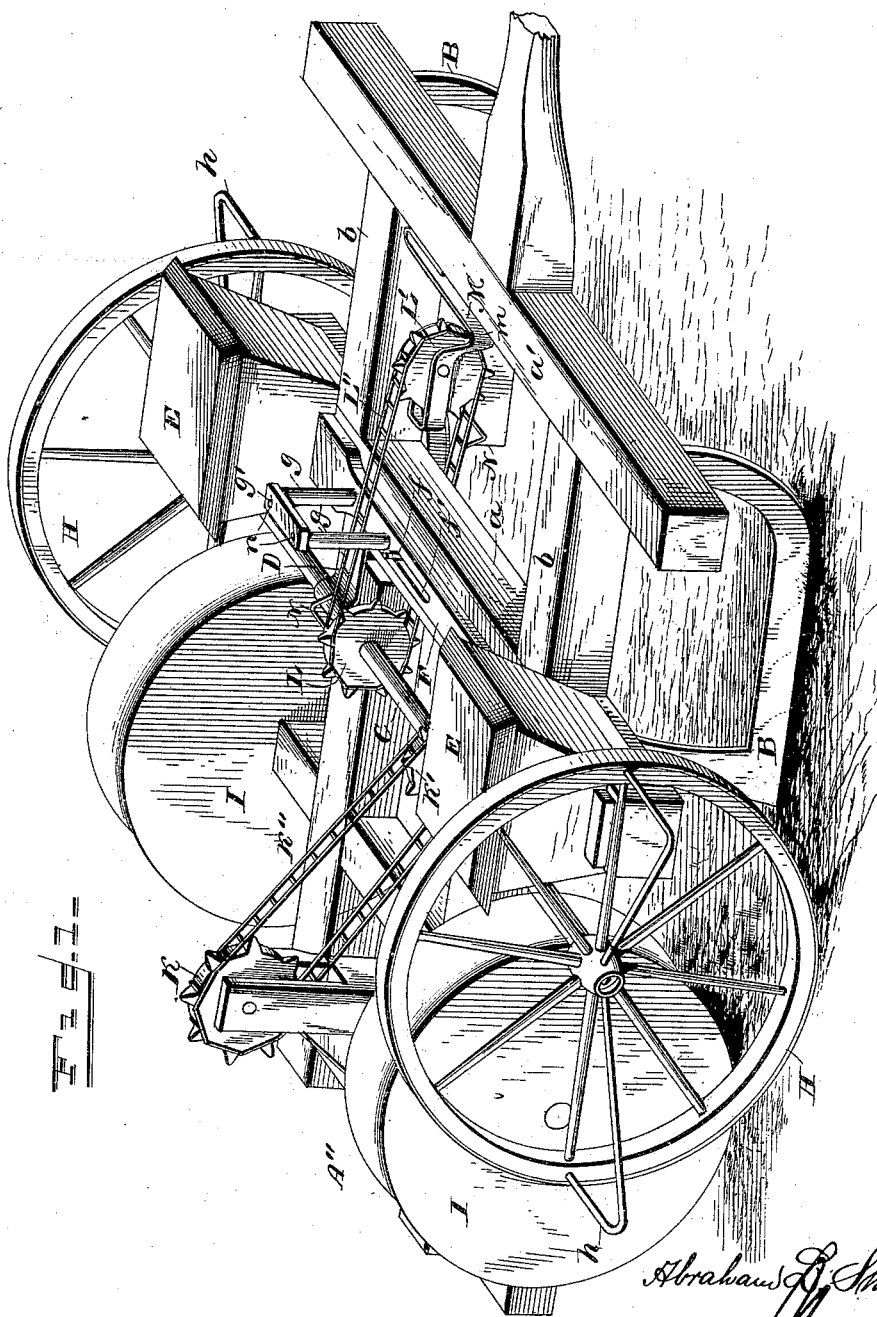
A. L. SHIPMAN.

2 Sheets—Sheet 1.

CORN PLANTER.

No. 344,685.

Patented June 29, 1886.



WITNESSES
G. S. Elliott
E. W. Johnson

Abraham L. Shipman
INVENTOR
[Signature]
Attorney

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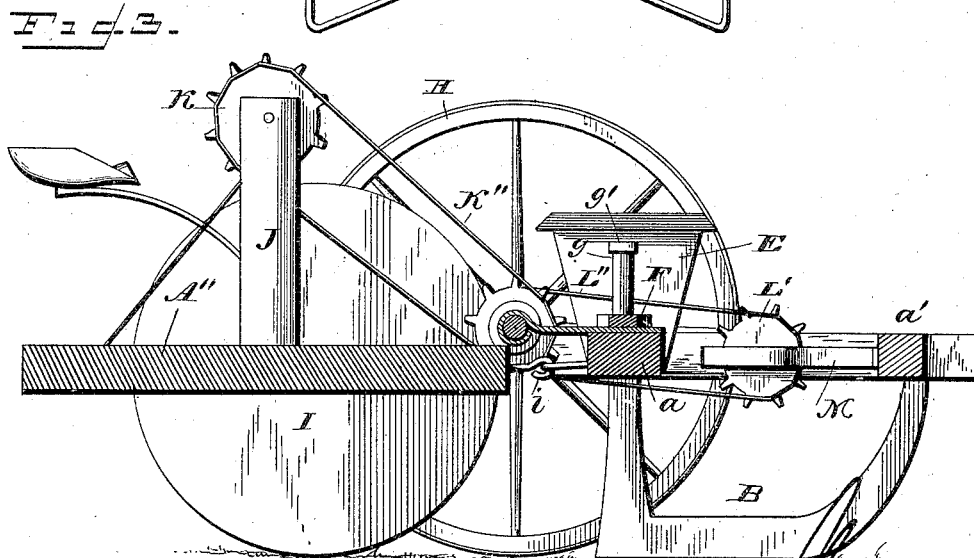
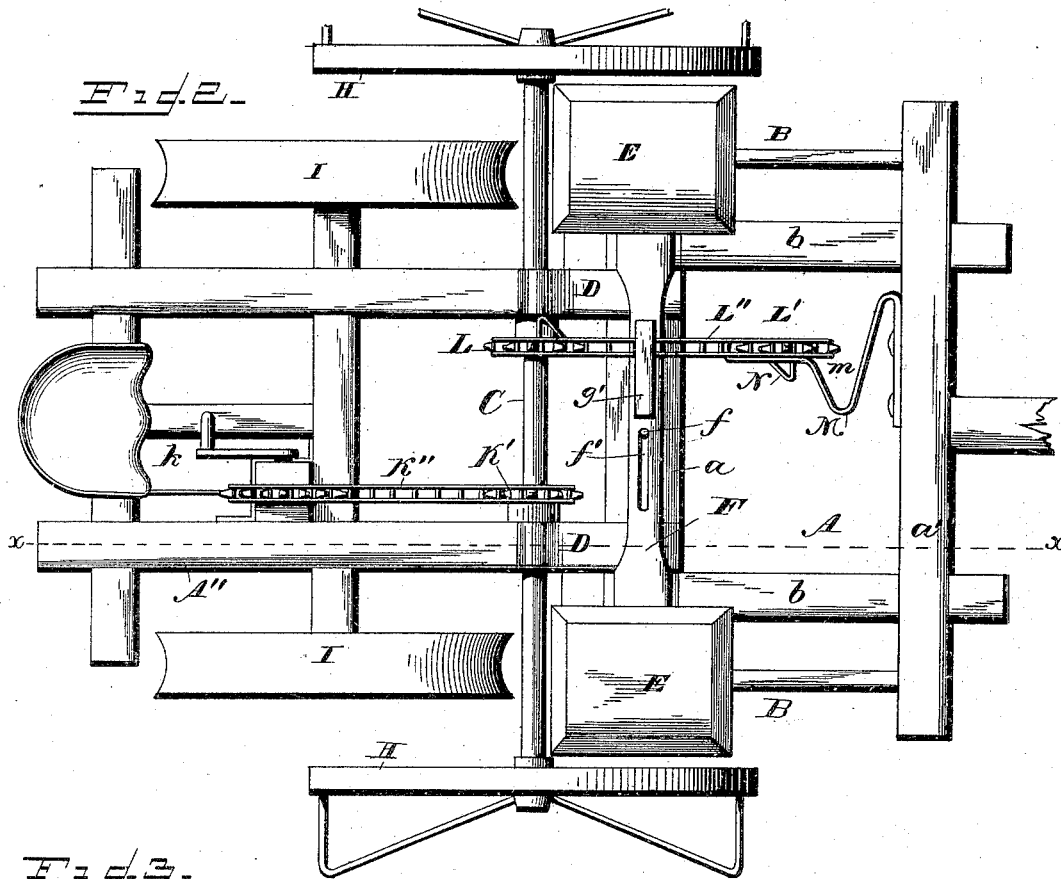
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UNITED STATES PATENT OFFICE.

ABRAHAM L. SHIPMAN, OF FULTON, KANSAS.

CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 344,635, dated June 29, 1886.

Application filed April 8, 1886. Serial No. 198,247. (No model.)

To all whom it may concern:

Be it known that I, ABRAHAM L. SHIPMAN, a citizen of the United States of America, residing at Fulton, in the county of Bourbon and State of Kansas, have invented certain new and useful Improvements in Corn-Planters; and I do hereby 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 letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to certain new and useful improvements in corn-planters; and it consists in the special construction and combination of the parts, as will be hereinafter fully set forth, and specifically pointed out in the claims.

In the accompanying drawings, which illustrate my invention, Figure 1 is a perspective view of a corn-planter constructed in accordance with my invention. Fig. 2 is a plan view, and Fig. 3 is a sectional view taken on the line *xx* of Fig. 2.

A refers to the front portion of the main frame, which consists of transverse bars *a* and *a'*, which are rigidly connected to each other by longitudinal bars *b b*. To the under side of the bars *a* and *a'* are rigidly attached runners *B B*, the rear vertical portions of which terminate above the seed-openings formed in the ends of the bar *a*.

C refers to a transverse axle, which is attached to the bar *a* of the frame A by means of metallic plates, which are rigidly secured thereto, the end of said plates being bent so as to form eyes which encircle the axle or shaft C, said plates being indicated by the letter D.

E E refer to the seed-hoppers, which are secured to the ends of the bar *a*, said bar *a* having vertical openings immediately above the heel of the runners, through which the seed is discharged from the hoppers E when the seed-slide F is reciprocated. The seed-slide F is provided with openings, two at each end, and above said perforated ends a bar extends, said bar being secured to the hoppers immediately above said seed-slide. The seed-slide F enters recesses or openings in the sides of the hop-

pers, so as to retain the same in position, and an excessive lateral movement thereof is prevented by a pin, *f*, which projects upward from the bar *a*, said pin entering a slot, *f'*, in the seed-slide. The seed-slide F has rigidly secured thereto two upwardly-projecting pins, *g g*, upon which are mounted friction-rollers, said pins being connected to each other at their upper ends by a cross-piece, *g'*.

The outer ends of the shaft or axle C have rigidly mounted thereon wheels H H, from the rims of which project bent bars or markers *h*, the opposite ends being secured to the hubs of the wheels, as shown.

A" refers to the rear frame, which is pivotally attached to the forward frame, A, by a flexible coupling, *i*, so that the frames may swing vertically with respect to each other. This rear frame has mounted on its transverse axle covering-wheels I, which will be on a line with the runners B, and at a suitable point. Said frame carries a vertical upright, J, which is bifurcated at its upper end, within which bifurcated portions is journaled a sprocket-wheel, K, which is rigidly attached to its supporting-shaft, said shaft also carrying a crank-handle, *k*.

The axle or shaft C has rigidly attached thereto a sprocket-wheel, K', over which a belt, K'', passes, for connecting the sprocket-wheels K and K' to each other. These sprocket-wheels and belts are for the purpose of rotating the wheels H, so as to bring the markers to the proper position, so as to indicate where the seed has been dropped.

If desirable, the sprocket-wheel K' may be provided with a spring-clutch or equivalent device for throwing the same in and out of gear, so that it will remain idle when it is not needed for adjusting the position of the wheels H.

L refers to a sprocket-wheel, which is rigidly mounted on the axle C, and on a line therewith in front of said axle sprocket-wheel L' is secured, which sprocket-wheel is supported by a bent bracket, M, which bracket has a curved portion, *m*, through which the projecting side pieces, N, on the sprocket-chain L' may pass when said belt is rotated. This sprocket-wheel may have two or more angular projecting side pieces, N, on opposite

sides, said angular pieces being adapted to contact with the anti-friction rollers on the vertical pins *n*, so as to reciprocate the seed-slide.

- 5 The operation of my invention is as follows:
When the machine is drawn forward, the wheels
H will rotate and cause a rotary movement of
the belt L', having the angular side projecting
portions, N, which will alternately strike
10 against the opposite vertical anti-friction rollers, so as to cause the reciprocation of the said slides. If the markers should not correspond with the dropping of the seed they can be
turned by the crank-handle *k*, so as to bring
15 them to a proper position.

I claim—

1. In combination with a corn-planter, having a reciprocating seed-slide with vertical pins attached thereto, a sprocket-chain having
20 angular side projecting pieces, N, attached thereto, a bracket, M, carrying a sprocket-wheel and provided with a bent portion, *m*, the axle C, with driving-wheels, and a sprocket-

wheel over which said belt passes, substantially as shown, and for the purpose set forth. 25

2. In combination with a corn-planter, the frames A and A'', pivotally hinged to each other, a shaft, C, carried by the forward frame and provided with sprocket-wheels L and K', a belt geared to a sprocket-wheel on the rear 30 of the frame with a crank-handle for rotating said shaft, the sprocket-wheel L being connected by a belt with side projecting pieces which abut against vertical pins on the seed-slide, so as to reciprocate the same, and a 35 bracket having a return-bend, through which said side projecting pieces may pass, said bracket carrying a sprocket-wheel, the parts being organized substantially as shown, and for the purpose set forth. 40

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

ABRAHAM L. SHIPMAN.

Witnesses:

JOHN W. BROWN,

HENRY S. ANDREWS.