

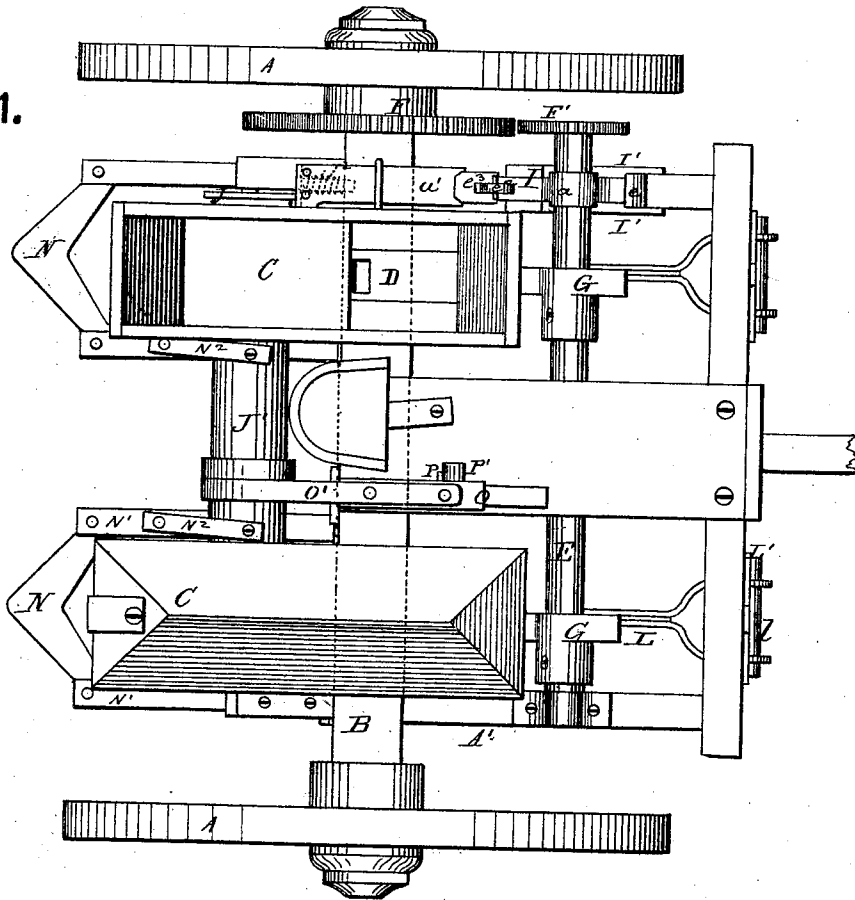
R. HACKMAN.

Improvement in Corn-Planters.

No. 131,097.

Patented Sep. 3, 1872.

Fig. 1.



WITNESSES.

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Geo. Elphau.

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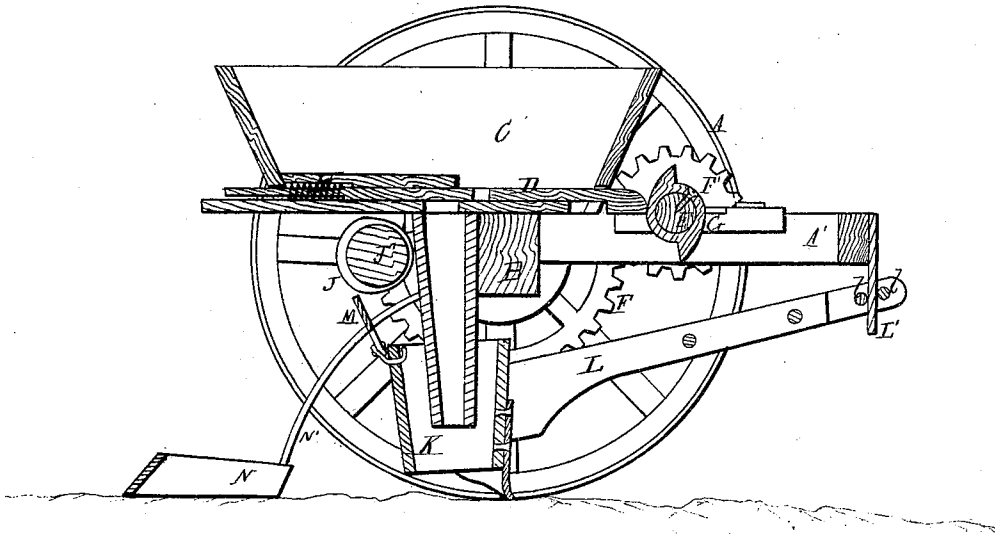
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Fig. 2.



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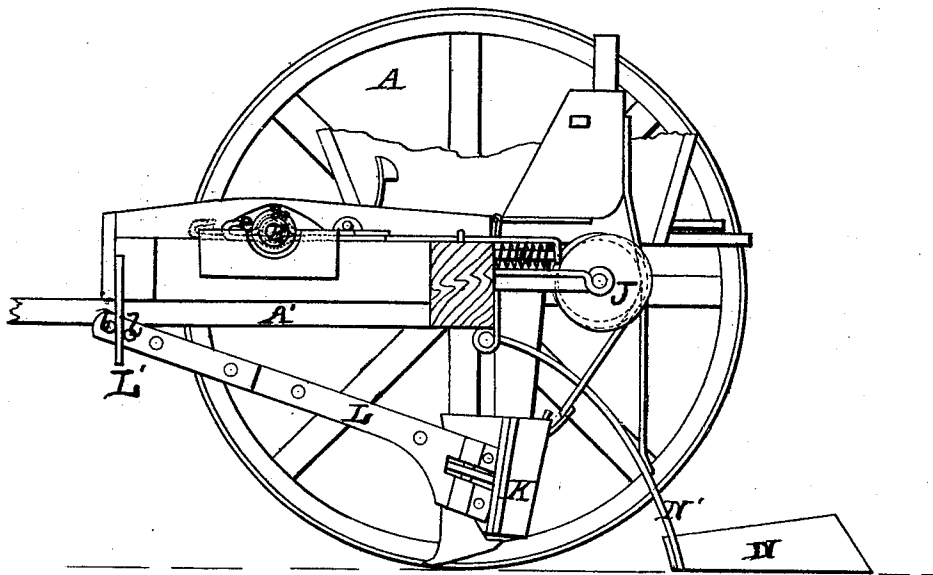
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Fig. 3.



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UNITED STATES PATENT OFFICE.

REUBEN HACKMAN, OF CLEARFIELD, PENNSYLVANIA.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. 131,097, dated September 3, 1872.

To all whom it may concern:

Be it known that I, REUBEN HACKMAN, of Clearfield, in the county of Clearfield and State of Pennsylvania, have invented a new and valuable Improvement in Corn-Planters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a plan view of my invention. Figs. 2 and 3 are sectional views of the same.

This invention has relation to corn-planters; and consists in the construction and novel arrangement of devices for actuating the seed-slides and for the adjustment of the seed-spouts and corn-coverers, all as hereinafter more fully described.

Referring to the accompanying drawing, A represents the driving-wheels of my improved corn-planter, supporting a rectangular frame, A', of which the axle B constitutes a part. C designates the seed hoppers resting on the axle, in transverse relation thereto, and containing the longitudinally-reciprocating seed-slides D the ends of which project from the forward ends of the hoppers. E designates a transverse shaft, journaled to the frame A forward of the axle and operated from one of the wheels A by means of the gearing F F'. Fixed to this shaft are two wiper-wheels, G, which, as the shaft rotates, act alternately on the end slides and push them back. The slides are driven forward by means of springs H. The shaft E has one of its bearings in a flanged box, I, composed of two plates joined together, and one of them extended to the rear end of the machine. The forward end of the upper plate a passes underneath a flange, e, on the forward end of the lower plate a'. The rear end has a slot, e², through which passes a staple, e², on the lower plate, designed to receive a pin to lock the plates together. The box I is movable lengthwise between the flanged plates I', secured to either side of one of the beams of the frame A', and is pushed forward by means of a cam, J, on the end of a shaft, J¹, located behind the axle. The rear end of the lower plate a' is bent down and incloses between it and the axle a spiral spring, J², designed to throw back the box I. The object of having the box I thus adjustable is to enable the

gearing F F' to be disconnected at will by the turning of the shaft J, which is connected to and used for elevating the corn-coverers and seed-shoes. K represents the shoes, attached to beams L, which have their forward ends forked and passed through slotted plates L' depending from the front of the frame A'. Pins l pass through holes in the ends of said beams on either side of the plates and hold said beams in place, allowing them a hinge-like movement. The shoes are supported at the back by means of bands M, which are wound spirally around and secured to the shaft J¹. N designates the corn-coverers, having arms N¹ hinged to the axle B. Straps or bands N² connect the inner arms to the shaft J, being wound spirally around said shaft. O designates a cam-lever, hinged to the axle B and connected to the shaft J by means of a band, O', which unwinds when the lever is turned forward and causes the shaft to turn forward also. With this motion of the shaft the shoes and corn-coverers are raised and the box I pushed forward. A stud, P, projecting from one side of the lever, engages with a beveled spring-catch, P', and by this means the lever is held in position when turned forward. When the lever is released the shaft is turned back by the weight of the coverers and shoes.

The gearing F F' is disengaged when the coverers and shoes are raised so as to prevent the depositing of seed.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The sliding journal-box I, having the extended plate a', in combination with the cam J, spring J¹, gearing F F', and wiper-shaft E, substantially as specified.

2. The journal-box I, composed of the plate a' having the flange e and staple e², and the plate a having the slot e², substantially as specified.

3. The shaft J¹ holding the cam J and connected by means of bands M N² O' to the coverers N, shoes K, and lever O, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

REUBEN HACKMAN.

Witnesses:

ISRAEL TEAT,
C. HOWE.