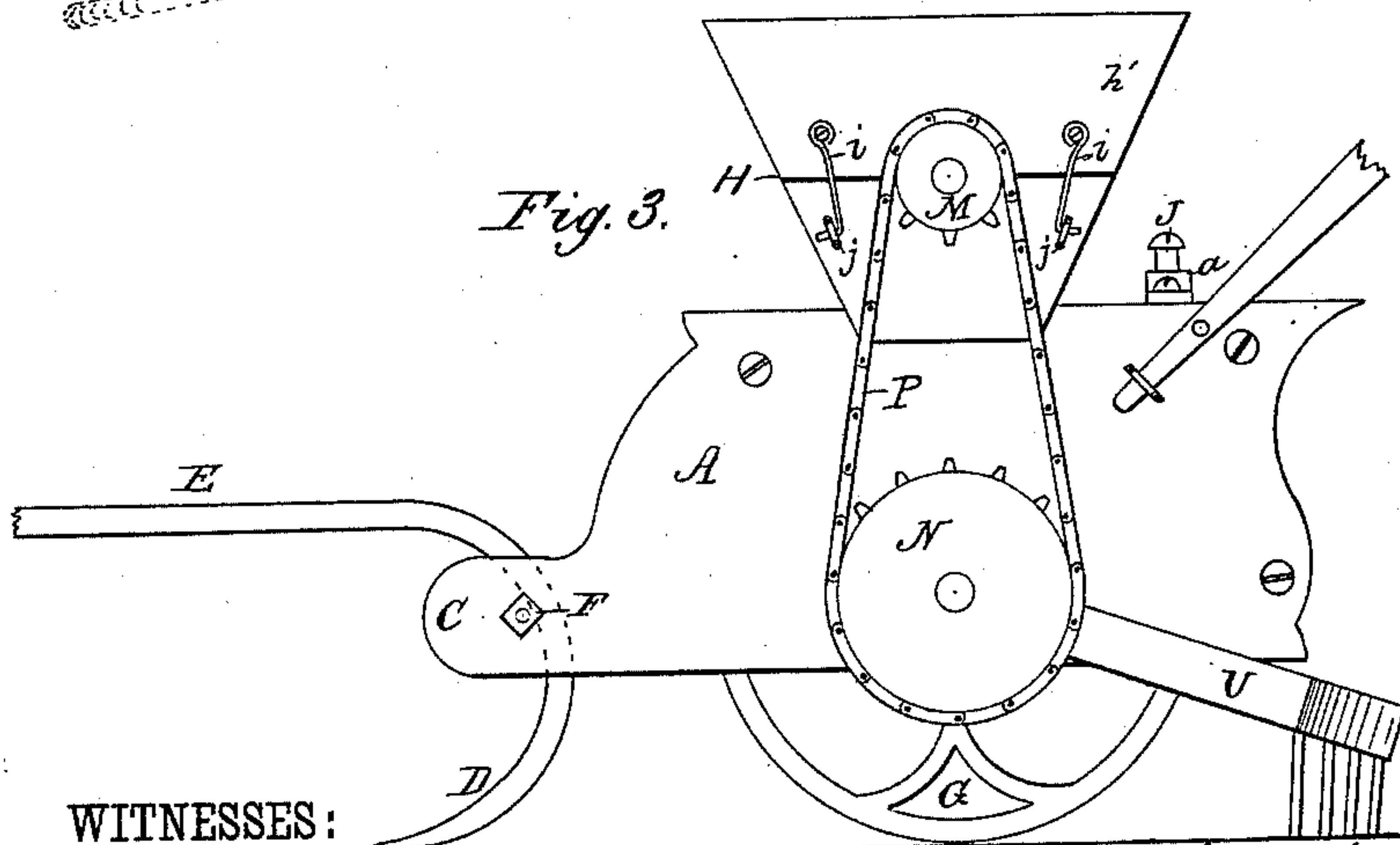
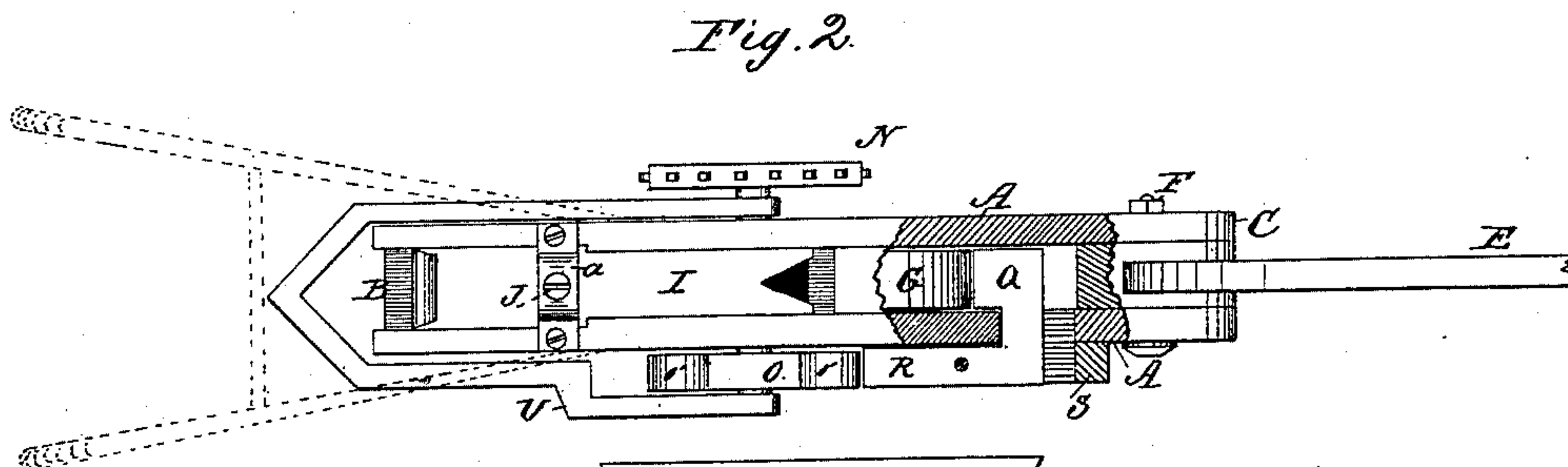
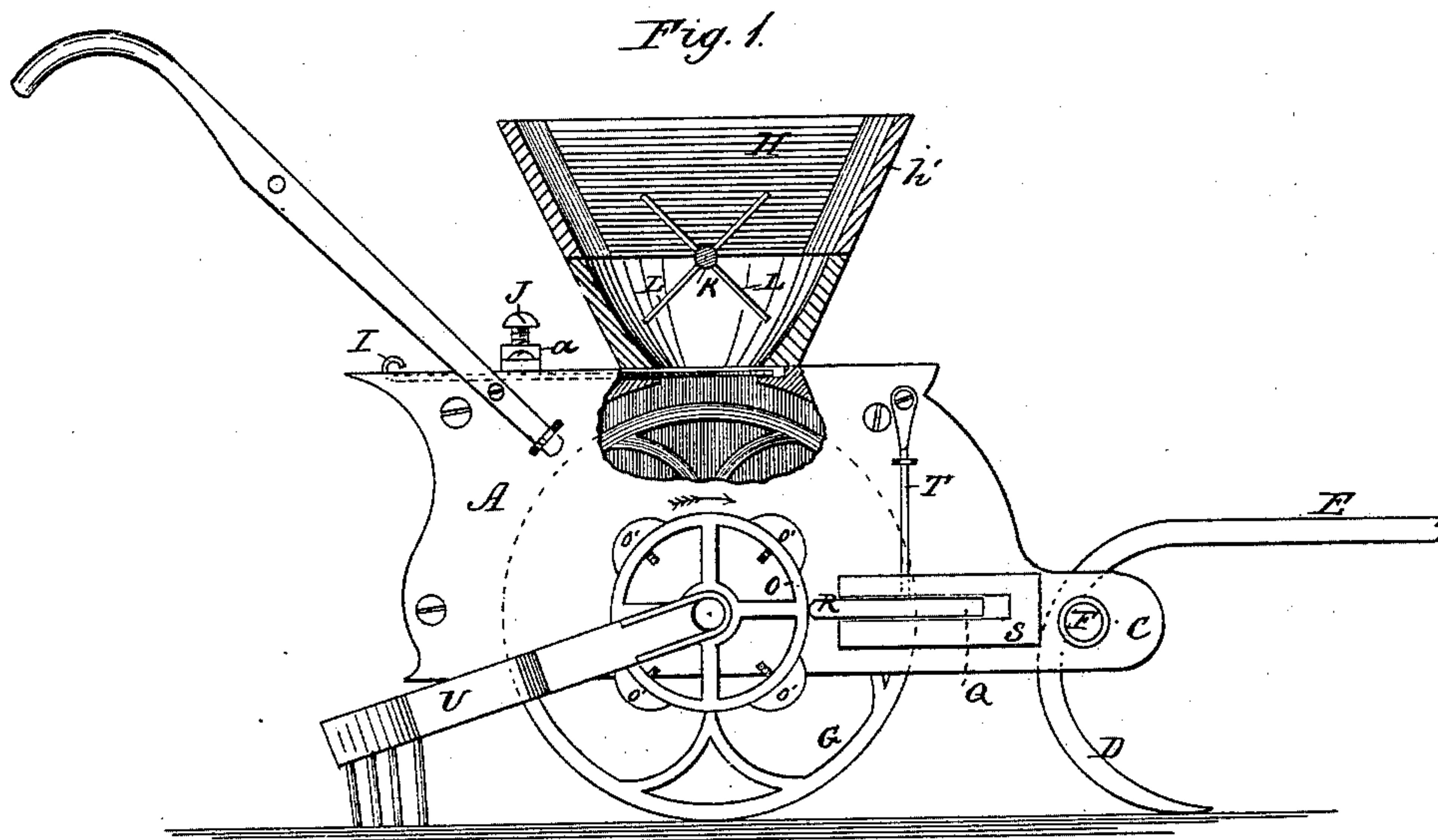


J. A. KIRKPATRICK.
Seed-Planter.

No. 223,148.

Patented Dec. 30, 1879.



WITNESSES:

W. W. Hollingsworth
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UNITED STATES PATENT OFFICE.

JESSE A. KIRKPATRICK, OF CARTERSVILLE, GEORGIA.

IMPROVEMENT IN SEED-PLANTERS.

Specification forming part of Letters Patent No. **223,148**, dated December 30, 1879; application filed November 13, 1879.

To all whom it may concern:

Be it known that I, JESSE A. KIRKPATRICK, of Cartersville, in the county of Bartow and State of Georgia, have invented a new and Improved Seed-Planter; and I do hereby declare that the following is a full, clear, and exact description of the same.

The present invention relates to a seed-planter adapted for planting cotton-seed and all kinds of smooth seed, such as pease, beans, corn, wheat, &c.

The invention consists in the combination and arrangement of parts, as hereinafter described and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 is a side view, and Fig. 2 a plan view, of my improved seed-planter, a portion being broken away or shown in section. Fig. 3 is another side view.

The frame of the machine or planter is made in the form of a casing or box, and consists of two vertical side boards, A, applied to the opposite sides of a central or intermediate section, B. The front portions of these boards A and section B are extended to form a draft-beam, C, and into a mortise cut through this draft-beam is fitted a curved metallic bar, the rear portion of which forms a furrow-opener, D, while the forward portion constitutes the draft-bar E. The mortise is shaped to conform with the curvature of the bar, so that the same may be adjusted to vary the degree of penetration of the furrow-opener and pitch of the draft-bar.

A screw-bolt, F, passing transversely through the draft-beam, bears against the front face of the furrow-opener, and serves to hold the same in position. In rear of the furrow-opener is located a revolving wheel, G, preferably made of cast-iron, and journaled in the side boards, A, in such a manner that the upper half of said wheel is inclosed by the casing or frame of the machine. The wheel G revolves by contact with the ground, and a curved chamber or space in the section B permits the wheel to revolve.

A seed-hopper, H, is arranged above the wheel G, the apertured bottom of which is in line with an opening or aperture formed in the section B. Between said apertured hopper-bottom and apertured top of the section B

is fitted a metallic slide, I, which has a V-shaped notch cut in its front end. The object of said notched slide is to regulate the flow of all smooth seed, such as pease, beans, corn, wheat, &c., it being obvious that the discharge is greater when the front end of the slide is in line with the front wall of the aperture in the section B than when said slide is pushed forward beyond said front wall. A set-screw, J, passing through a guide-strip, a, serves to retain the slide I in position.

The hopper H is made in two sections, the upper section, h', having hooks i, which enter staples j on the lower section. Notches are made in the adjoining faces of the hopper-sections for the reception of the journal portions of a transverse stirrer-shaft, K, which has fingers or arms L, and carries at one end a cog-wheel, M. The shaft of the ground-wheel G projects beyond the frame at both sides thereof, and carries at one end the cog-wheel N, and at the other end the cam-wheel O. An endless chain, P, passing around the cog-wheels M and N, serves to operate the stirrer-shaft K, the latter serving to properly agitate the seed and force the same through the hopper-bottom. The seed drops on the wheel G, and is carried around by the same in the curved wheel-chamber to the lower end thereof, where is located a discharge-slide or cut-off, Q. This discharge-slide has an outer arm, R, which slides in a slotted guide-strip, S, attached to the frame of the machine. The rear end of said arm R is struck by the cams or blocks o', which are detachably fitted to the periphery of the wheel O, so that the slide will be forced forward by said cams to permit the discharge of seed to take place. The position of the cams determines the distance apart between the hills of seed planted whenever the slide is forced away from the delivery-wheel by the action of the cam-wheel. A vertical spring, T, connected with the slide or cut-off and frame of the planter, serves to retract the slide whenever the cams are not in action. These cams or blocks are detachably fastened to the periphery of the wheel by screws, so that they can be set farther apart or closer together to drop the seed correspondingly.

A bifurcated frame, U, has its rear V-shaped

end armed with harrow or covering teeth. This frame is hung on the shaft of the ground or delivery wheel G, so as to rise and fall and adapt itself to the inequalities of the ground.

The mechanism above described, without change or transposition, will serve for planting all kinds of seed, it being understood that by simply withdrawing the slide in the bottom of the seed-hopper the devices are in condition to plant cotton-seed.

I do not claim operating a seed-slide by means of a cam-wheel, nor communicating motion from a rotating axle to a seed-slide either by cam-wheel or gearing; but,

Having thus described my invention, what I claim as new is—

In combination with the hopper and frame of the planter, the smooth-faced seed-delivery wheel, which supports the frame of the machine and forms a portion of the bottom of said hopper, the cam-wheel fixed on the rotating axle, and the reciprocating discharge-slide or cut-off, constructed, and working in front of the delivery-wheel, as shown and described.

The above specification of my invention signed by me this 24th day of October, A. D. 1879.

JESSE A. KIRKPATRICK.

Witnesses:

W. L. KIRKPATRICK,
D. W. K. PEACOCK.