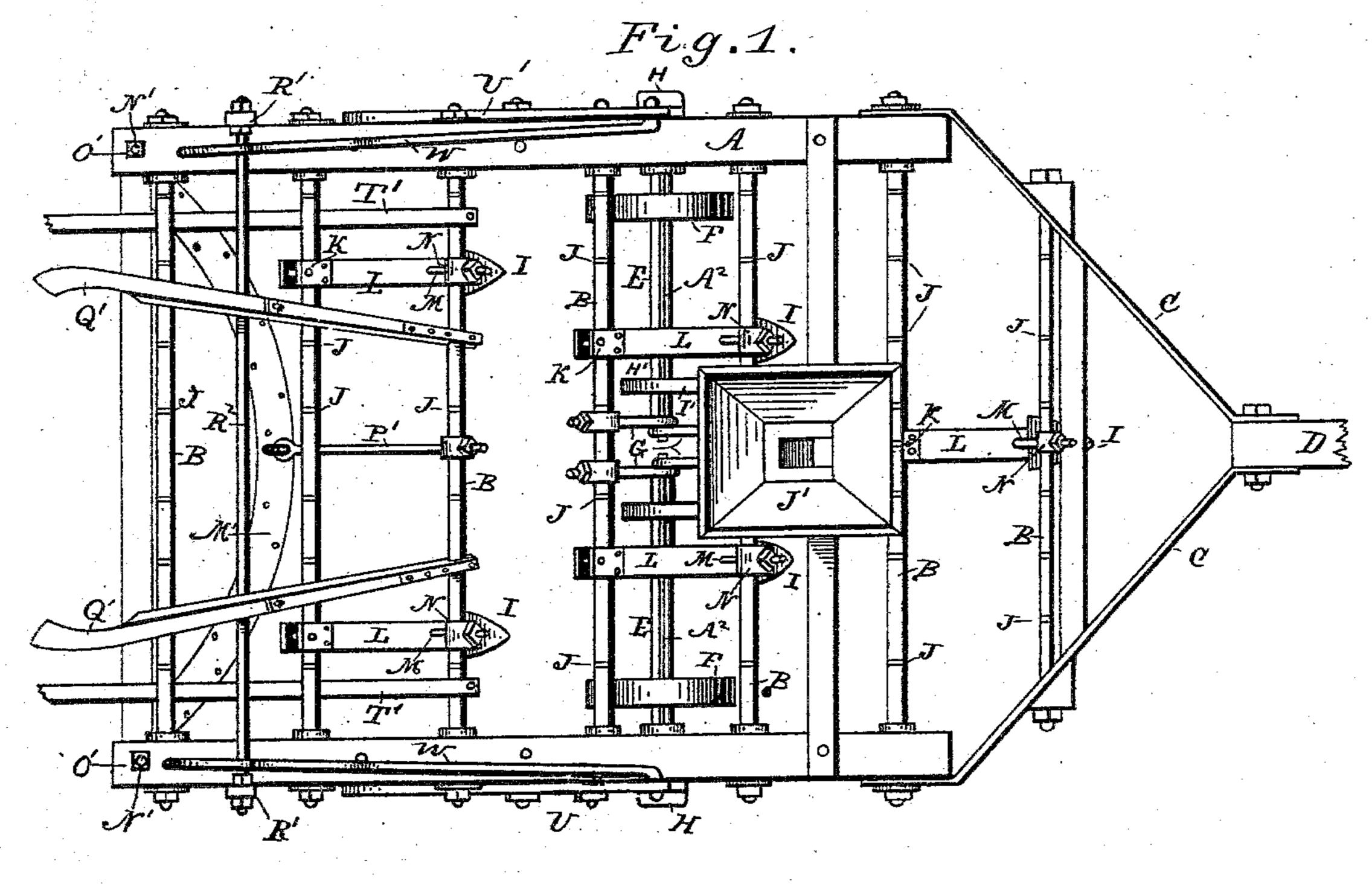
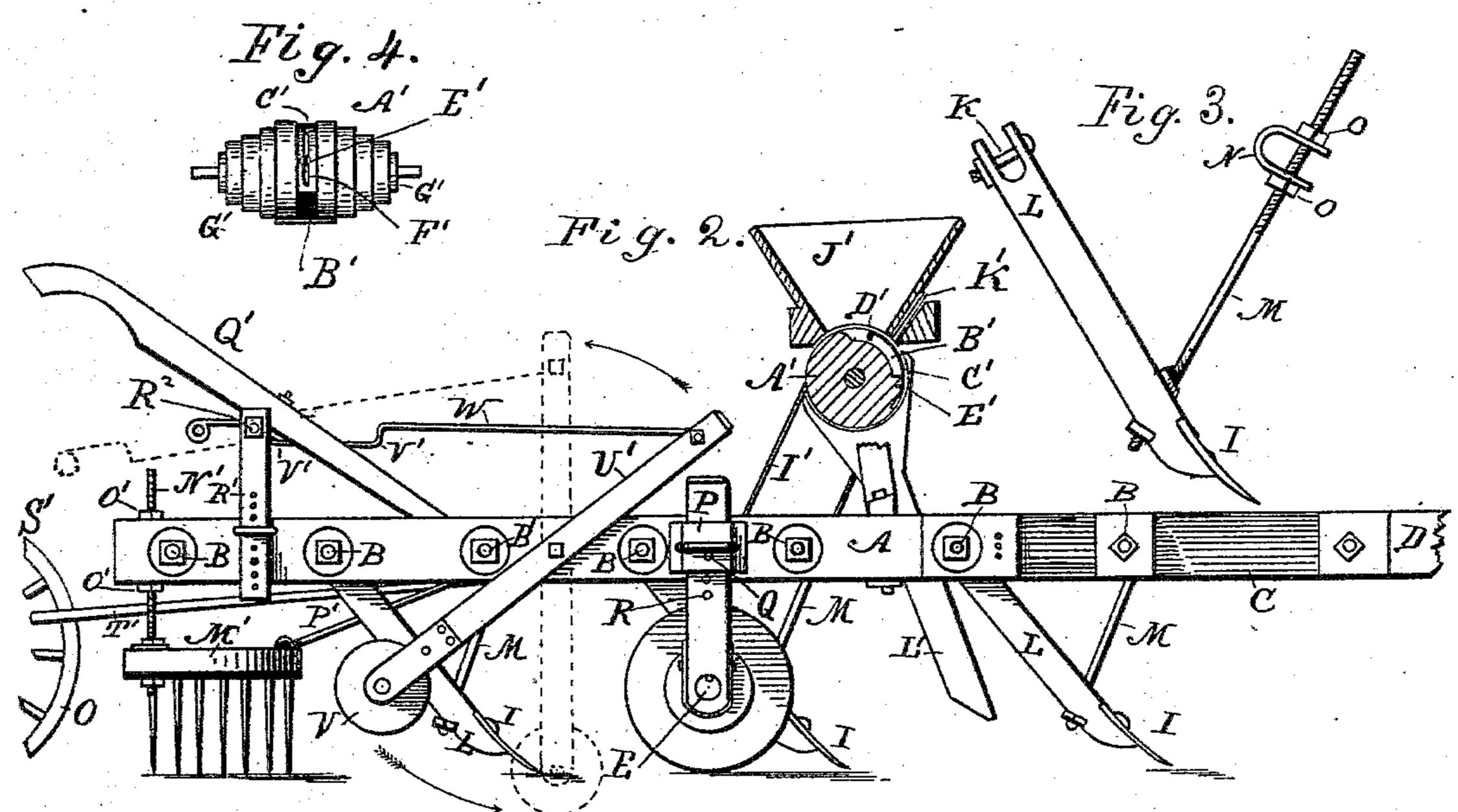
H. D. LAYMAN.

CORN PLANTER.

No. 296,697.

Patented Apr. 8, 1884.





WITNESSES:

Tho Houghton. A. L. Lyne.

INVENTOR:
H. Layman
BY Munu Lo

United States Patent Office.

HIRAM D. LAYMAN, OF BENTON, ARKANSAS.

CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 296,697, dated April 8, 1884.

Application filed November 9, 1883. (No model.)

To all whom it may concern:

Be it known that I, HIRAM D. LAYMAN, of Benton, in the county of Saline and State of Arkansas, have invented a new and useful Improvement in Corn-Planters, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, forming part of this specification.

This invention relates to wheeled corn-planto ers having rotary dropping devices; and the invention consists of the novel construction

hereinafter described and claimed.

In the drawings, Figure 1 is a plan view of my corn-planter, the seat-supporting frame being broken away at the rear thereof. Fig. 2 is a side elevation of the same, showing the hopper and dropping-wheel in section. Fig. 3 is a detail view of one of the plows detached from the planter, and Fig. 4 is a detached view

20 of the dropping-wheel.

A indicates two side beams, connected together by a series of cross-rods, B, forming the frame-work of the planter. An additional rod B is supported in the draft-bars C, to 25 which latter the tongue D is attached. This frame-work is supported on the divided axle or axles E and the wheels F, the axles being supported in adjustable hangers G H, to vary their height from the ground according to the 30 depth the plows are to run. The plows I, which are designed to be removable from the frame, are connected to the cross-rods B by means of a series of notches, J, formed transversely in the rods, in which notches are set 35 the bolts K after the clips or slotted standards L are placed in engagement with the rods. The engagement of the bolts K with the notches J prevents the plows from moving longitudinally on the rods. The stay-rods M of the 40 plows are threaded at their upper ends, and provided with clips N and nuts O, for holding the clips rigidly in engagement with the next foremost rod, B, in each particular case. The hangers G of the axles E are connected to rods 45 B in the same manner as the stay-rods M; but the hangers H are supported in clips P by means of a pin, Q, which is set in a hole in said clips and one of a series of perforations, R, in said hangers.

For planting corn five plows, I, are preferably used, the foremost one being at the cen-

ter to form the furrow, and the others being arranged in pairs on opposite sides of the center, as shown in Fig. 1. The dropping device is arranged on the frame just behind the fore- 55 most plow, and consists of a cylinder, A', having a partially-circumferential groove, B', and a curved gage-plate, C', having a lip, D', and adjustably secured over said groove by a setscrew, E', which passes through a longitudinal 60 slot, I', in the plate. The lip D', which is turned inward, serves to close or cut off part of the groove when required. At each end of cylinder A' is arranged a series of pulleys, G', each one of which is to be different from the 65 others in size, in order that by connecting one of said pulleys G' with a pulley, H', on the axle by a belt, I', the cylinder A' may be rotated at any desired speed, according to the distance required between the planted hills. 70 The hopper J' is provided with a bunch of bristles, K', to cut off the grain from groove B'. L' is the chute for conveying the grain to the furrow.

For covering the corn in the furrow a curved harrow, M', is attached to the rear end of the frame-work by means of vertical screw-rods N', passing up through side beams, A, and secured adjustably thereto by nuts O'. The front or center of the harrow is supported by 80 a stay-rod, P', connecting it to one of the bars B. The frame is provided with handles Q', having adjustable supports R' R², which handles are to be held by the driver, who is to occupy a seat (not shown) supported on a 85 wheeled frame, S', which is connected to the planter by bars T'. The handles may also be adjusted laterally on the supporting-rod R².

U' indicates a pair of pivoted bars carrying rollers V at their lower ends, and having rods 90 W at their upper ends for operating and holding said bars in any desired position. When the bars are moved to the position shown in dotted lines, the rollers are brought to the ground in position for supporting the plows 95 and wheels above ground for convenience in turning around, &c. The rods W are provided with shoulders V', adapted to engage with the rod R², to hold the bars U' in either indicated position.

The wheels F are made adjustable on the axles E by means of the feathers A², in order

that the wheels may be set to act as guides in laying off rows of any desired distance apart. What I claim is—

1. In a corn-planter, the combination of the frame having the series of parallel cross-rods B, each provided with a series of notches, J, and the plows having slotted standards L, and bolts K, passing through said standards and engaging with the notches of one rod, and the screw-rods M, connected to the next forward rod B by the clips N and nuts O, substantially as shown and described.

2. In a corn-planter, the combination of the frame having the series of parallel cross-bars

B, each being provided with a series of notches, 15 J, the plows arranged to open and close a furrow, and having slotted standards L, and bolts K, passing through the standards and engaging with the notches of one rod, the screwrods M, connected to the next forward rod B 20 by the clips N and nuts O, the hopper and seed-dropping device, and the covering-harrow, substantially as shown and described.

HIRAM D. LAYMAN.

Witnesses:

A. G. LYNE, SOLON C. KEMON.