(No Model.)

3 Sheets—Sheet 1.

H. A. CAMPBELL.

FERTILIZER DISTRIBUTER AND CULTIVATOR.

No. 312,329. Patented Feb. 17, 1885.

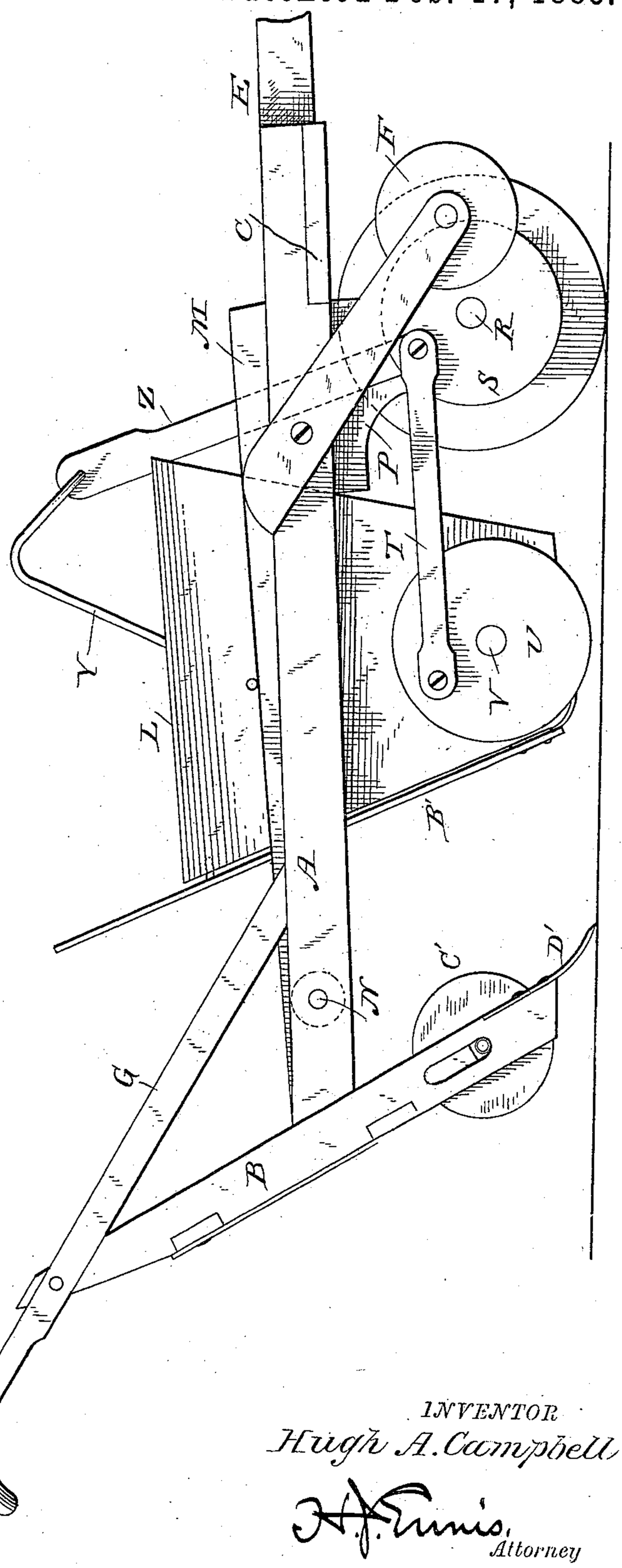

Fig. 1.

WITNESSES

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Jas. F. Baker

INVENTOR

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(No Model.) 3 Sheets—Sheet 2.

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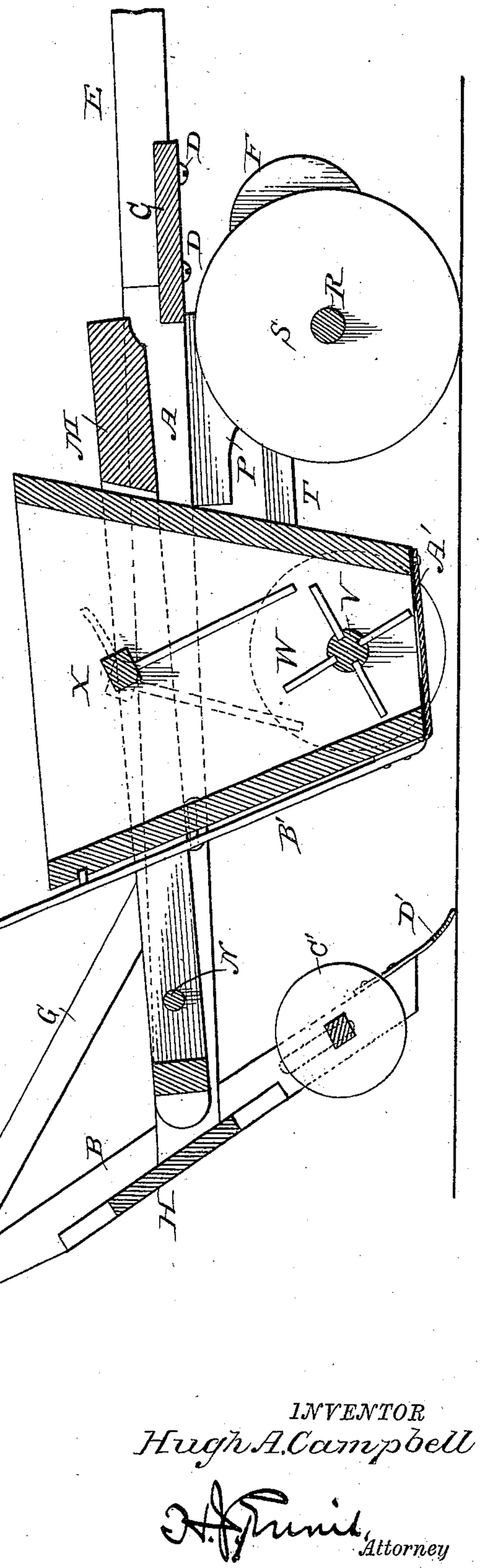

Fig. 2.

WITNESSES

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(No Model.) 3 Sheets—Sheet 3.

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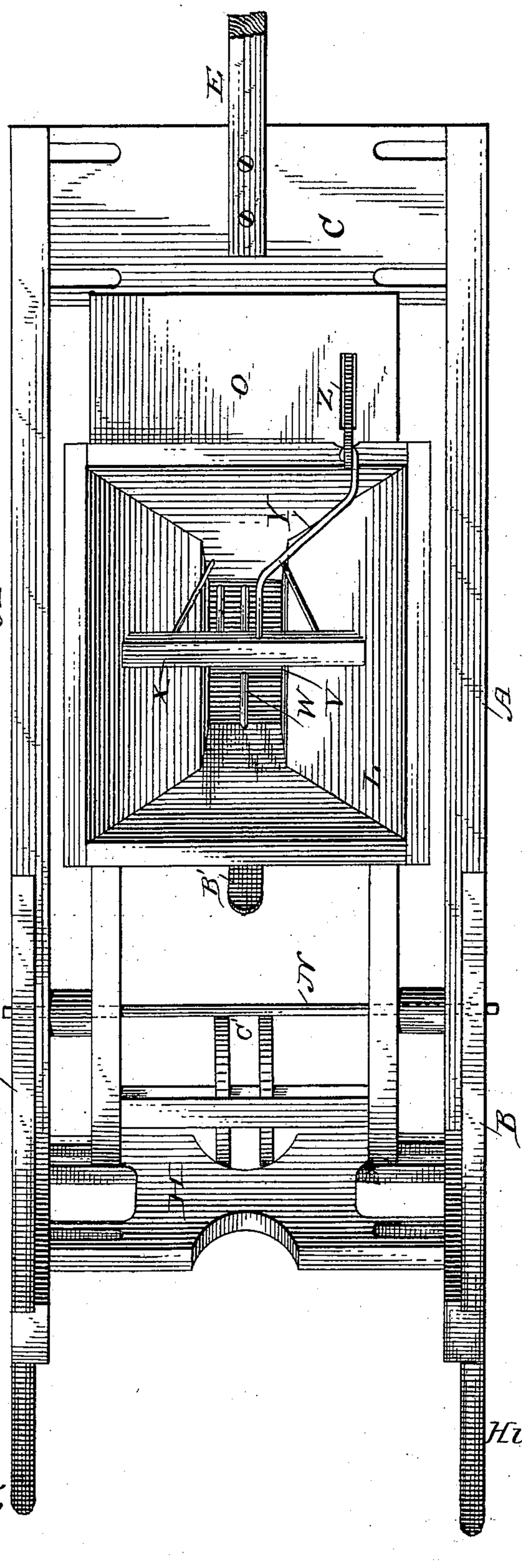

Fig. 3.

WITNESSES

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UNITED STATES PATENT OFFICE.

HUGH ARCHIBALD CAMPBELL, OF ANTIOCH, ASSIGNOR TO A. AND W. McQUEEN, OF PLAINVIEW, NORTH CAROLINA.

FERTILIZER-DISTRIBUTER AND CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 312,329, dated February 17, 1885.

Application filed May 3, 1884. (No model.)

To all whom it may concern:

Be it known that I, HUGH A. CAMPBELL, a citizen of the United States, residing at Antioch, in the county of Robeson and State of North Carolina, have invented certain new and useful Improvements in Fertilizer-Distributers and Cultivators, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain improvements in fertilizer-distributers and cultivators combined; and it has for its objects to provide for readily changing and adjusting the parts to suit the required purposes, and also to provide for thoroughly distributing the fertilizer when employed for such purpose, as more fully hereinafter specified. These objects I attain by the means illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my improved fertilizer-distributer and cultivator; Fig. 2, a longitudinal vertical section thereof, and Fig. 3 a plan view of the same.

The letter A indicates two side beams, attached to the plow-beams B at the rear, and extending forward, where they are adjustably connected to a transversely-slotted board, C, by means of set-screws D.

E represents the draft pole or tongue, which is attached to said board. Near the forward end the beams are each provided with two forwardly-inclined arms, between which the wheels F are journaled.

The letter G indicates the plow-handles, which are secured to the side beams as well as the plow-beams, and serve to brace the same. The plow-beams are adjustably connected at the rear to the slotted board H by means of set-screws or otherwise.

The letter L indicates the fertilizer-hopper, which is mounted in a frame, M, pivoted at its rear between the side beams, as indicated by the letter N. In front of the hopper is a platform, O, from which depend two hangers, P, between which is mounted a driving-wheel on the shaft R, journaled in such hangers. The said shaft has at its ends the wheels S, which are connected by pitmen T with the wheels U, the said pitmen being connected to the respective wheels by crank-pins set at right angles to each other, as shown. The wheels U are mounted on a shaft, V, which carries the distributing-arms W, by which the fertilizer is distributed through the opening in the bottom of the hopper.

X indicates a rock-shaft, located in the upper part of the hopper, which receives its motion through an arm, Y, and a link, Z, secured to a crank-pin on one of the forward wheels.

A′ is a plate secured below the delivery-opening of the hopper, and B′ a lever, by which it may be operated to open or close the same.

The letter C′ indicates a couple of wheels journaled in hangers at the rear between the plow-beams.

The letter D′ indicates the plowshares.

When used as a distributer, the front wheels are taken off of the beams, and the main driving-wheel of the hopper takes their place. As the machine moves forward, this wheel will give motion to the distributing mechanism, as will be perceived. When employed as a plow, the wheels are replaced.

It will be observed from the above description that when thus used the plows may be adjusted to any distance apart to adapt the plow to the various requirements of the farmer or planter.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with the plow or cultivator frame, of the inclosed pivoted frame, the fertilizer-hopper, the driving-wheel and distributing mechanism, and the rock-shaft and connection for operating the same, substantially as specified.

2. The combination, with the plow or cultivator frame provided with wheels F and C′, and the transverse slotted board C, having set-screw D, and the rear slotted board or brace, H, of the inclosed pivoted frame, carrying the hopper L, provided with lever B′, plate A′, distributing-wheel U V W, and the wheel S, having pitmen T, and the link Z, operating the arm Y, secured to the rock-shaft X, substantially as shown and described.

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

HUGH ARCHIBALD CAMPBELL.

Witnesses:
D. N. OLIVER,
S. L. ADAMS.