

(No Model.)

2 Sheets—Sheet 1.

A. L. PARKER.

COMBINED PLANTER AND CULTIVATOR.

No. 355,948.

Patented Jan. 11, 1887.

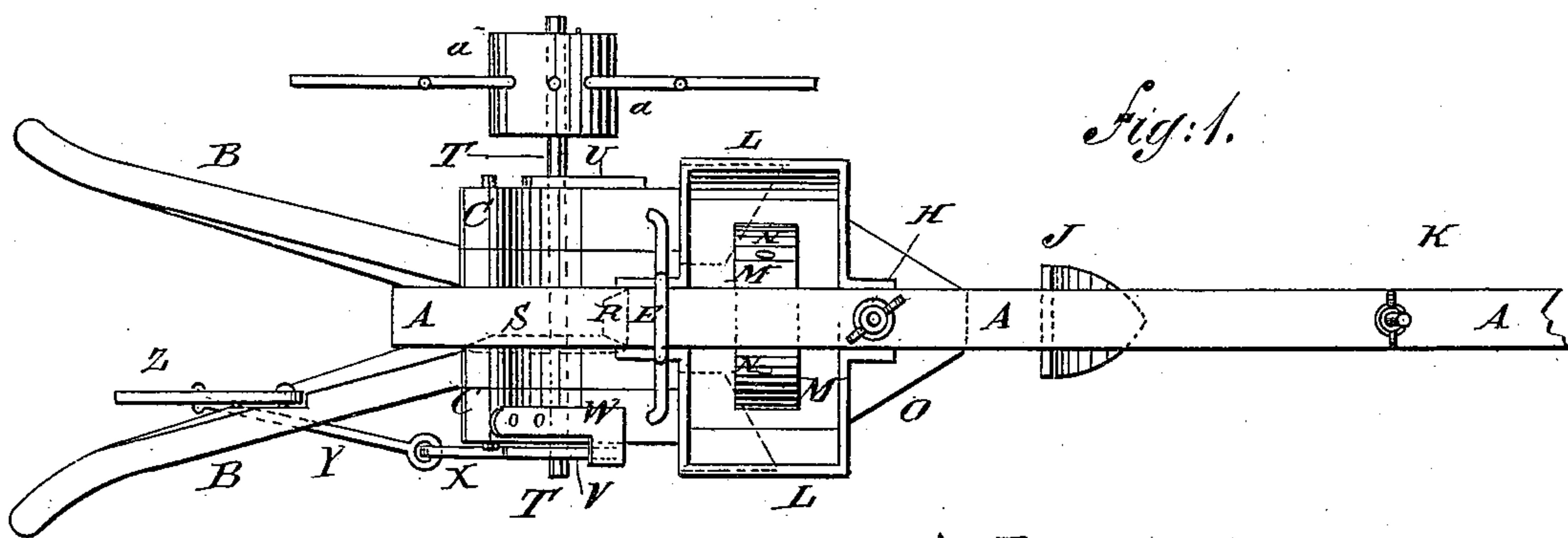


Fig. 1.

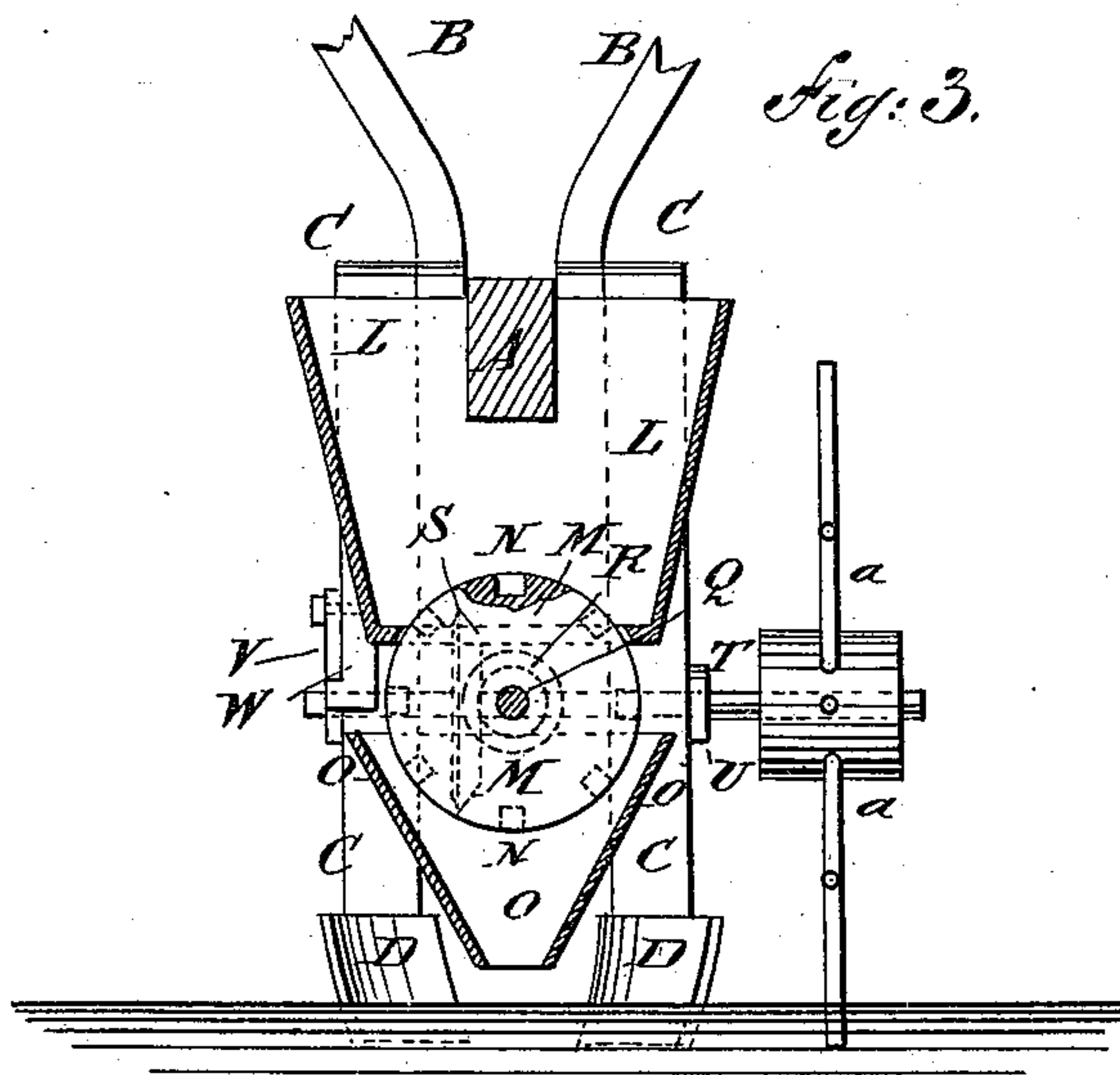


Fig. 3.

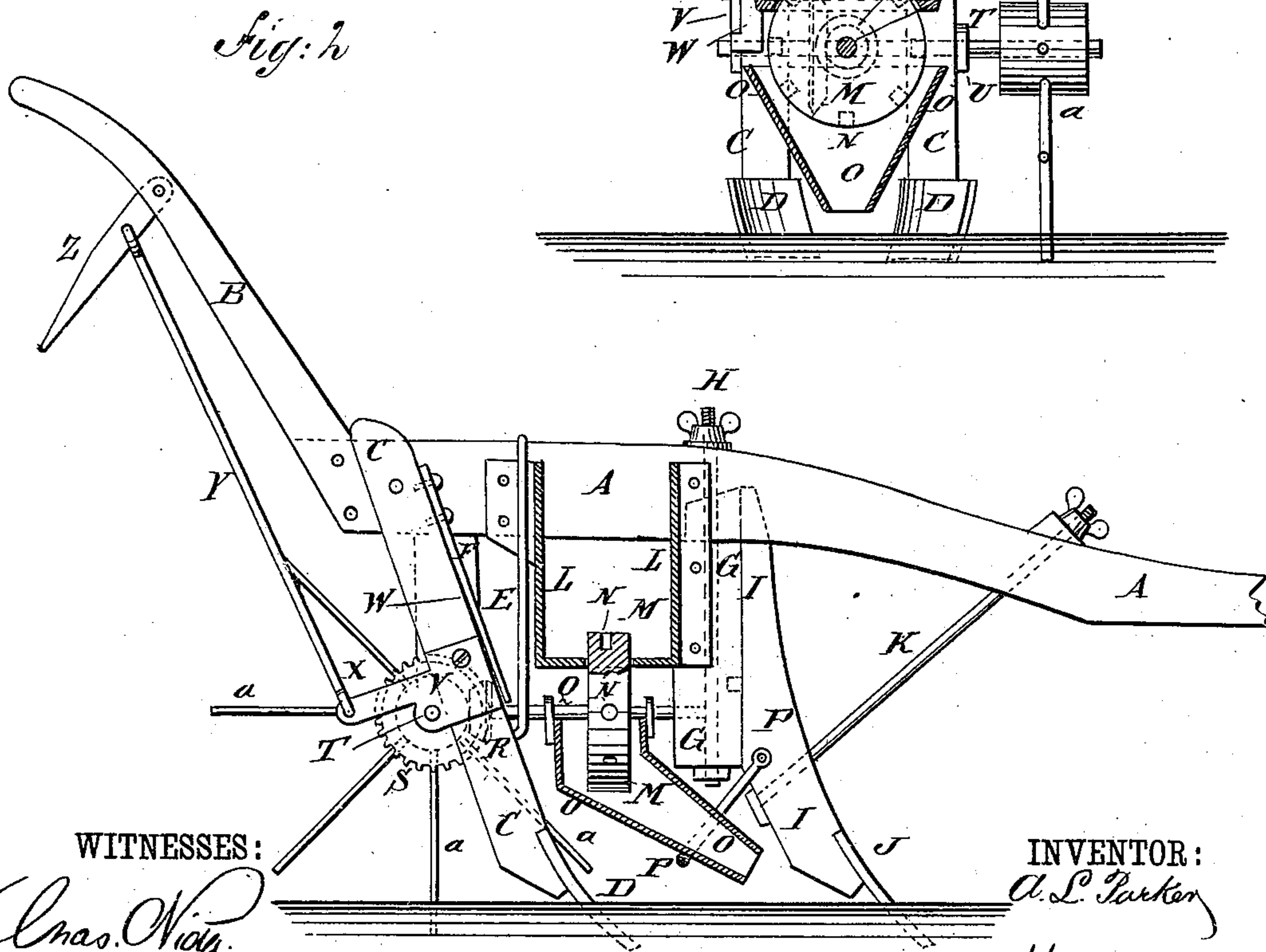


Fig. 2.

WITNESSES:

Chas. Viola
C. Bedgwick

INVENTOR:

A. L. Parker

BY

Munn & Co

ATTORNEYS.

(No Model.)

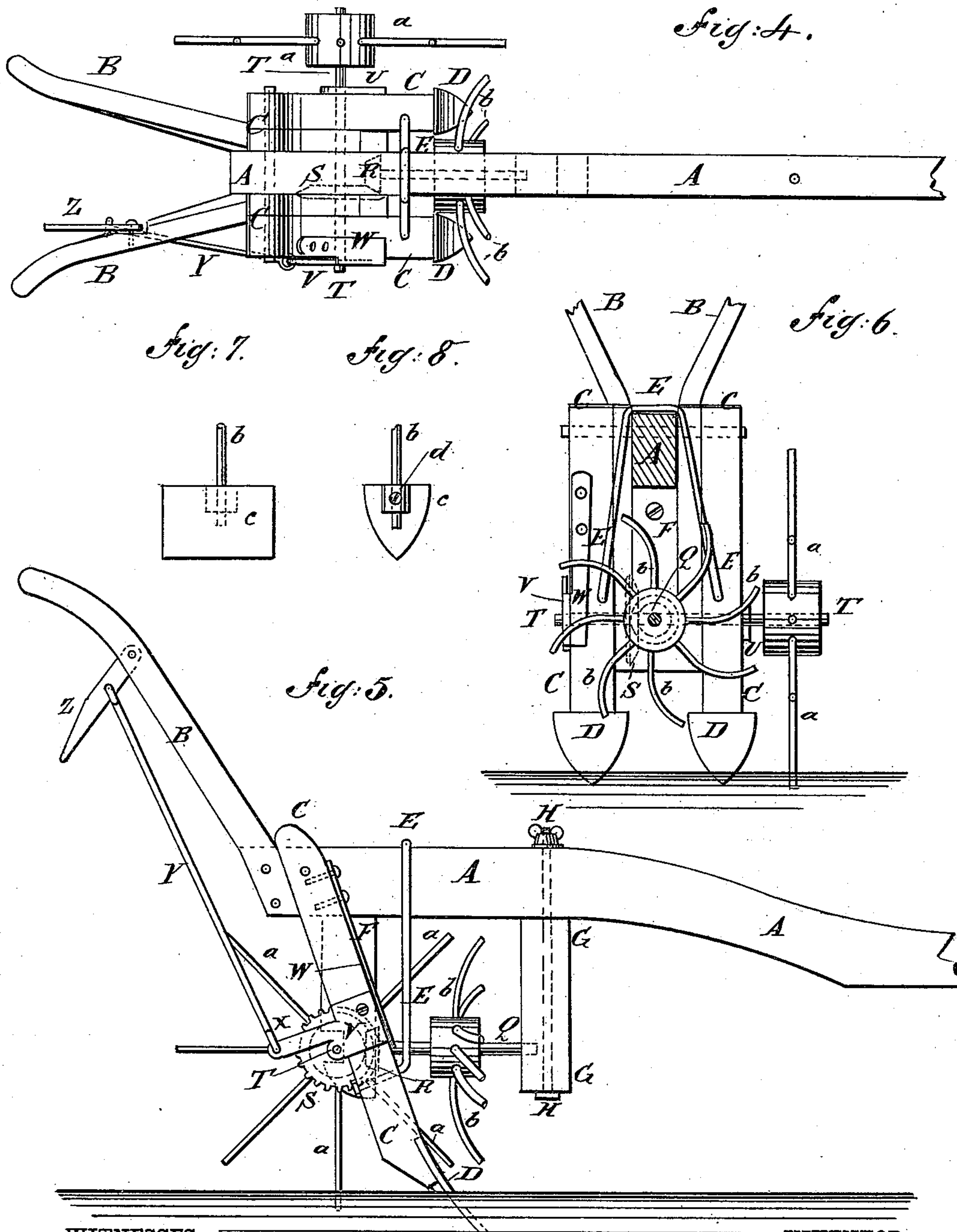
2 Sheets—Sheet 2.

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WITNESSES:

Chas. Nida
C. Sedgwick

INVENTOR:

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UNITED STATES PATENT OFFICE.

AARON L. PARKER, OF PHILADELPHIA, MISSISSIPPI.

COMBINED PLANTER AND CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 355,948, dated January 11, 1887.

Application filed May 5, 1886. Serial No. 201,187. (No model.)

To all whom it may concern:

Be it known that I, AARON L. PARKER, of Philadelphia, in the county of Neshoba and State of Mississippi, have invented a new and useful Improvement in a Combined Planter and Cultivator, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of my improved machine, shown arranged as a planter. Fig. 2 is a sectional side elevation of the same, parts being broken away. Fig. 3 is a sectional front elevation of the same, parts being broken away. Fig. 4 is a plan view of the same, shown arranged as a cultivator. Fig. 5 is a side elevation of the same. Fig. 6 is a sectional front elevation of the same. Figs. 7 and 8 show different kinds of shovels attached to cultivator-arms.

The object of this invention is to provide combined planters and cultivators constructed in such a manner that they can be readily adjusted for use in either capacity, and which shall be convenient in use and reliable and effective in operation.

The invention consists in the construction and combination of various parts of the combined planter and cultivator, as will be hereinafter fully described.

A represents a plow-beam, to the rear end of which are attached the handles B. To the opposite sides of the beam A, near its rear end, are attached the upper ends of standards C, to the lower ends of which are attached plows D. The standards C are strengthened against the draft-strain by the U-shaped brace E, the bend of which passes over the beam A, and its ends are secured to the lower parts of the said standards. Between the upper parts of the standards C is placed a hanger, F, which is secured to the said standards and to the beam A. To the lower side of the beam A, at a little distance from the hanger F, is secured a hanger, G, by means of a long bolt, H, which passes up vertically through the said hanger and through the said beam, and has a nut screwed upon its upper end.

To the beam A and the forward side of the hanger G is secured a standard, I, to the lower

end of which is attached a plow, J, to open a furrow to receive the seed, the seed being covered by the plows D, attached to the standards C. The standard I is strengthened against the draft-strain by an inclined brace K, the lower end of which passes through the lower part of the said standard, and its upper end passes through the beam A, and has a nut screwed upon it.

To the plow-beam A and the hanger G is secured a hopper, L, to receive the seed to be planted or a fertilizer to be distributed, and which has a slot in its bottom to receive the upper part of the wheel M. In the face of the wheel M are formed recesses N, to receive the seed, carry it out of the hopper L, and drop it into the spout O, through which it passes to the ground.

Several wheels M are designed to be provided, having recesses N of different sizes adapted to receive different kinds of seed. The lower part of the spout O is kept in place by a keeper, P, attached to the plow-standard I, and through which the said spout passes.

The seed-dropping wheel M is attached to, and the conducting-spout O is suspended from, a shaft, Q, the ends of which revolve in bearings in the lower parts of the hangers F G. To the rear part of the shaft Q is attached a small beveled gear-wheel, R, into the teeth of which mesh the teeth of a larger beveled gear-wheel, S, placed in a recess in the side of the hanger F and attached to the shaft T. The shaft T revolves in a stationary bearing, U, attached to one of the standards C and in a bearing, V, pivoted eccentrically to the other standard C, so that by moving the said bearing on its pivot the gear-wheel S can be thrown into and out of gear with the gear-wheel R. The bearing V is held in either position by a spring, W, attached at its upper end to the upper part of the standard C, and the lower part of which rests upon the edge of the said bearing. The bearing V is made with a rearwardly-projecting arm, X, to the rear end of which is pivoted the lower end of the connecting-rod Y. The upper end of the connecting-rod Y is pivoted to a lever, Z, the forward end of which is pivoted to one of the handles B, and its rear end projects into such a position that it can be readily reached and operated by the hand that grasps the said handle.

One end of the shaft T projects, and to it is attached the hub of the spoke-wheel *a*, the spokes of which are made of such a length as to engage with the ground and be rotated, and thus give motion to the seed-dropping wheel M.

When the machine is to be used as a cultivator, the plow-standard I, the hopper L, the seed-dropping wheel M, and the conducting-spout O are detached and the said seed-dropping wheel M replaced by a spoke-wheel, *b*, the spokes or arms of which are provided with shovels *c*, and are so curved as to bring the said shovels into proper position to loosen the soil on the top of the ridge and thin cotton to a stand as the said cultivating-wheel *b* is revolved by the advance of the machine.

Soil is thrown around the plants by the shovels D, attached to the standards C.

The shovels *c* can be made of any desired shape or size, as the work to be done may require, as illustrated in Figs. 7 and 8, in which two styles of shovels are shown.

The shovels *c* are secured to the spokes or arms of the cultivating-wheel *b* by set-screws *d*, so that the said shovels can be readily adjusted to work deeper or shallower in the ground, as the work to be done may require.

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

1. The combination, with the beam A and plow-standards C, of the hangers F G, the shaft

Q, the gear-wheels R S, the shaft T, and the spoke-wheel *a*, substantially as herein shown and described, to adapt the plow-stock to receive a planting or a cultivating mechanism, as set forth.

2. The combination, with the beam A and standards C, of the hangers F G, the standard I of the furrow-opening plow, the hopper L, attached to the beam and forward hanger, the seed-dropping wheel M, the seed-conducting spout O, the shaft Q, carrying the seed-dropping wheel, the gear-wheels R S, the shaft T, connected with the shaft Q by the said gear-wheels, and the spoke-wheel *a*, attached to the said shaft T, substantially as herein shown and described, whereby the seed will be planted by the advance of the machine, as set forth.

3. The combination, with the beam A, the standards C, the handles B, and the shaft T, carrying the spoke-wheel *a*, and connected by the gear-wheels R S with the shaft Q, carrying the seed-dropping wheel M, of the stationary bearing U, the eccentrically-pivoted bearing V and its holding-spring W, and the connecting-rod Y and lever Z, substantially as herein shown and described, whereby the said gear-wheels can be readily thrown into and out of gear, as set forth.

AARON L. PARKER.

Witnesses:

S. H. STRIBLING,
J. B. MERKEL.