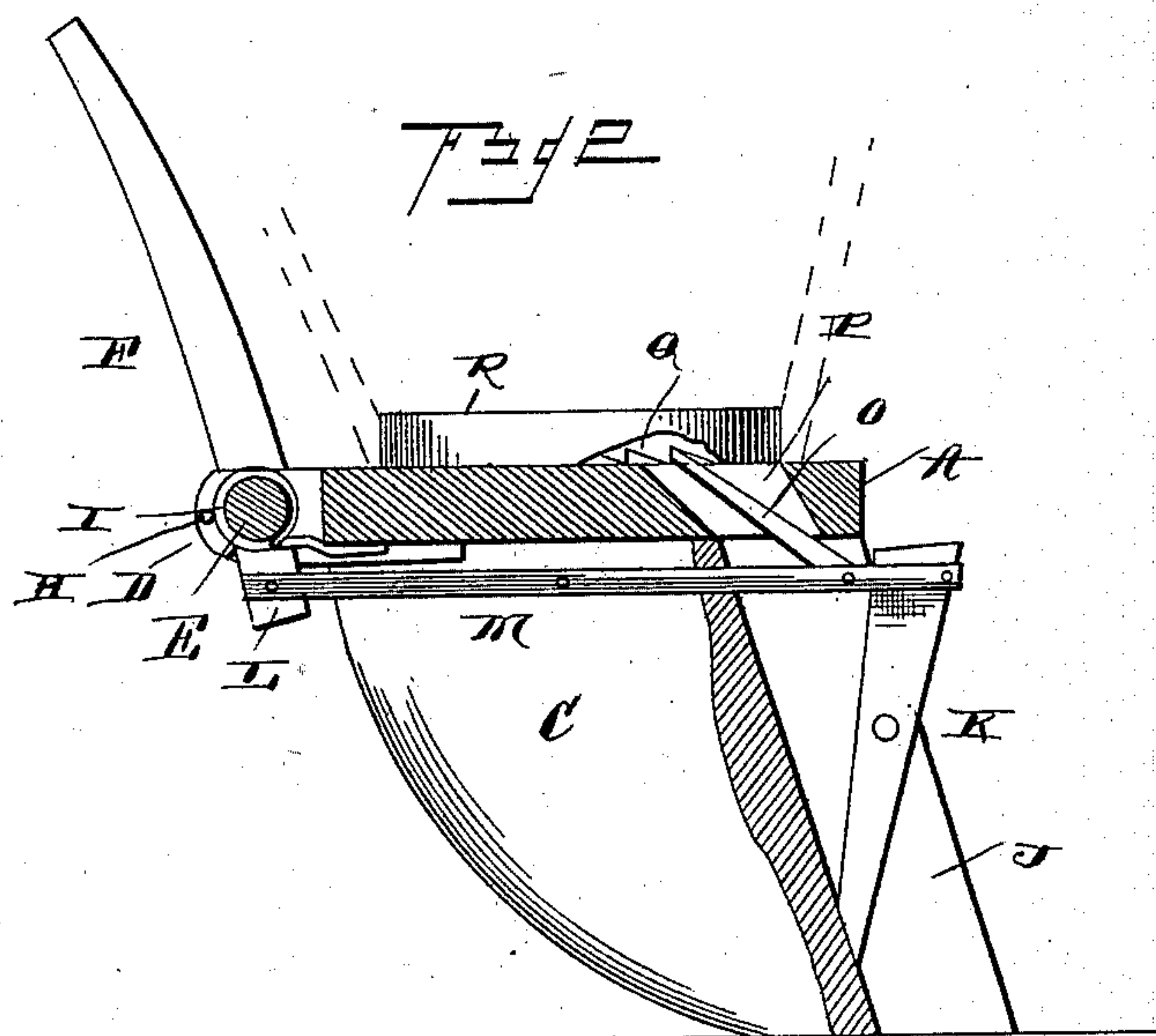
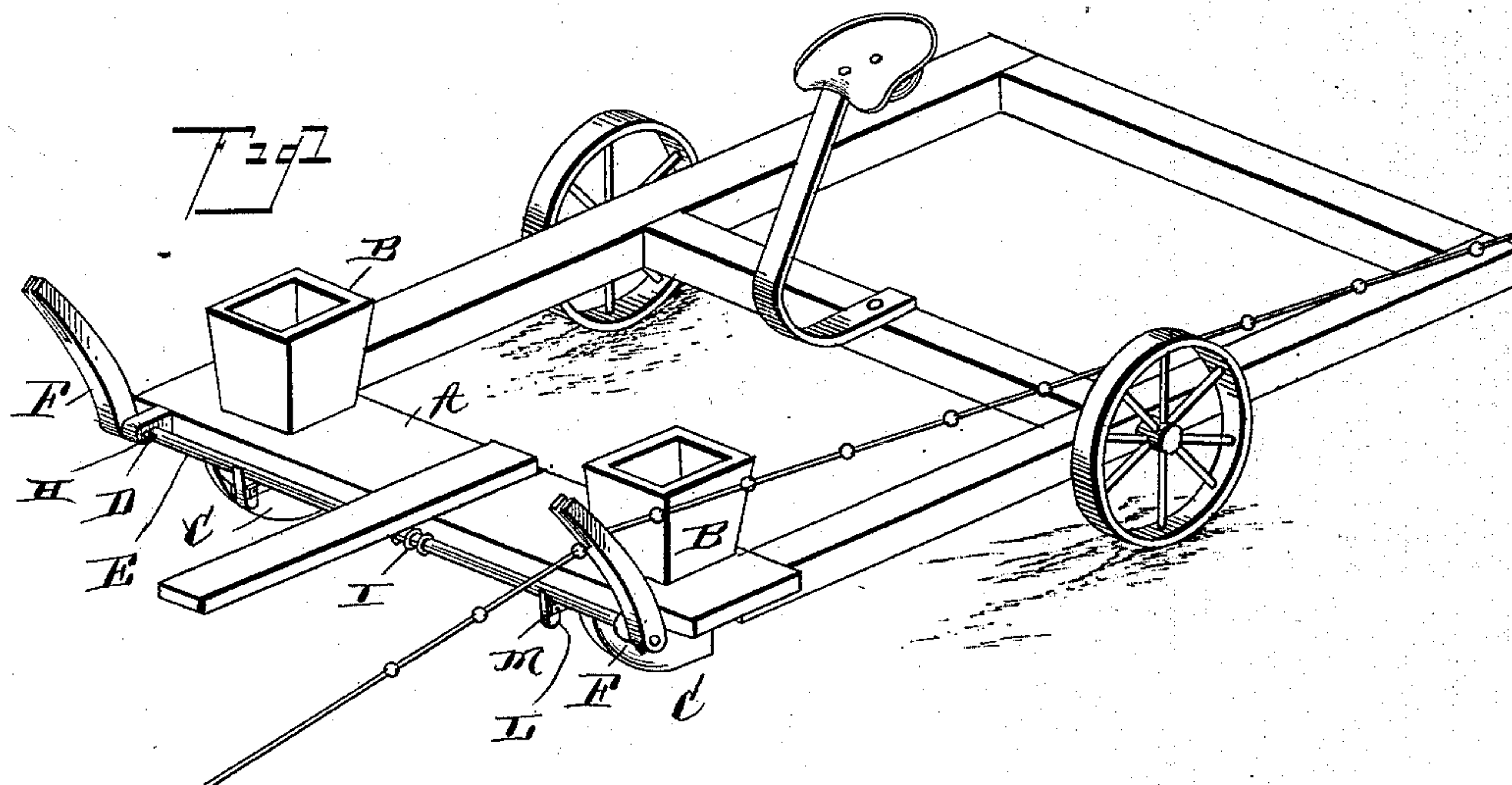


2 Sheets—Sheet 1..

No. 410,140.

Patented Sept. 3, 1889.



Witnesses
John Imirie
R. W. Bishop.

Inventar
George L. Banks

By his Attorneys

Attorneys
C. A. Snowdon

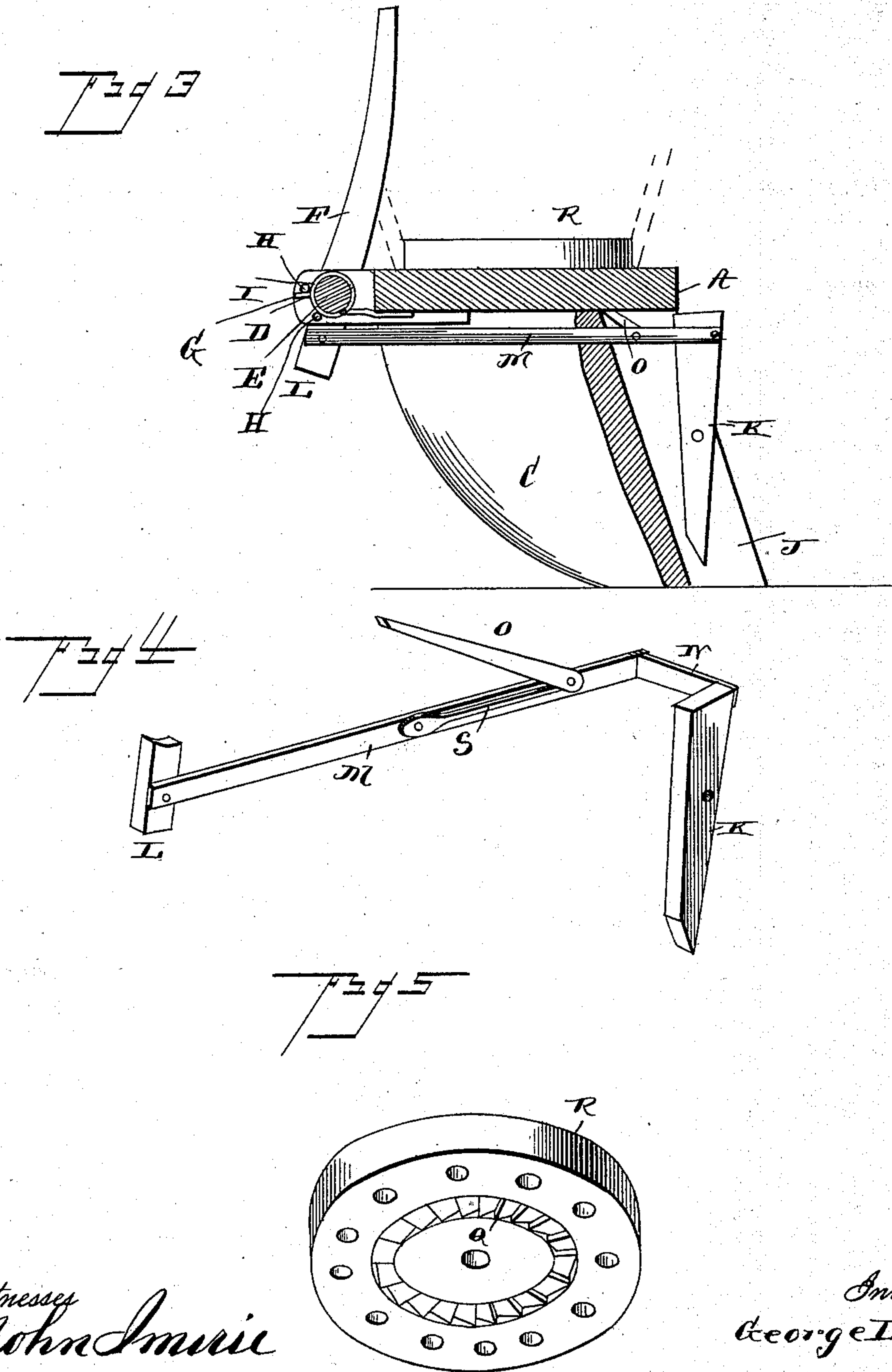
(No Model.)

2 Sheets—Sheet 2.

G. L. BANKS.
CHECK ROW CORN PLANTER.

No. 410,140.

Patented Sept. 3, 1889.



Witnesses
John Murie
R. W. Bishop.

Inventor
George L. Banks

By his Attorneys

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UNITED STATES PATENT OFFICE.

GEORGE L. BANKS, OF FALL RIVER, KANSAS, ASSIGNOR TO WILLIAM E. CASE, DARWIN S. ROMIG, AND ALONZO F. DEFEVERS, OF SAME PLACE.

CHECK-ROW CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 410,140, dated September 3, 1889.

Application filed March 18, 1889. Serial No. 303,714. (No model.)

To all whom it may concern:

Be it known that I, GEORGE L. BANKS, a citizen of the United States, residing at Fall River, in the county of Greenwood and State of Kansas, have invented new and useful Improvements in Check-Row Corn-Planters, of which the following is a specification.

My invention relates to improvements in check-row corn-planters; and it consists in certain novel features hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a planter provided with my improvements. Fig. 2 is a vertical section. Fig. 3 is a similar view showing the parts in a different position. Fig. 4 is a detail perspective view of the pitman and the pawl and valve connected thereto; and Fig. 5 is a detail perspective view of the seed-disk, looking at the under side of the same.

The corn-planter constructed in accordance with my invention is provided with a transverse beam A, the seed boxes or hoppers B, erected thereon near the ends of the same, and the runners C, all of the usual construction.

On the front side of the transverse beam A, near the ends of the same, I provide the bearings D, in which the rock-shaft E is journaled, the said rock-shaft being provided at its ends with the upwardly-projecting forked lever-arms F, over the ends of which the check-row wire passes. The rock-shaft is further provided near one end with the radial pin G, which plays between the stops H H on the side of the adjacent bearing D to limit the movement of the rock-shaft. At the center I arrange around the rock-shaft a coiled spring I, one end of which is secured to the under side of the transverse beam A and the other end of which is secured to the rock-shaft. This spring serves to return the rock-shaft to its normal position after it has been operated by the check-row wire.

The runners C are provided in their rear portions with the passages J, through which the seed is discharged, and in the said passages I pivot the valves K. These valves are operated by the rock-shaft through the crank-arms L, depending from the rock-shaft, and the pitmen M, having their front ends pivoted

to said crank-arms and their rear ends connected to the upper ends of the valves by the lateral arms N, as shown. Each of the pitmen M carries a pawl O, which extends upward through a longitudinal slot P in the beam A and engages the ratchet-teeth Q, formed on the under side of the seed-disk R. These pawls are held normally projected up through the said slots by the springs S, secured to the pitmen and bearing against the pawls. The spring I holds the rock-shaft normally in such a position that the crank-arms L will be thrown backward and the pitmen thereby caused to carry the upper ends of the valves K rearwardly, so that the lower ends of said valves will swing inward and close the passages in the runners to prevent the discharge of seed. As the machine is drawn over the ground, the knobs on the check-row wire coming in contact with the lever-arms F will throw the said lever-arms backward, so as to rotate the rock-shaft and thereby draw the pitmen forward and move the valves so as to open the passages in the runners. The forward movement of the pitmen also causes the pawls carried thereby to engage the ratchet-teeth on the undersides of the seed-disks to force the said disks forward, so as to bring another supply of seed over the seed-opening in the beam A, through which it will fall into the passages in the runners and escape through the same to the ground. When the knob on the check-row wire has escaped from the lever-arm, the spring I at once returns the rock-shaft to its normal position, as will be readily understood.

It will be observed from the foregoing description that I have provided an extremely simple planter in which the seed will be effectually planted in rows and at regular distances apart, and undue escape and consequent loss of the seed will be effectually prevented.

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

1. The combination, with the beam A, having the slots P, of the vibratory rock-shaft E, journaled on the front side of the beam A and having depending crank-arms, the runners depending from the beam, the valves mounted in the runners, the pitmen extend-

ing transversely under the beam and connecting the crank-arms on the rock-shaft with the valves, the seed-disks on the upper side of the beam having ratchet-teeth in their under sides, the pawls pivoted to the pitmen passing through the slots P and engaging the said ratchet-teeth, and the springs secured to the pitmen and bearing on the pawls, as set forth.

10 2. The combination, with the beam A and the runners, of the bearings on the front side of the beam, one of said bearings having the stops H, the rock-shaft journaled in said bear-

ings and having a radial pin playing between the said stops, the valves mounted in the runners, the pitmen connecting the valves with the rock-shaft, and mechanism for operating said shaft, as set forth. 15

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses. 20

GEORGE L. BANKS.

Witnesses:

J. H. SIGGERS,
R. J. MARSHALL.