D. H. GOBIN.

Improvement in Corn-Planters.

No. 128,613. Patented July 2, 1872.

Fig. 1.

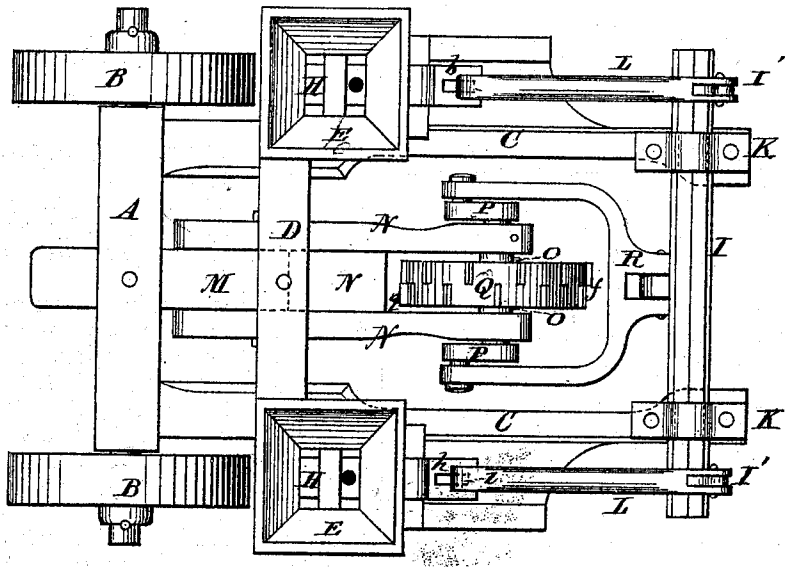


Fig. 2.

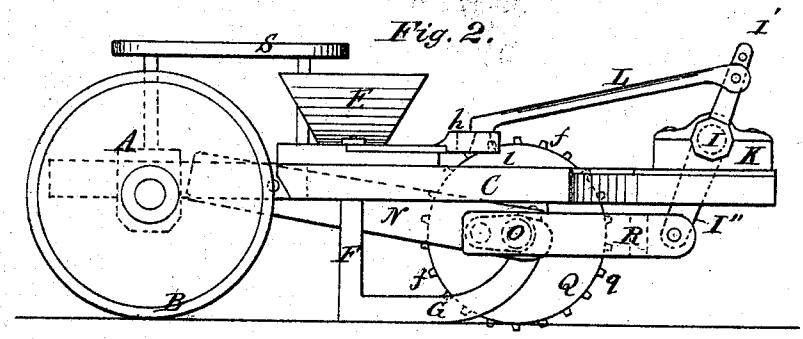
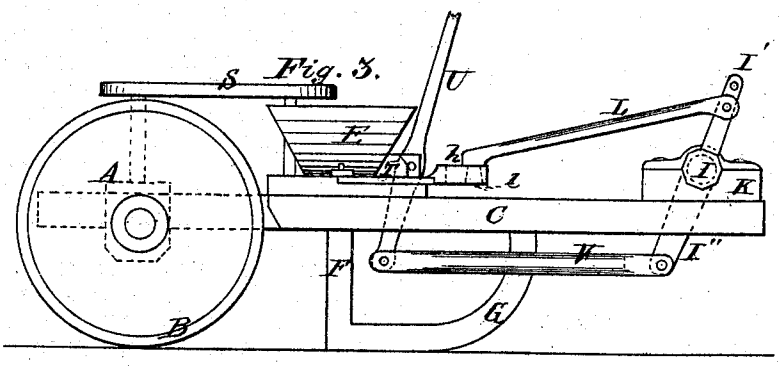


Fig. 3.



Witnesses:

T. C. Brecht.

C. H. Poole

Inventor:

David H. Gobin, by Prindle and Ley, his attys.

UNITED STATES PATENT OFFICE.

DAVID H. GOBIN, OF SPRINGFIELD, ILLINOIS.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. 128,613, dated July 2, 1872.

To all whom it may concern:

Be it known that I, DAVID H. GOBIN, of Springfield, in the county of Sangamon and in the State of Illinois, have invented certain new and useful Improvements in Corn-Planters; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a plan view of the upper side of my device; Fig. 2 is a side elevation of same as arranged to drop by power; and Fig. 3 is a like view of said device when arranged for operation by hand.

Letters of like name and kind refer to like parts in each of the figures.

My invention is an improvement in a class of corn-planters which are designed for use with the dropper operated by hand or power, as is desired; and it consists in the means employed for connecting the traction-wheel to or with the main frame, and for rendering said wheel vertically adjustable, substantially as and for the purpose hereinafter shown.

In the annexed drawing, A represents the axle of the device, supported by means of two ground-wheels, B, of usual construction. Secured to and extending forward from said axle, immediately within the journals of the wheels, are two side rails, C, which are, in turn, connected together and braced by means of a cross-bar, D, that rests upon and is secured to said rails immediately in front of the wheels. The ends of the cross-bar D extend outward beyond the ground-wheels, and furnish a support for two seed-boxes, E, seed-chutes F, and runners G, all of usual construction. The droppers H have a reciprocating movement in a line with the draft, and are operated by means of a rock-shaft, I, suitably journaled within boxes K, which rest upon and are secured to the forward ends of the side rails C, said shaft being provided with two arms, I′, which extend vertically upward, and have each pivoted thereon one end of a connection, L, the opposite end of which rests upon the upper side of said dropper, and is provided with a downward-projecting stud, *l*, that engages with a slot, *h*, formed within said dropper. As thus arranged a semi-rotary movement in opposite directions of the rock-shaft will give to the droppers a reciprocating movement but as the latter require an intermittent, instead of a continuous movement, the slots *h* are elongated, so as to give to the stud *l* a certain amount of motion before it engages with and moves said dropper.

Motion is communicated automatically to the rock-shaft and dropping devices by means of the following described devices: Passing horizontally through the axle A, and beneath the cross-bar D, is a bar, M, upon the sides of which are pivoted two other bars, N, that are connected together immediately in front of said bar M by means of a block, *n*. A shaft, O, provided upon its ends with two cranks, P, and upon or at its longitudinal center with a traction-wheel, Q, is suitably journaled within the ends of the bars N; and when said wheel is permitted to rest upon the ground the forward motion of the entire device causes said wheel and shaft to revolve. A forked connection, R, is journaled upon the cranks P, and has its front or single end pivoted to or upon an arm, I″, which projects vertically downward from the center of the shaft I, by which means the rolling movement of the wheel is communicated, through its shaft, said cranks, and connection, to said rock-shaft, and through the latter and the connections L to the droppers. The periphery of the traction-wheel Q is provided with two series of short spurs, *q*, which are arranged so as to break joints with each other, and by their action in the ground give a firm adhesion thereon of said wheel. A seat, S, is placed over or immediately in front of the axle, in which position the operator is enabled, by placing his feet upon the rear ends of the pivoted bars N, to raise the traction-wheel from the ground so as to suspend action of the dropping devices.

When it is desired to operate the dropper by hand, the forked connection is disconnected from the rock-shaft, the pivoted bars detached from the frame, and said parts, together with the ground-wheel, removed. A cross-bar, T, is now secured across the side rails immediately in front of the seed-boxes, with a lever, U, pivoted at its longitudinal center, the lower end of which lever is upon a line with the lower end of the arm I″ of the rock-shaft, and is connected therewith by means of a rod or bar, V, which is pivoted at its ends to or upon

said parts. The upper end of the lever being within convenient reach of the operator's hand, the movement of the droppers is easily effected.

The advantages possessed by this construction of a corn-planter are: First, the traction-wheel, journaled within its pivoted frame, rests fairly upon and follows the surface of the ground regardless of the unevenness of the same, and furnishes a convenient and reliable means whereby the movement of the machine is communicated automatically to the dropping mechanism. Second, the means employed for communicating the motion of the traction-wheel to the droppers is simple in construction and effective in operation. Third, the arrangement of the pivoted frame of the traction-wheel enables the latter to rise and fall with the undulations of the ground, and also permits said wheel to be easily and quickly removed from contact with said ground when it is desired to suspend the operation of the dropping-devices.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

In combination with the traction-wheel Q and crank-shaft O, the bars N, pivoted in front of their rear ends to or upon the main frame, substantially as and for the purpose shown.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of February, 1872.

DAVID H. GOBIN.

Witnesses:
WILLIAM J. NUTT,
H. BURROWS.