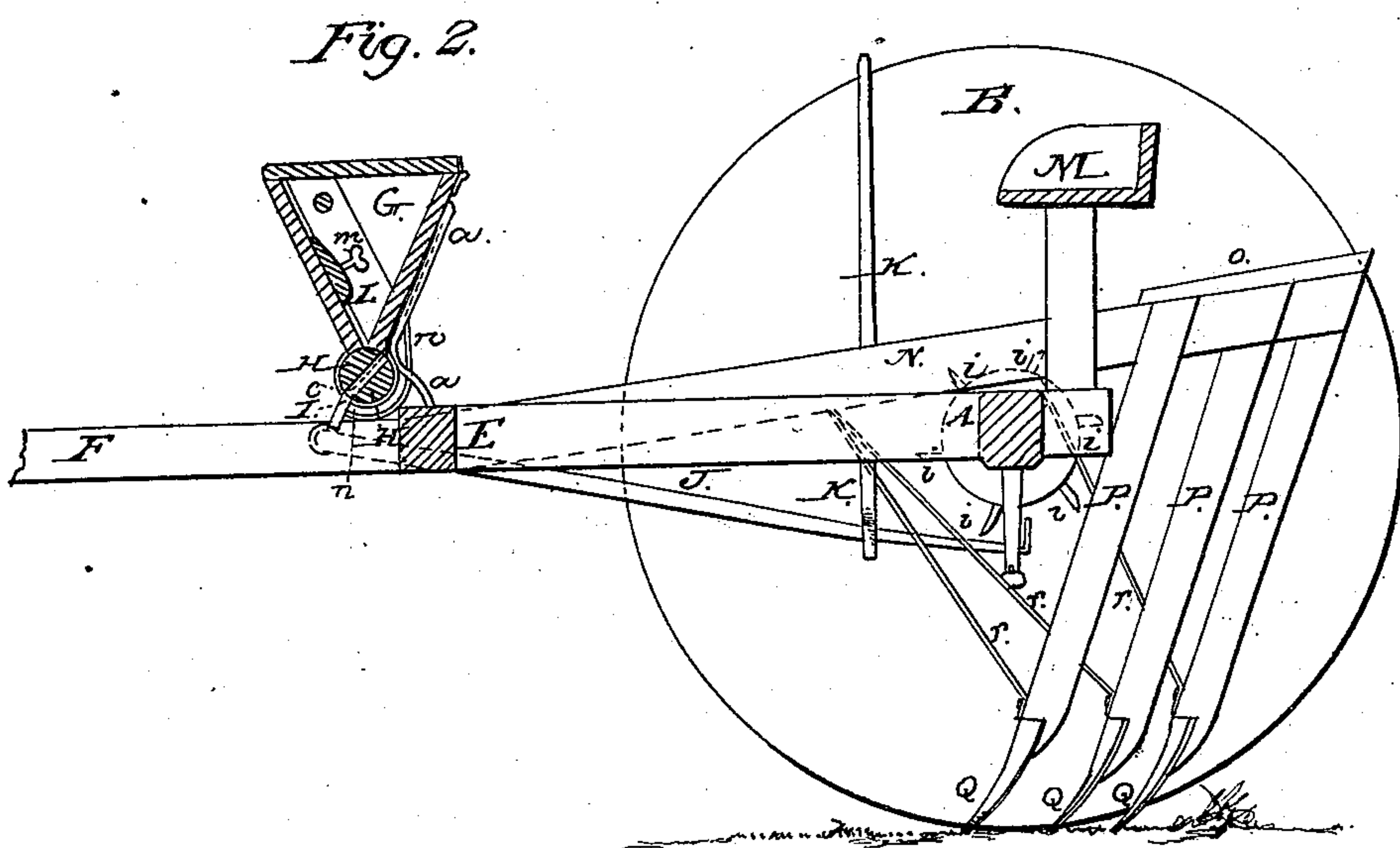
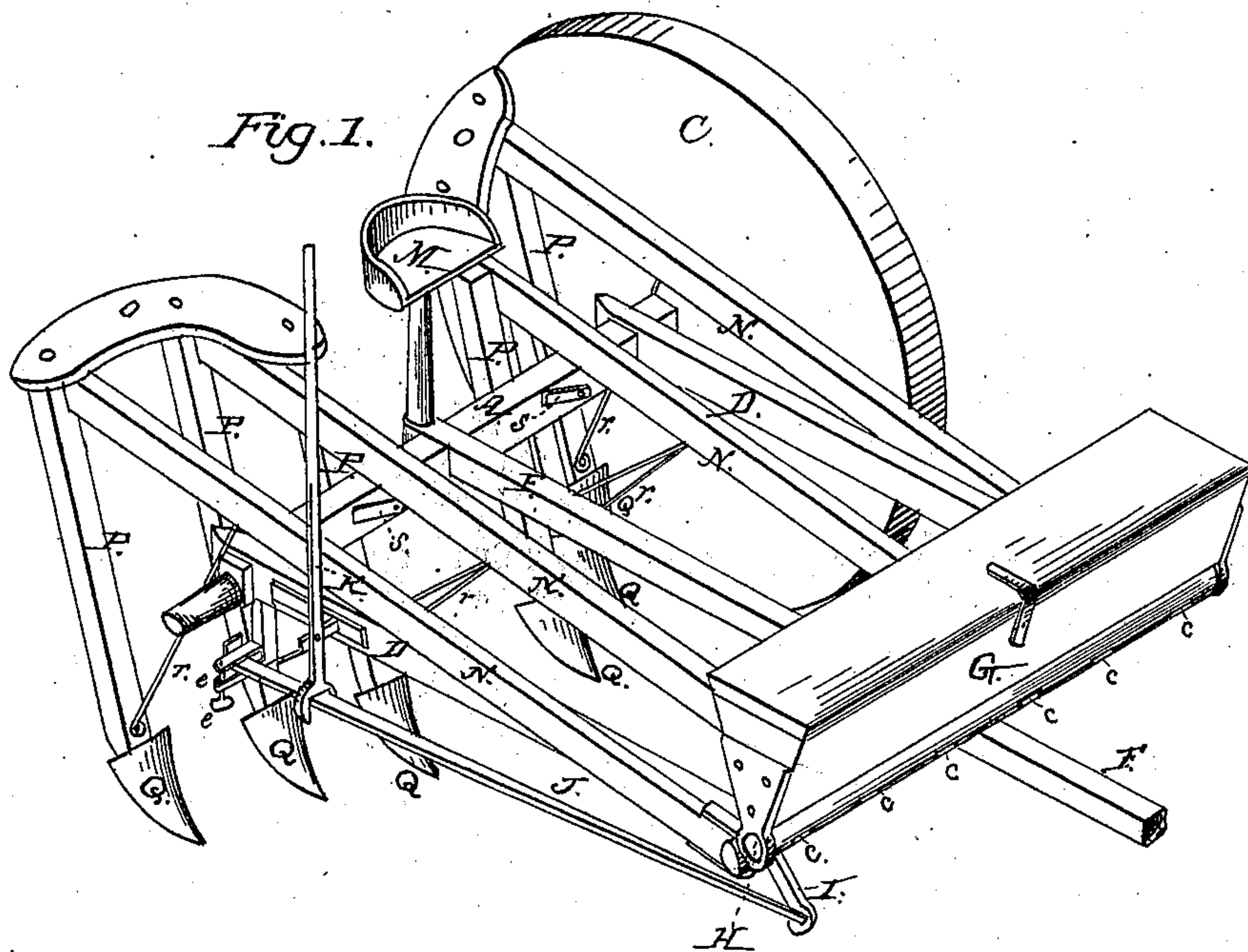


J. LINCOLN.

Grain-Drill.

No. 14,629.

Patented Apr. 8. 1856.





# UNITED STATES PATENT OFFICE.

JESSE LINCOLN, OF UNIONTOWN, PENNSYLVANIA.

## IMPROVEMENT IN MACHINES FOR SOWING SEED BROADCAST.

Specification forming part of Letters Patent No. **14,629**, dated April 8, 1856.

*To all whom it may concern:*

Be it known that I, JESSE LINCOLN, of Uniontown, in the county of Fayette and State of Pennsylvania, have invented certain new and useful Improvements in Machines for Sowing Seed Broadcast; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part thereof, in which—

Figure 1 represents a perspective view of the entire machine, with one wheel removed to better show the parts behind it. Fig. 2 represents a vertical longitudinal section through the machine.

Similar letters of reference, where they occur in the separate figures, denote like parts in both.

The nature of my invention relates more especially to the operation of the seeding-roller and its connection or adaptation to the carriage on which it and the plows are arranged.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

A is an axle supported in a pair of wheels, B C. Two side pieces, D, are let into the axle A and project forward, and are united at their forward ends by a cross-piece, E. The tongue F is also fastened to the axle A and to the cross-piece E, and these several pieces constitute the frame of the machine.

To the front cross-piece, E, is connected by the braces *a* the seed-hopper G, which is open at its bottom, but having a seed-roller, H, so arranged in its bottom as to prevent any escape of the grain from the hopper except that which is especially designed to be sown.

The roller H is suitably supported at each of its ends to the hopper, and is provided with any suitable number of holes or slots, *c c c*, through it, through which the grain can pass from the hopper to the ground as the oscillation of the roll carries said slots through the hopper, as will be presently described.

To one end of the roller is attached an arm, I, to which one end of a rod, J, is connected, the other end of said rod or bar passing through guides *e e*, and then bent up so that the cogs or teeth *i* on the hub of one of the wheels shall

strike against said bent end, and, drawing backward the rod or bar J, give to the roller H a rocking motion that causes the slots or cells *c c* to enter the hopper and receive their charge of grain. As the arm I is drawn back it comes in contact with a spring, *n*, and forces back with it said spring, and when the tooth *i* slips over or past the bent end of the rod or bar J the recoil of the spring *n* suddenly throws the roller forward with a quick movement, which forces the grain out of the cells or slots *c* and scatters it broadcast on the ground in front of the machine.

K is a clutch-lever for throwing the rod or bar J into or out of gear with the teeth *i* on the wheel B, so that the roller H shall not operate except when sowing seed, and remain stationary when moving from place to place.

Within the hopper is a slide, L, which can be moved up or down, and held when adjusted by set-screws *m*, the object of this slide being to regulate the size of the opening in the bottom of the hopper, and consequently the amount of grain to pass into the cells or slots *c*.

On the rear end of the tongue, and just behind the axle, so as to balance the machine, is arranged the seat M for the driver or conductor of the machine, so that from his seat he may reach the clutch-lever K to throw the seeding apparatus into or out of gear at pleasure.

To the front cross-bar, E, are connected pieces N, so as to hinge or turn on said bar. The pieces N extend rearward over the top of the axle A, and are united at their extreme rear ends by the crescent-shaped pieces O, one on each side of the tongue or center of the machine.

To the pieces N are attached beams or stocks P, to each of which is secured a covering-plow, Q, the series of covering-plows being set in the form of harrow-teeth. The stocks P are braced to the pieces N by the stay-rods *s*.

On the axle A are pivoted supporting-pieces *s s*, which when set upright catch under one of the pieces P, and thus hold up the plows above the ground when the machine is moved from place to place. By turning down the supporting-pieces as seen in Fig. 1 the plows take into the ground sufficiently to turn over a

light soil on top of the seed previously thrown out by the roller H.

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

In combination with the hopper G, the seed-ing-roller H, provided with open cells *c*, pass-

ing through it, and rocked through the hopper to receive and discharge the grain broadcast, substantially in the manner described.

JESSE LINCOLN.

Witnesses:

F. C. ROBINSON,  
JACOB DOWNER.