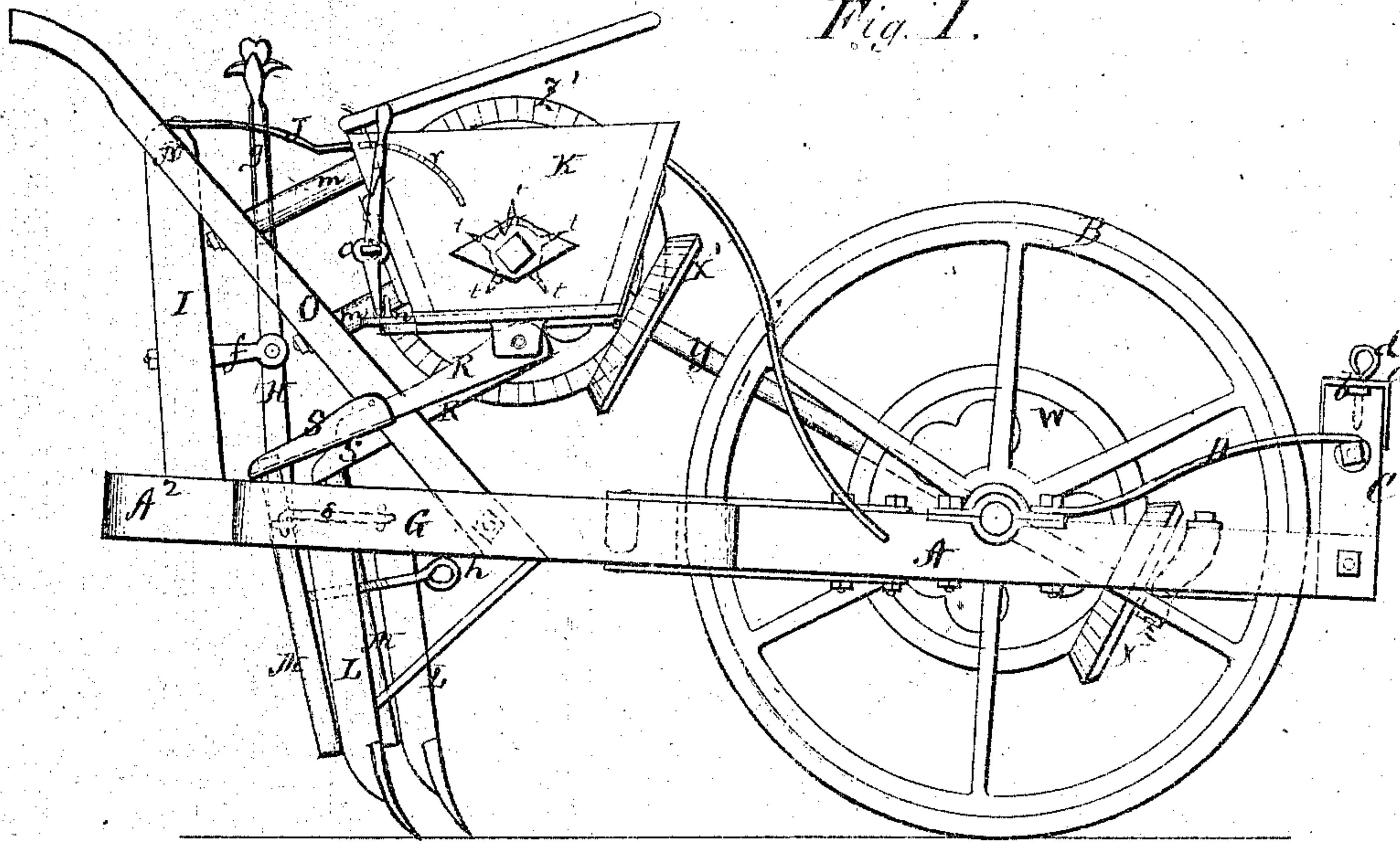


**CASWELL HOLLAR.**  
*Combined Corn Plow & Grain Drill.*

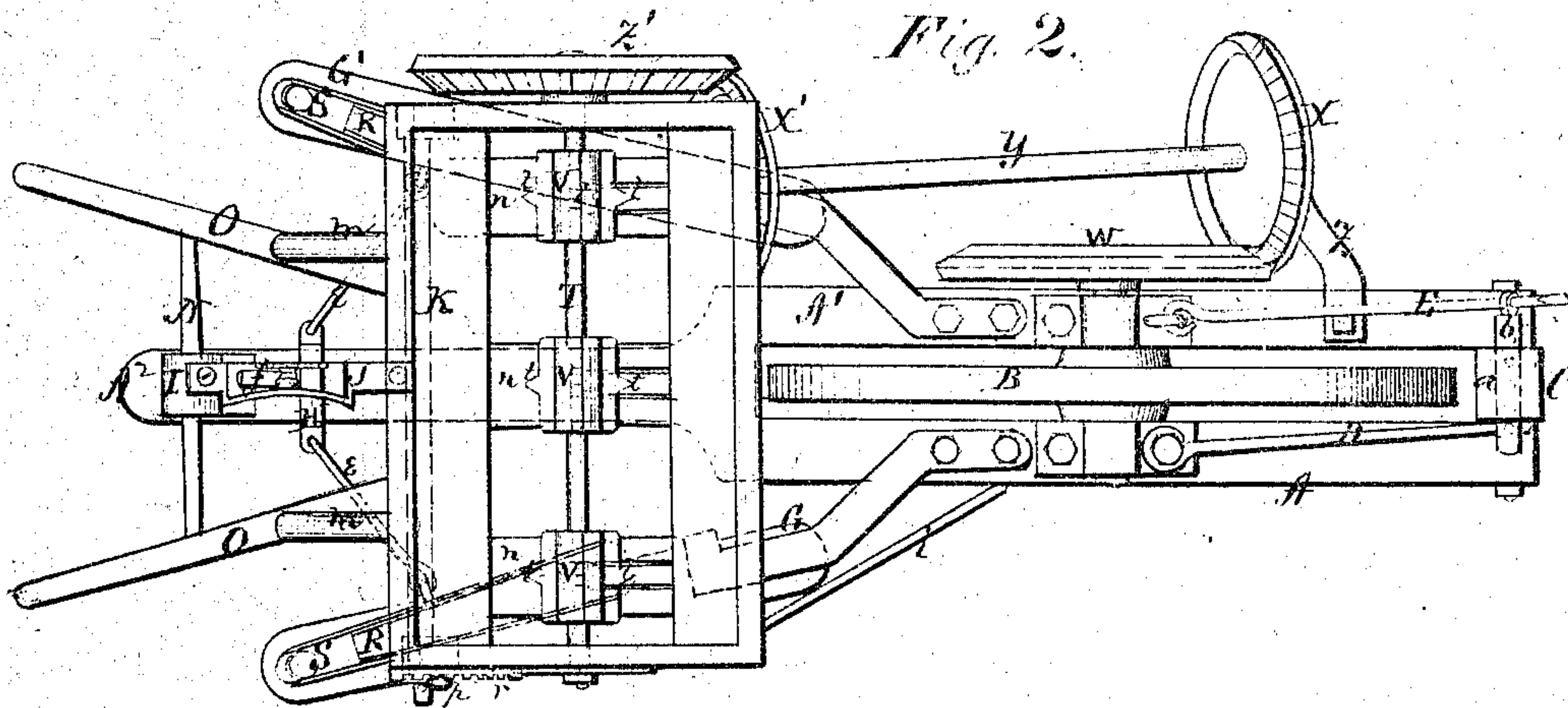
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*Fig. 1.*



*Fig. 2.*



Witnesses:  
*C. L. Coe*  
*A. H. Harr*

Inventor:  
*Caswell Hollar*  
*Alexander Mason*  
*Atty.*



# United States Patent Office.

CASWELL HOLLAR, OF ABINGDON, INDIANA.

Letters Patent No. 105,575, dated July 19, 1870.

## IMPROVEMENT IN COMBINED CORN-PLOW AND GRAIN-DRILL.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, CASWELL HOLLAR, of Abingdon, in the county of Wayne and in the State of Indiana, have invented certain new and useful Improvements in Combined Corn-Plow and Grain-Drills; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a "combined grain-drill and corn-plow," as will be hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation, and

Figure 2 is a plan view of my machine.

A A<sup>1</sup> represent two beams placed parallel with each other, a sufficient distance apart to give free room for the driving-wheel B, placed between them, and the axle of which has its bearings in suitable journal-boxes on the upper sides of said beams.

The beams A A<sup>1</sup> are connected, at their rear ends, by another beam, A<sup>2</sup>, which extends on the same plane a suitable distance toward the rear.

Between the front ends of the beams is placed and firmly secured a small upright standard, C, which is braced by the rod D to the right-hand beam A.

In the upper end of the standard C is a groove, covered by a bent metal plate, a, through which groove passes a metal bar, b, having at its left end a loop.

Through this loop passes the rod E, attached at its rear end to the left beam A, and to the front end of which the team is to be attached.

The bar b is held by a pin or bolt, d, passing through the same downward into the standard C, and as said bar is provided with a series of holes, its position can be shifted so as to throw the machine to or from the corn.

On the outside of the beams A A<sup>1</sup>, respectively, in rear of the driving-wheel axle, are hinged the side beams G G', which are connected by rods e e to the lower forked end of a lever, H.

This lever is pivoted in a forked post, f, which extends forward almost horizontally from a standard, I, rising from near the rear end of the beam A<sup>2</sup>.

The upper end of the lever H is provided with a spring, g, which forces the lever into notches on a

slotted plate, J, so as to hold the lever at any point desired.

This plate J is attached to the upper end of the standard I, and to the seed-box or hopper K.

By the use of the lever or spreader H and connecting-rods e e, the side bars G G' can be widened and closed at pleasure for planting narrow strips of corn.

On the under sides of the side beams G G' and the beam A<sup>2</sup> are attached the plow-sheaths L L, provided with corn-plows of any suitable description.

In rear of each sheath L is a pipe, M, extending up through the beam, and through the sheath is a set-screw, h, for throwing the piping to or from the sheath to gauge the depth of the grain.

Through the upper end of the standard I passes a rod, N, to the ends of which the handles O O are attached, the lower ends of the same being attached, one on each side of the beam A<sup>2</sup>, by means of a bolt passing through the same.

The seed-box or hopper K is supported, from the handles O O, by means of stays m m, of which there are two from each handle.

From the right corner of the hopper a guard-rod, i, runs to the right beam A, to keep the corn from hanging to the hopper.

In the bottom of the hopper K are three openings, with slides n n, for regulating the amount of grain to be sown.

These slides are moved by means of a gauge-bar, o, on the rear side of the hopper, with a spring lever, p, and gauge-rack r, at the right end of the hopper.

From under the openings in the bottom of the hopper are conductors R R, for carrying the grain from the hopper into shoes S S, attached to the upper ends of the piping M.

The conductors R are pivoted each between two ears, on the under side of the bottom, and joined in any suitable manner to the shoes S, so that they will accommodate themselves to any movement of the side beams.

Running lengthwise across the hopper K is a shaft, T, provided with cog-wheels or cog-pinions V, for agitating the grain.

Each cog is, in the center, provided with a spur, t, which passes through a groove in the slide and across the opening, for cleaning obstructions out of the opening or crowding them through.

The shaft T is operated in the following manner:

Upon the left end of the driving-wheel axle is a miter-wheel, W, which gears with a similar smaller wheel, X, on the lower end of a shaft, Y, said shaft



having its bearings in the front side of the hopper, and in a bar, Z, attached to the left beam A<sup>1</sup>.

The upper end of the shaft Y is provided, also, with a miter-wheel, X', which gears with a similar wheel, Z', on the end of the shaft T, and thus motion is communicated to the same.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The arrangement of the frame A A<sup>1</sup> A<sup>2</sup>, wheel B, side beams G G', lever H, hopper K, with seed-slides

n n, shovel-beams L, set-screws h, pipes M, conductors R, shoes S, shaft T, wheels V, with spurs t, shaft Y, and cog-wheels X X', Z Z', all constructed and arranged with their several parts to operate substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand, this 7th day of March, 1870.

CASWELL HOLLAR.

Witnesses:

ENOS THOMAS,  
JOHN WHITE.