

M. WILKINSON.

Corn Planter.

No. 54,633.

Patented May 8, 1866.

Fig. 1.

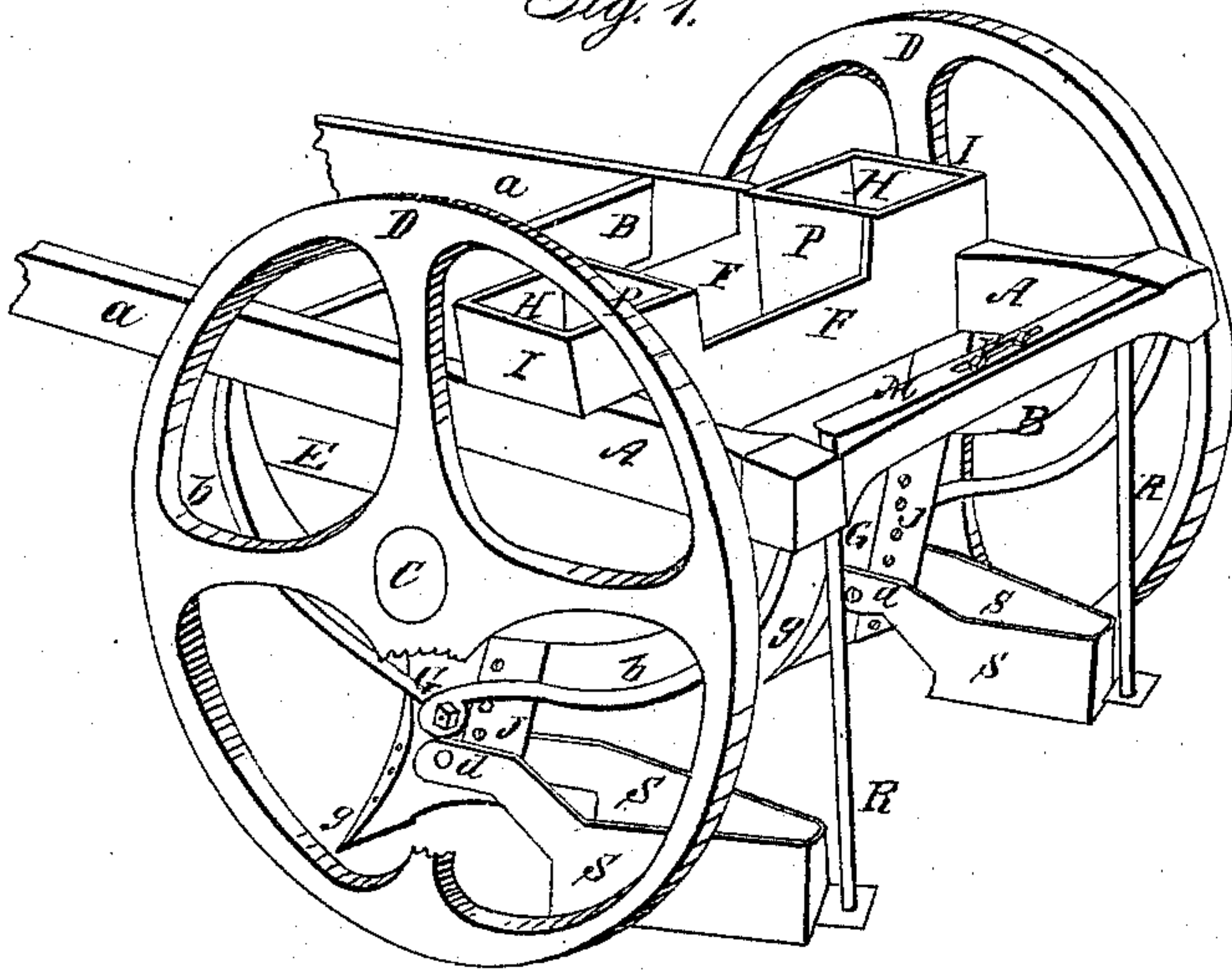


Fig. 2.

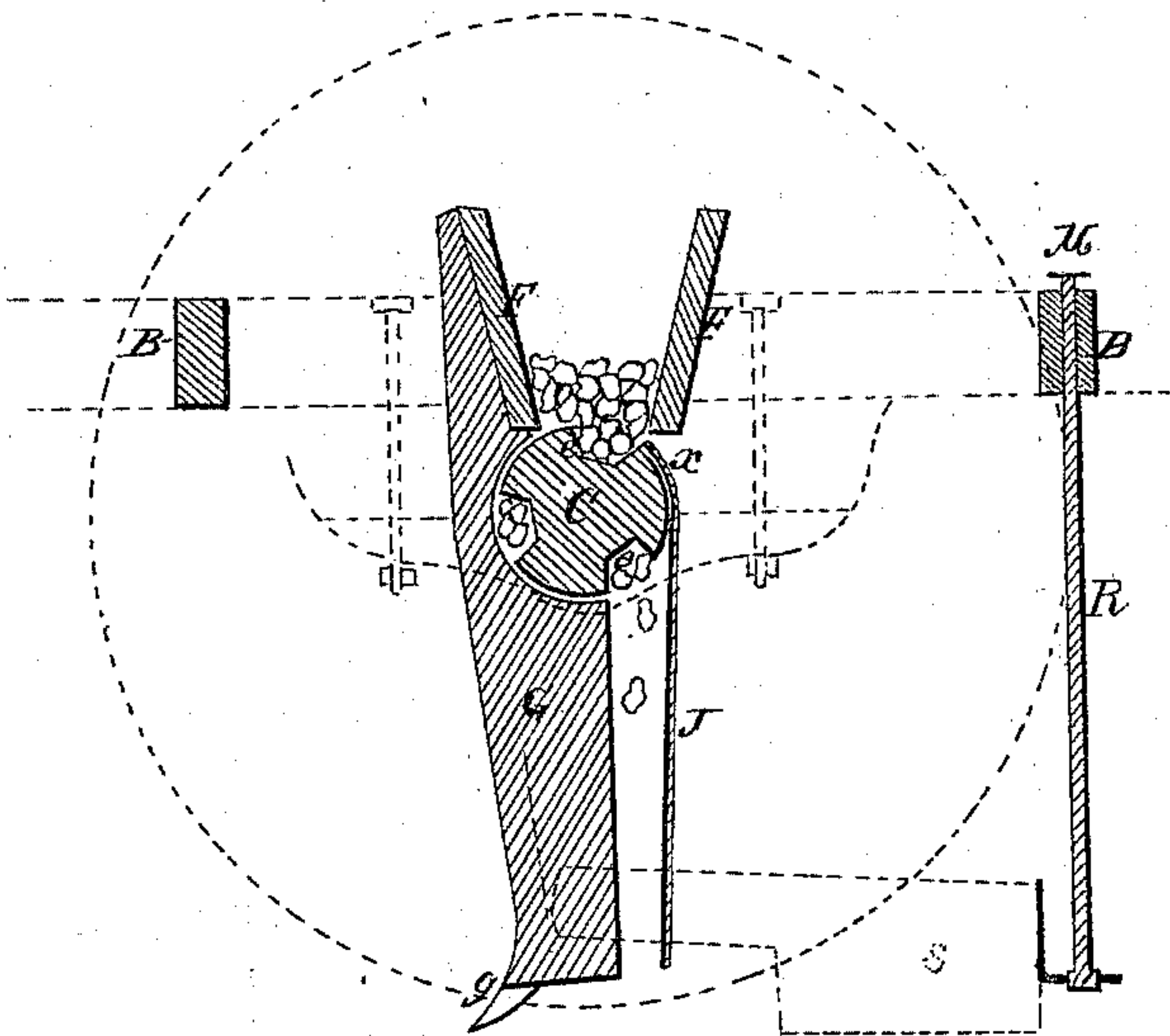
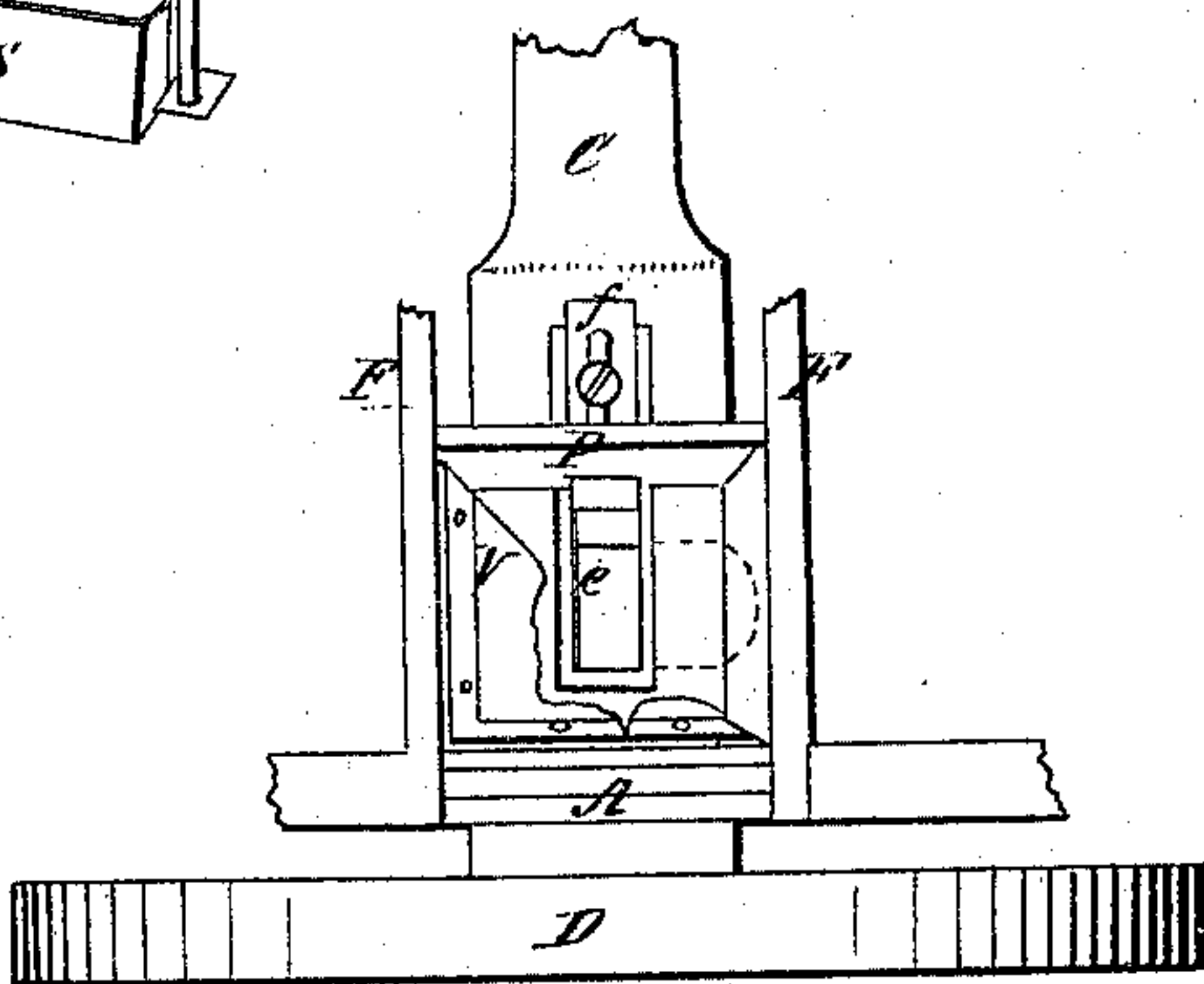


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

MORRIS WILKINSON, OF BURLINGTON, MICHIGAN.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. 54,633, dated May 8, 1866.

To all whom it may concern:

Be it known that I, MORRIS WILKINSON, of Burlington, in the county of Calhoun and State of Michigan, have invented certain new and useful Improvements in Corn-Planters; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, forming a part of this specification, in which—

Figure 1 is a perspective view. Fig. 2 is a vertical longitudinal section in the seed-planting line. Fig. 3 is a partial plan view.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to an improved arrangement of covering and seed-distributing parts, as will be hereinafter described, whereby a more uniform covering of the seed is effected, and the construction of seed-planting machines much simplified.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A A represent the sides, and B B the girts, of a wooden rectangular frame. The broken projecting portions *a a* indicate the thills, but for two horses, I only allow the sides to project a few inches beyond the front girt, and attach a tongue or pole in any of the ordinary ways, which are too well known to require any particular description.

An axle, C, (usually of wood) carrying a pair of wheels, D D, a proper distance apart to plant two rows, is hung to the frame aforesaid in bearings formed in the lining-bolsters E E, which are bolted to the under side.

The two hoppers H H are formed by fitting in with a lap a proper distance apart above the axle two plank, F F, transversely across the frame, to which they are bolted or otherwise secured. The space between the plank is divided into two end compartments by the cross-partitions P P and the two end strips, I I, which fill up the space where the said planks lap across the sides of the frame and complete the two hoppers.

G G are the plow-stocks, which carry on their lower ends the shovel-plows or drill-teeth *g g*, for making the furrows, and J J represent the seed-tubes.

I usually construct the stocks of wood and attach them to the front plank F, as may be clearly seen in Fig. 2. A circular segmental

portion of the stock is cut away to receive the axle C, which revolves within the space moderately close to the stock, at least sufficiently so to keep out the seed. This part of the axle opposite the stock contains the seed-cells *eee*, any required number of which are secured in recesses cut out equidistant around the periphery, which recesses may be cased with metal. An ordinary slide, *f*, contracts or enlarges the capacity of each seed-cell.

I form the seed-tubes J J of sheet metal, bent somewhat, as shown in section by the dotted lines in Fig. 3, and secure them, generally by screwing them through an overlap, to the sides of the plow-stock. A portion of the bent-over sides of the tubes are cut away to fit around that contiguous part of the axle, and the central uncut portion is bent over, as at *x*, and secured to the hind plank F.

It will be seen that in this arrangement the seed in the hopper rests on the axle, and the area of space formed by cutting away the stock and cutting out and bending over the upper end of the seed-tubes is a circular chamber, within the walls of which that portion of the axle containing the seed-cells revolves closely but without touching.

The lower end of the stock is firmly held in the working line by the brace-rods *b b*, and laterally by angle-braces (not seen) secured to the front plank F.

My device for covering the seed consists of a metal plate bent round so that the sides S diverge in the direction of the seed-tubes, and the notched ends converge to fit against the sides of the plow-stock, where they are pivoted by a bolt at *d*. A rod, R, which is attached to the hinder end of each coverer, passes up vertically through the hind girt B, and acts upon each end of a spring, M, the stiffness of which is adjusted to the necessities of the work by bolts passing through a slot, *n*, in the middle, securing said spring to the working length.

The operation is as follows: First, gage the seed-cells for the proper number of seeds by means of the slides *f*; fill the hopper with seed and adjust the length of the spring, as aforesaid, so that the coverers S will press into the ground with just sufficient force to scrape in the proper quantity of dirt to cover.

When the horses draw the machine along, the wheels and axle revolve, the seed in the

hopper falls into the seed-cells and is carried round within the wall of the chambered portion of the plow-stock until it reaches the seed-tube J, when it falls through it into a furrow previously made by the plow g, and is covered by the converging sides S of the coverer, scraping the dirt from each side toward the furrow.

A triangular-shaped spherical plate, V, fastened to two sides of the hopper close to the axle, scrapes or cuts off any projecting seed and prevents jamming.

I have never had any difficulty with the seed forming an arch over the cells, and have made no provision against such contingency; but should it occur, thin projecting plates could be inserted in proper position in the axle to work in corresponding narrow grooves in the chamber walls, which is an old device, but would be effective in stirring up the seed at the bottom of the hopper and preventing clogging.

I do not claim delivering the seed from cells formed in the axle or from a cylinder on it, for this is old in seeding-machines; but I know

of no arrangement of plow-stock and tube within which the chamber for the seed-cylinder is formed as in mine, which combines simplicity, economy, and effectiveness; nor do I claim the coverers S when simply pivoted to the stock; but

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

1. Forming a chamber for the portions of the axle C containing the seed-cells e, or for any equivalent seed-cylinder, by means of the plow-stock G and seed-tube J, when arranged relatively with each other and with the axle and hopper, and constructed and connected substantially in the manner and for the purpose herein described.

2. The employment of pivoted coverers S, in combination with the rods R and adjustable spring M, substantially as and for the purposes specified herein.

MORRIS WILKINSON.

Witnesses:

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