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Falouted Nov. 23. 1869

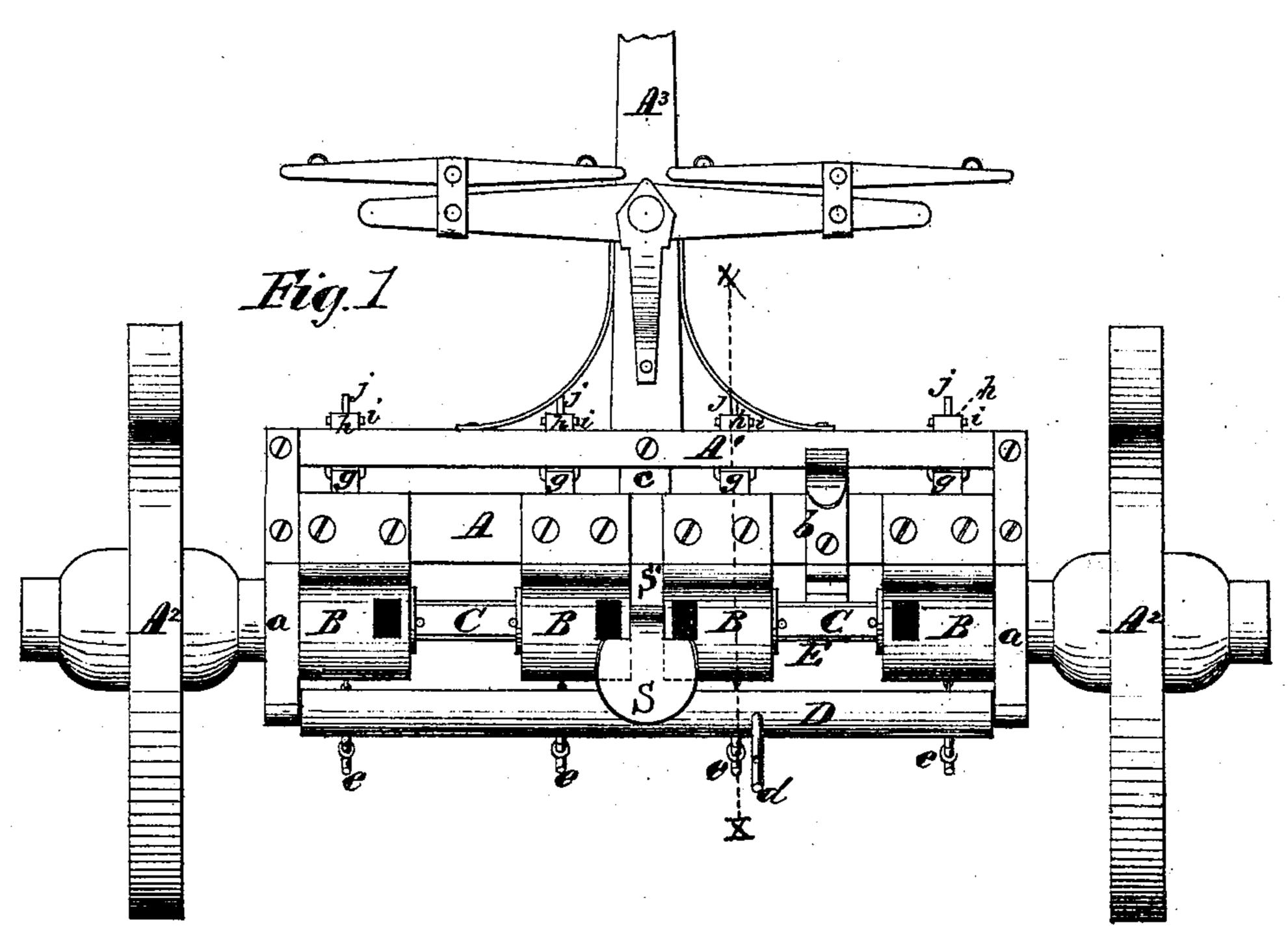
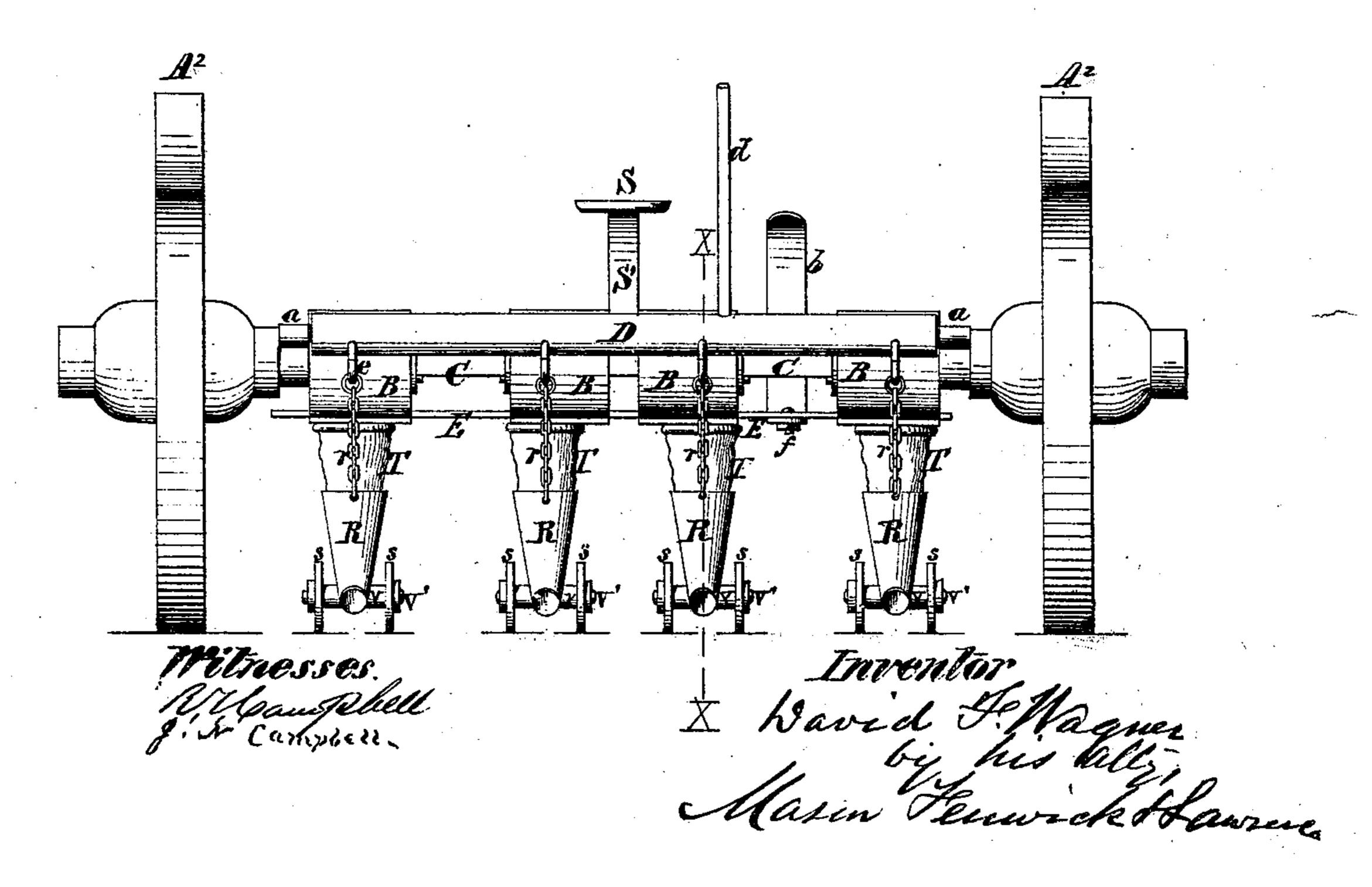


Fig. 2



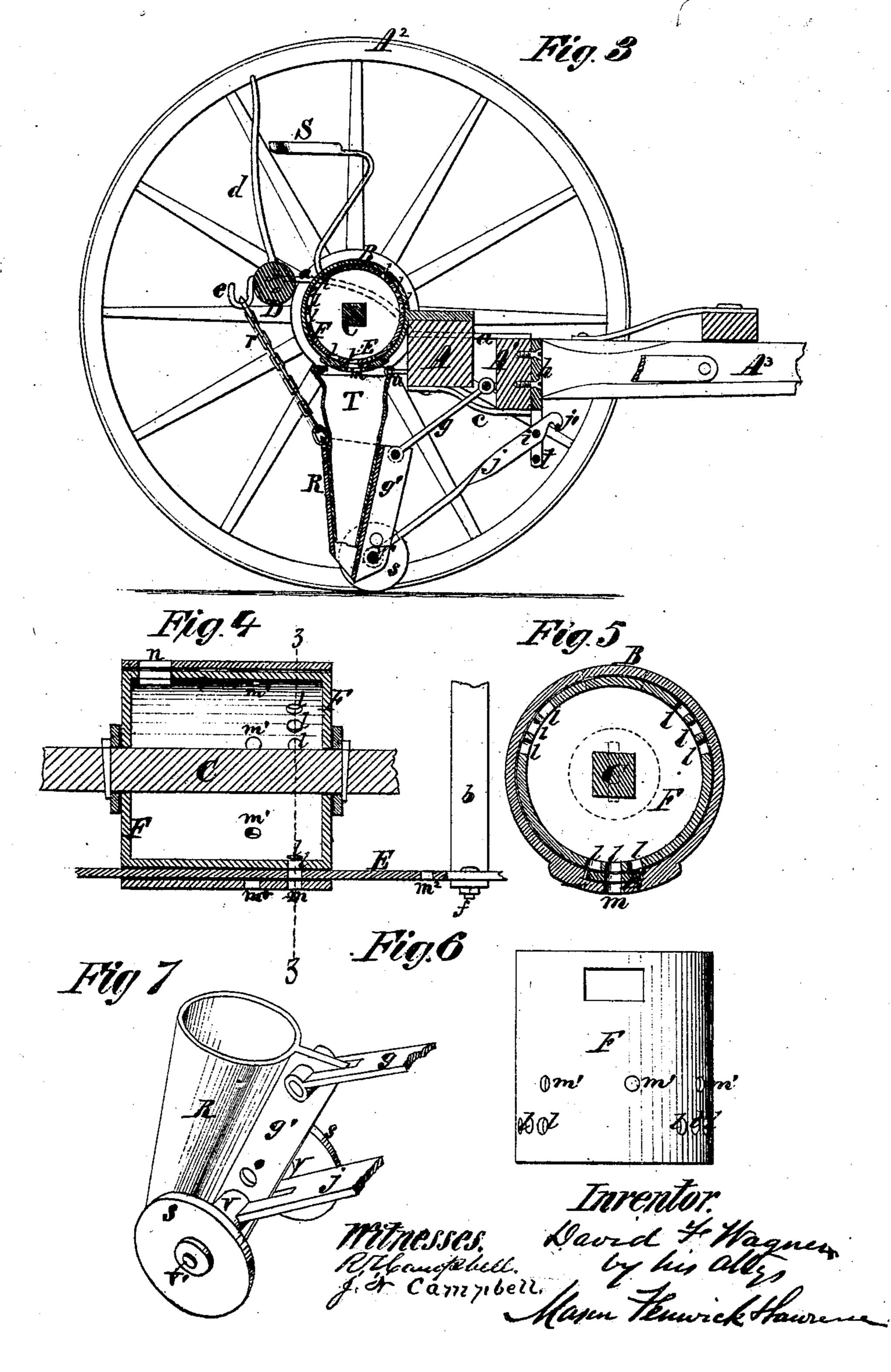
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Patented Mv. 23. 1860.



## Anited States Patent Office.

## DAVID F. WAGNER, OF WEST HANOVER, PENNSYLVANIA

Letters Patent No. 97,139, dated November 23, 1869.

## IMPROVEMENT IN CORN-PLANTERS.

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, DAVID F. WAGNER, of West Hanover, in the county of Dauphin, and State of Pennsylvania, 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 thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1, plate I, is a top view of the improved

corn-planter.

Figure 2, plate 1, is a rear end elevation of the same. Figure 3, plate 2, is a section, taken longitudinally through the planter, in the vertical plane indicated by lines X X in figs. 1 and 2.

Figure 4, plate 2, is a longitudinal section, taken centrally through one of the seed-hoppers and drop-

ping-devices.

Figure 5, plate 2, is a cross-section through fig. 4,

in the plane indicated by line  $\mathbf{Z}$   $\mathbf{Z}$  in fig. 3.

Figure 6, plate 2, is a top view of the interior rotating cylinder, showing the two sets of perforations.

Figure 7, plate 2, is a perspective view of one of the seed-tubes, its rollers, and portions of its draw and stay-bars.

Similar letters of reference indicate corresponding

parts in the several figures.

This invention relates to certain improvements on corn-planters, wherein the hoppers are caused to rotate, and at proper times discharge the grains through stationary cylindrical casings, in which the hoppers rotate, and through tubes which are supported upon the ground by means of rollers.

The nature of my invention consists—

First, in connecting the frame of the machine to the axle of two transporting-wheels, by means of the cylindrical casings, in which the hoppers rotate, and in applying the rocking bar, from which the seed-tubes are hung by chains, and by which these tubes can be raised or depressed, to goosenecks, which are secured to the ends of said frame, and which serve as its longitudinal

braces, as will be hereinafter explained.

Second, in connecting each one of the seed-tubes, which guide the seeds into the drills, to pendants, which are secured to the front cross-beam of the frame by means of two pivoted bars, one of which is connected to its pendant by means of a wooden pin, and hooked on its end, so that should the seed-tube meet -with an obstruction in its path, which would be liable to break or derange the machine, the wooden pin would break and allow the tube to fall back, and the said pivoted bar would drop a short distance and be caught by its hooked end falling upon a pin arranged below said wooden pin, as will be hereinafter explained.

Third, in connecting the axles of each pair of rollers

of a seed-tube to a flange on the back of said tube in a more substantial manner, than hitherto.

Fourth, in having two sets of perforations through each hopper and its easing, in combination with an adjustable double perforated slide, whereby the corn can be dropped three grains in a hill, or dropped in single grains, at short distances apart, at the pleasure of the attendant, as will be hereinafter explained.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

In the accompanying drawings—

A represents a horizontal beam, which is arranged in front of and parallel with the axle C of two trans-

porting-wheels, A<sup>2</sup> A<sup>2</sup>.

To this beam four cylinders, B B B B, are rigidly secured, by means of bolts passed through flanges formed on these cylinders, and through the beam, which cylinders are arranged at suitable distances apart for dropping in rows at regular distances apart.

In each one of the cylinders B, a cylinder, F, is fitted, to turn freely, which cylinder has closed ends, and is screwed rigidly to the axle C, which passes centrally through it, so that when the machine is moved forward, one of the transporting-wheels, A2, which is fast on said axle, will cause all the cylinders F to turn.

To the ends of the beam A, straps a a are secured, which extend backward, and are curved over axle C, and provided with eye bearings on their rear ends, for supporting a horizontal rocking bar, D, having hooks e fixed to it, from which the seed-tubes R are hung. by means of chains r, as shown in figs. 2 and 3.

The hand-lever d, which rises from bar D, enables a person sitting upon the seat S to raise or depress

the seed-tubes.

The seat S, on which the person is located who manages the machine, is arranged over or a little in rear of the axle C, and is mounted upon a spring standard, S1, which is secured, at its front end, to the beam A, between the flanges of the two intermediate cylinders. B B.

The front ends of the straps a a are extended forward of the beam A, and secured to the ends of a front beam, A1, so as to serve, in conjunction with a central connection, c, as a means for sustaining said front beam rigidly in place, so that it will constitute part of the frame of the machine.

To the front beam A1 the draught-pole A3 is secured, and to this beam vertically-slotted and horizontally-perforated pendants h are also secured, at

regular distances apart.

To each one of the pendants h a seed-tube, R, is connected, by a draw-rod, J, which is pivoted to its pendant, at i, by a wooden pin, and which has a hook, j', formed on its front end, as shown in fig. 3.

Below the wooden pin connection i a pin, t, is passed

through the pendant h, for the purpose of catching the hooked end of the rod j when pin i breaks, and thus preventing this rod from dropping upon the ground.

The wooden pin connection *i* is designed to break should an obstruction be met with in the path of a seed-tube, which would be liable to break such tube.

The rod J is pivoted, at its lower rear end, to a short axle, V', that is passed transversely through the lower end of a flange, g', which is formed on the front side of each seed-tube R, as shown in figs. 2 and 7.

Tubular eyes V are formed on the rear end of each draw-rod J, to receive the axle V', and on the ends of this axle V' wheels s s are applied, and held in place by means of nuts and washers.

The wheels s s, which are applied to each seed-tube, support it upon the ground, and serve to lightly cover

the grains with earth.

The rods or links g, which are pivoted at their rear ends to the upper ends of the seed-tube flanges g', and at their front ends to staples fixed to the rear side of the front beam  $A^1$ , serve to connect the upper ends of the tubes to said beam, and allow the tubes to rise and descend vertically.

The grains of corn falling from the dropping-cylinders, are guided into the tubes R by the flexible tubes T, which are secured by short rods u to the beam A, as shown in fig. 3.

I will now refer more particularly to the devices for dropping the grains of corn, either three grains at a time, or one grain at a time.

The seed-hoppers F are rotating cylinders, turning

within the stationary cylinders or cases B.

Openings n are made through the upper sides and near the inner ends of the stationary cylinders B, and also through cylindrical hoppers, for the purpose of introducing corn into the latter, which can be done when the feed-openings through cylinders E register with the corresponding openings through the cylinders B.

Each stationary cylinder B has a groove made longitudinally into its bottom for receiving a slide, E, through which holes are made, to allow the discharge of the grains of corn through it.

This slide passes through the bottoms of all the cylinders B, and is moved in a direction with its length by means of a laterally-vibrating foot-lever, b, which is pivoted to the top of beam A, in reach of a person sitting on the seat S.

The rear depressed end of the lever b is connected to the slide E by an adjustable pivot, f, as will be further explained.

There are three sets of three holes, l l, made through the cylinder F, all in the same vertical plane, and in a plane with hole m through cylinder B for the, purpose of dropping three grains of corn in a hill, and dropping three hills at every revolution of the cylinder F.

There are also six holes  $m^1$  made through the cylinder F, at regular distances apart and in the same vertical plane, for dropping six grains through the hole  $m^*$ , through cylinder B at every revolution of the cylinder

F, as shown in fig. 4.

When the slide E is adjusted so that the holes through it, through which the corn drops, are in the plane of the holes l l l, as shown in fig. 4, the corn will be dropped three grains in a hill, and when the slide E is adjusted so that the holes through it are in the plane of holes  $m^1 m^*$ , the corn will be discharged from each hopper, one grain at a time.

When it is desired to adjust the slide for dropping from holes  $m^1$   $m^{\times}$ , the pivot-pin f is removed and inserted through hole  $m^2$ , so that the lever b can be moved for cutting off the discharge from holes  $m^1$   $m^{\times}$ , when it is not desired to plant.

Having described my invention,

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

1. The frame A  $A^1 a$ , connected to the axle of two transporting-wheels, by means of the casings B, in which turn the hoppers F, substantially as described.

- 2. The bar D, from which the seed-tubes are hung, applied to the rear overhanging ends of straps a a, when these straps also serve to connect together the two beams, A A<sup>1</sup>, and when these two beams are sustained by the cylindrical hopper casings B, substantially as described.
- 3. The pivoted draw-rods j, hooked on their front ends and pivoted to the pendants h, by means of wooden pins i, in combination with the catch-pins t, arranged below pins i, substantially as described.

4. The double perforated rotating hopper F, applied upon axle C, and combined with a stationary case, B, and an adjustable slide, E, all constructed substantially as described

tially as described.

5. The tubular eyes V, on the rear end of draw-rod J, applied to the axle V' of wheels s s and to flange g' of tube E, substantially as described.

DAVID F. WAGNER.

Witnesses:

JACOB R. WAGNER, EDWARD N. WAGNER.