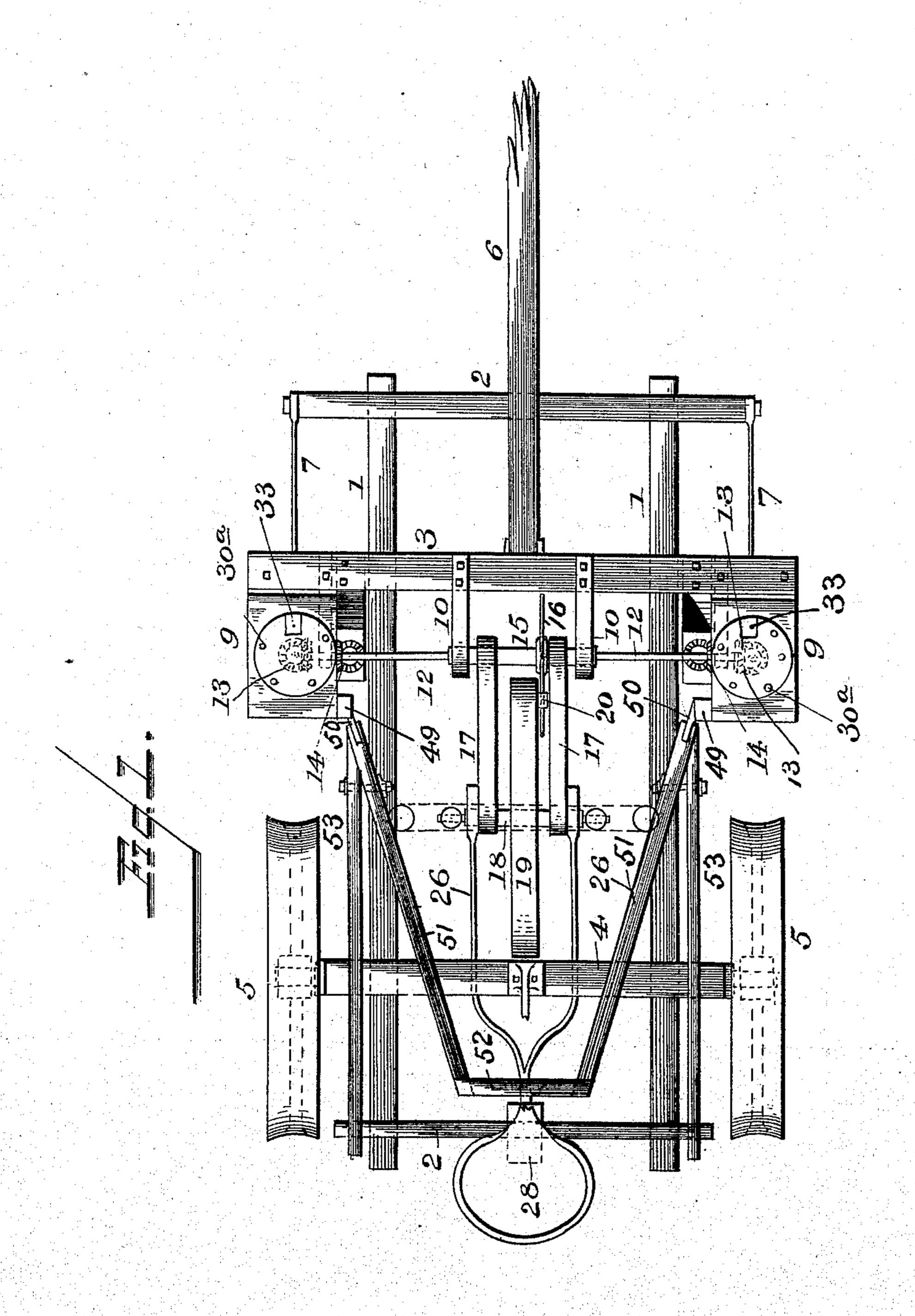
W. E. MATTHEW. CORN PLANTER.

No. 504,929

Patented Sept. 12, 1893.

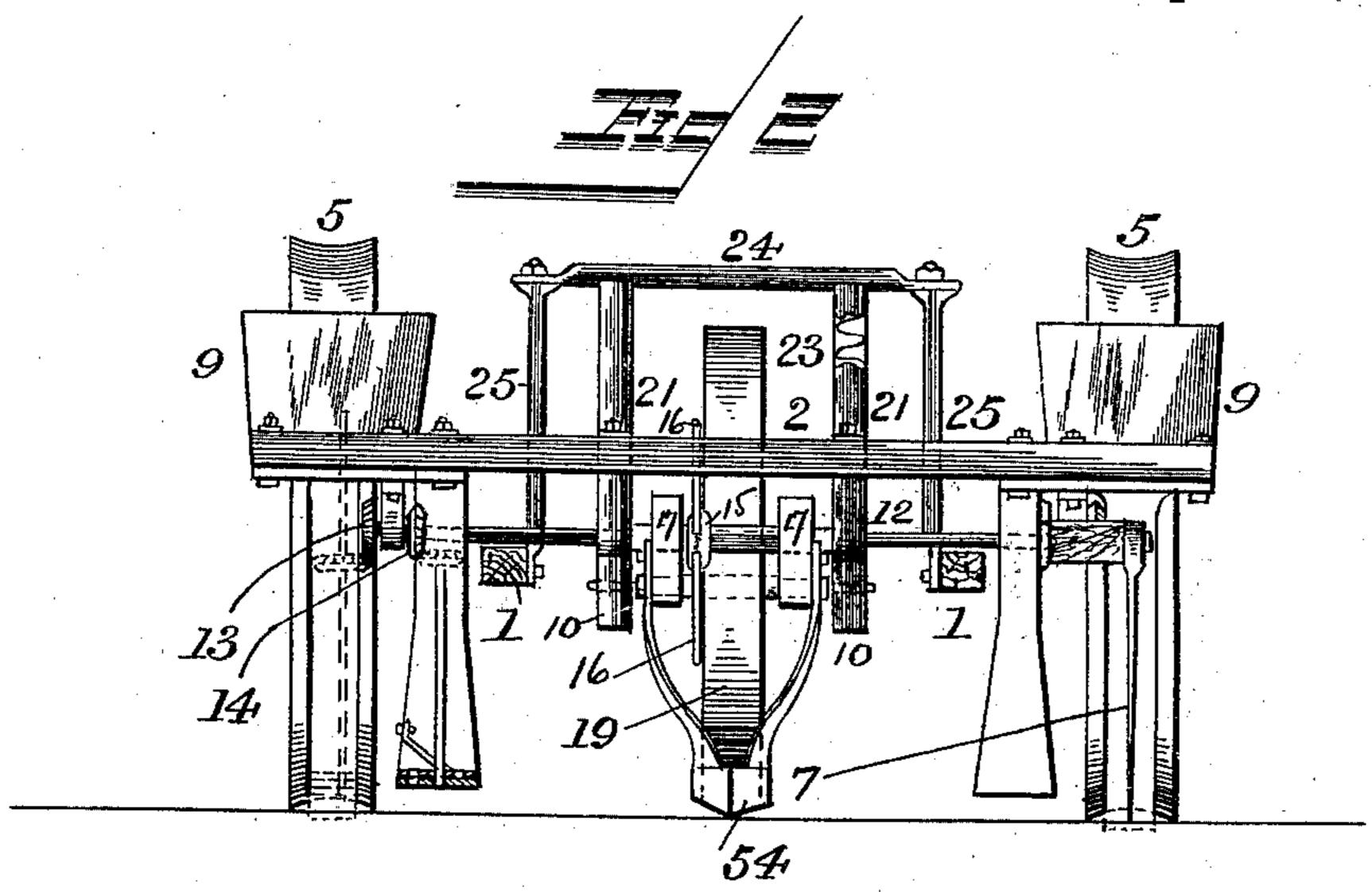


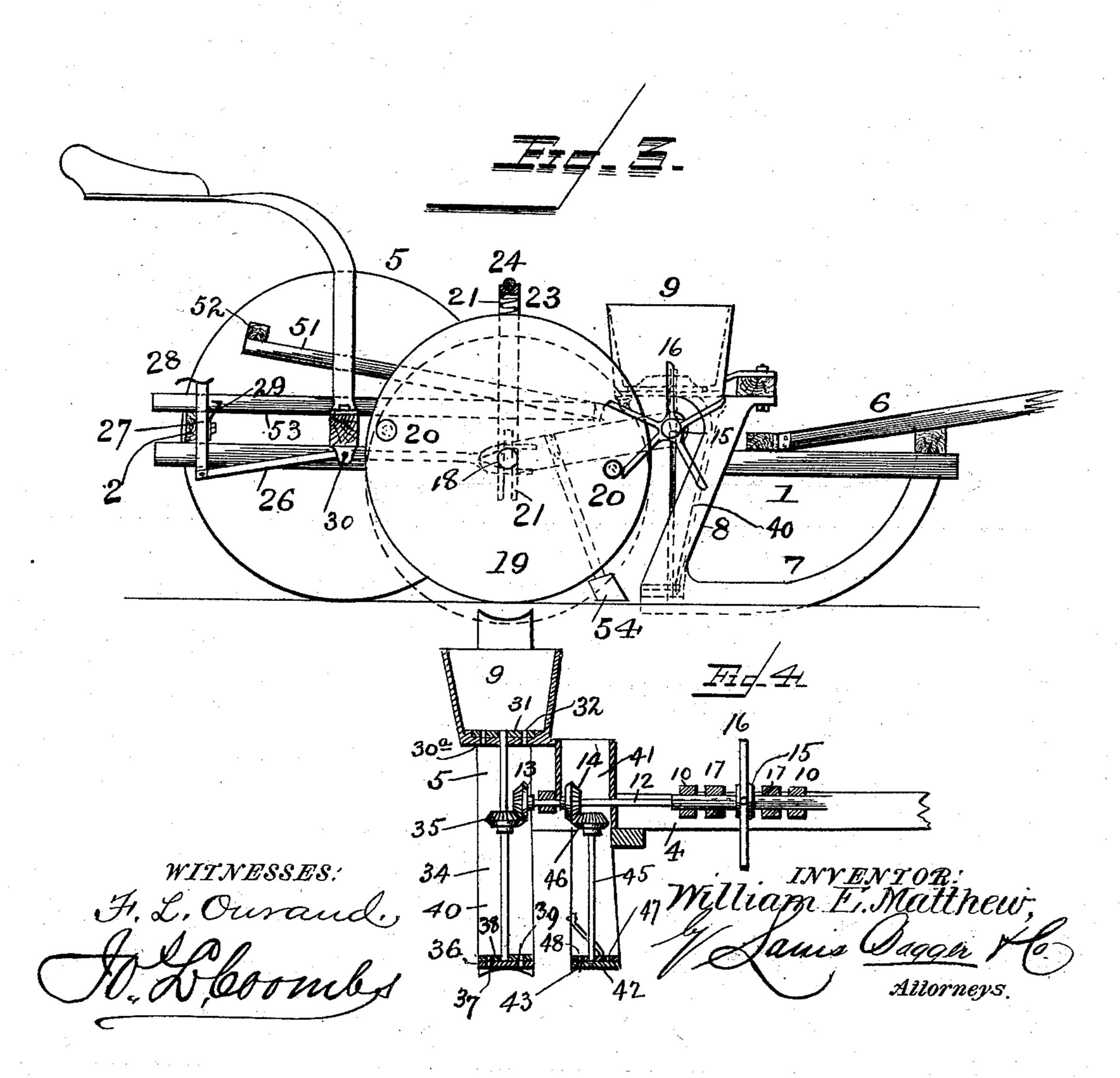
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United States Patent Office.

WILLIAM E. MATTHEW, OF BUCYRUS, OHIO, ASSIGNOR OF ONE-THIRD TO CHARLES H. NOBLET, OF SAME PLACE.

CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 504,929, dated September 12, 1893.

Application filed February 14, 1893. Serial No. 462,297. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. MATTHEW, a citizen of the United States, and a resident of Bucyrus, in the county of Crawford and State of Ohio, 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 invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in corn-planters, and its object is to provide a simple and economical construction of the same, whereby I secure important advantages with respect to efficiency in operation.

The invention consists in the novel con-20 struction and combination of parts hereinafter

fully described and claimed.

In the accompanying drawings: Figure 1 is plan view of a corn planter constructed in accordance with my invention; the transverse bar against which the ends of the coiled springs abut being shown in dotted lines. Fig. 2 is a front view. Fig. 3 is a side elevation. Fig. 4 is a detail sectional view.

In the said drawings, the reference numeral 30 1 designates horizontal side bars, and 2, 2, end bars, and 3 an intermediate cross bar.

The numeral 4 denotes the axle secured to the side bars and carrying the supporting wheels 5.

The numeral 6 designates the tongue secured to the front end bar and also to the intermediate cross bar. Also secured to the said end bar are curved runners or shoes 7, the lower ends of which are formed with standards 8, secured to bar 3, and which supports the seed-boxes 9, 9.

Secured to the bar 3, are two rearwardly extending brackets 10, in which is journaled a transverse shaft 12, provided with gear-wheels or bevel pinions 13, 13, and 14, 14, at each end, which mesh respectively with similar pinions hereinafter described. This shaft at its center is provided with a hub 15, provided with a series of radial arms 16. Journaled on this shaft, are two swinging brackets 17, in which

is journaled the shaft 18 of a wheel 19, provided on one face with studs, on which are journaled rollers 20, which are adapted to strike the radial arms 16, when said wheel is rotated, and thus impart an intermittent ro- 55 tary movement to the shaft 12. The outer ends of the shaft 18, engage in slots in the lower ends of tubes 21, which contain coiled springs 23, the lower ends of which bear on said shaft, while their upper ends rest against 60 a transverse bar 24, to which said tubes are secured, which bar is supported by uprights 25, secured to the side bars 1. The shaft 18, also engages the bifurcated ends of levers 26, which are united or connected together at 65 their rear ends, and provided with an upwardly projecting arm 27, having a treadle 28. This treadle is adapted to engage with a spring-catch 29, on the rear cross-bar 2, and the levers are pivoted to the axle at 30. The 70 object of this lever is to enable the wheel 19, to be elevated or thrown out of contact with the ground when desired. The seed-boxes 9, 9, are supported by the said runners, and are provided with a series of holes 30° in their 75° bottoms. They are also provided with disks 31, provided with corresponding holes or pockets 32, adapted to register therewith, when said disks are rotated. There is a guard or cut off 33, provided in the seed-boxes, so 80 that one of the pockets 32 will be covered when discharging and the others are open or filling. The disks 31 are carried by vertical shafts 34, having a bevel pinion 35, meshing with the pinions 13, 13, and at their lower 85 ends the shafts are journaled in disks 36, secured to the shoes or runners, and formed with pockets 37. Immediately above disks 36, are disks 38, secured to and rotating with said shafts, and provided with pockets 39.

The seed-boxes are provided with spouts 40, which guide the grain to the pockets in the disks 36.

Close to the inner sides of the seed-boxes are located lime receptacles 41, having their 95 lower ends closed by disks 42, each provided with a hole 43. In these disks are journaled vertical shafts 45, the upper ends of which are provided with bevel pinions 46, meshing with the pinions 14. At their lower ends the 100

shafts 45, are provided with disks 47, having holes 48.

Pivoted to lugs 49, on the rear inner sides of the seed boxes, are links 50, connected with two rearwardly extending levers 51, connected together by a cross-bar 52. These levers are fulcrumed to horizontal bars 53, secured to the axle and the rear end cross-bar, and their object is to elevate the seed-boxes and runners when desired, by depressing their rear ends.

The numeral 54 designates a plow or coverer for leveling the ground in front of the wheel 19.

The operation will be readily understood: When the seed-boxes are full of grain, four of the pockets in the disks will be also filled, (one of said pockets being covered by the guard or cut off 33 while discharging.) The 20 lime boxes are to be filled with lime. As the machine is drawn along the ground on the runners and supporting wheels, the wheel 19 is kept in close contact with the ground, by means of the coiled springs 23. The wheel 25 19 causes the disks in the seed and lime boxes to be rotated twice at each one-fifth revolution of said wheel, and causes the grain to be fed through the guide-spouts to the lower disks and be deposited therefrom on the 30 ground. At the same time, just at one side of the spout, where the grain is deposited, a

small quantity of lime will be feed to the

ground from the lime boxes, these serving as I

guides in the subsequent operation of the machine.

Having thus described my invention, what I claim is—

1. In a corn-planter the combination with the seed and lime boxes, the disks therein, and the transverse shaft and vertical shafts 40 provided with bevel pinions, of the hub provided with radial arms mounted on said transverse shaft, the rotating wheel having rollers in one face, adapted to engage with said shaft, and the swinging bearings in which said wheel 45 is journaled, substantially as described.

2. In a corn planter the combination with the seed and lime boxes, the disks therein and the transverse shaft and vertical shafts provided with intermeshing bevel pinions, of 50 the hub provided with radial arms mounted on said transverse shaft the wheel having rollers adapted to strike said radial arms, the shaft on which said wheel is mounted journaled in swinging bearings, the slotted tubes 55 containing coiled springs, the transverse bar to which said tubes are secured, and uprights for supporting said bar, substantially as described.

In testimony that I claim the foregoing as 60 my own I have hereunto affixed my signature in presence of two witnesses.

WILLIAM E. MATTHEW.

Witnesses:

S. R. HARRIS, CHARLES H. NOBLET.