

No. 677,254.

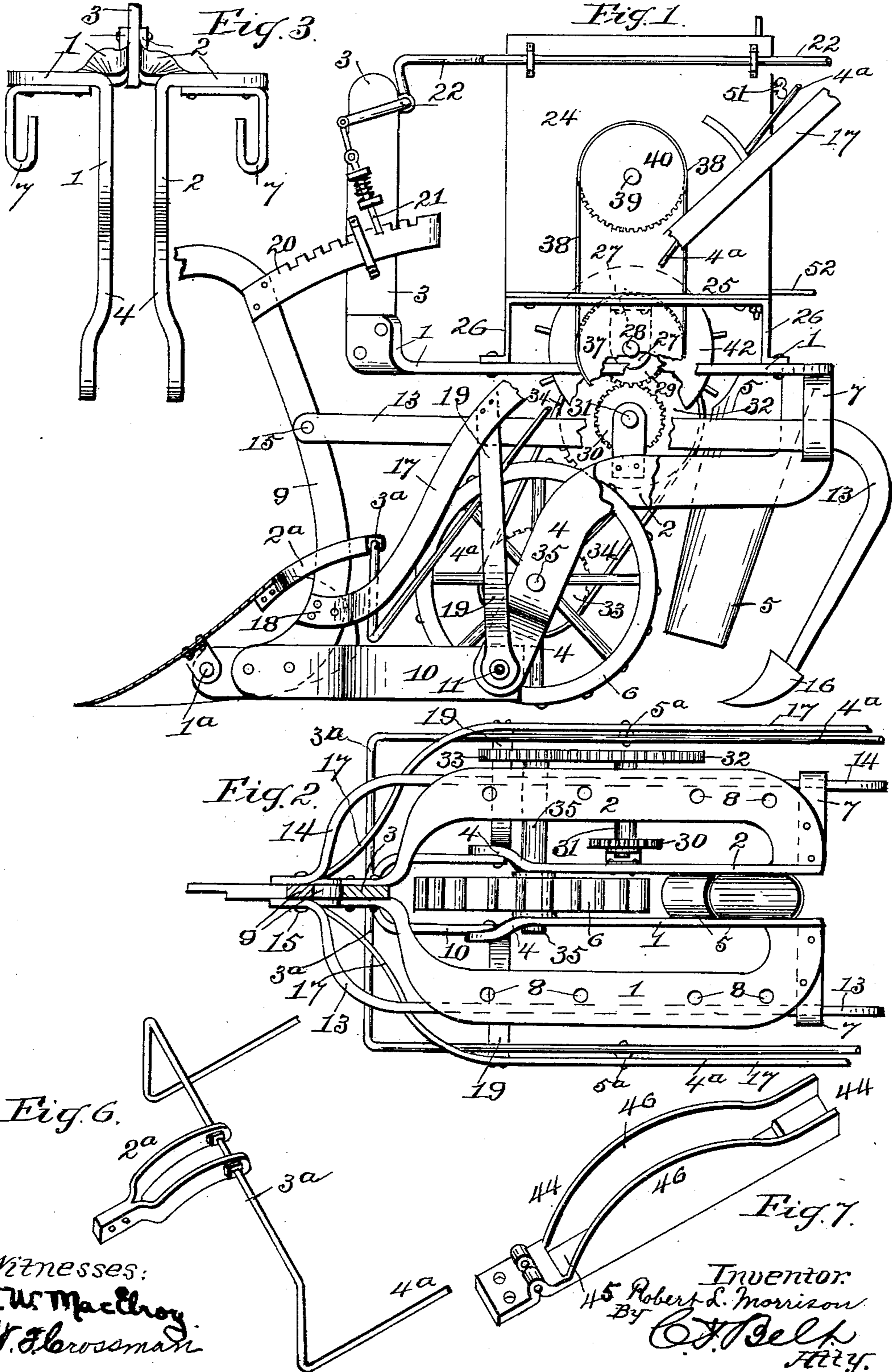
Patented June 25, 1901.

R. L. MORRISON.
COTTON PLANTER.

(Application filed Dec. 20, 1900.)

(No Model.)

2 Sheets—Sheet 1.



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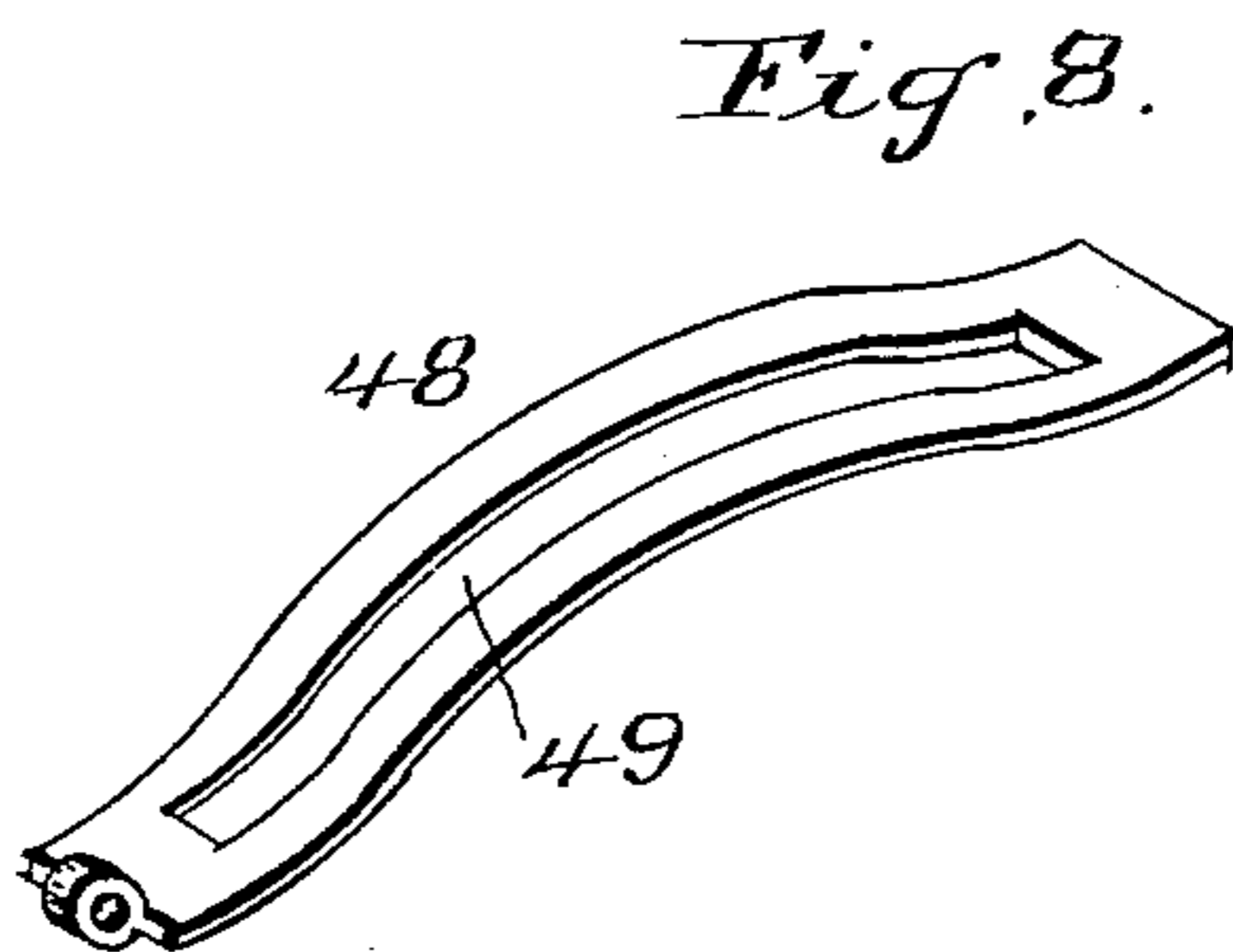
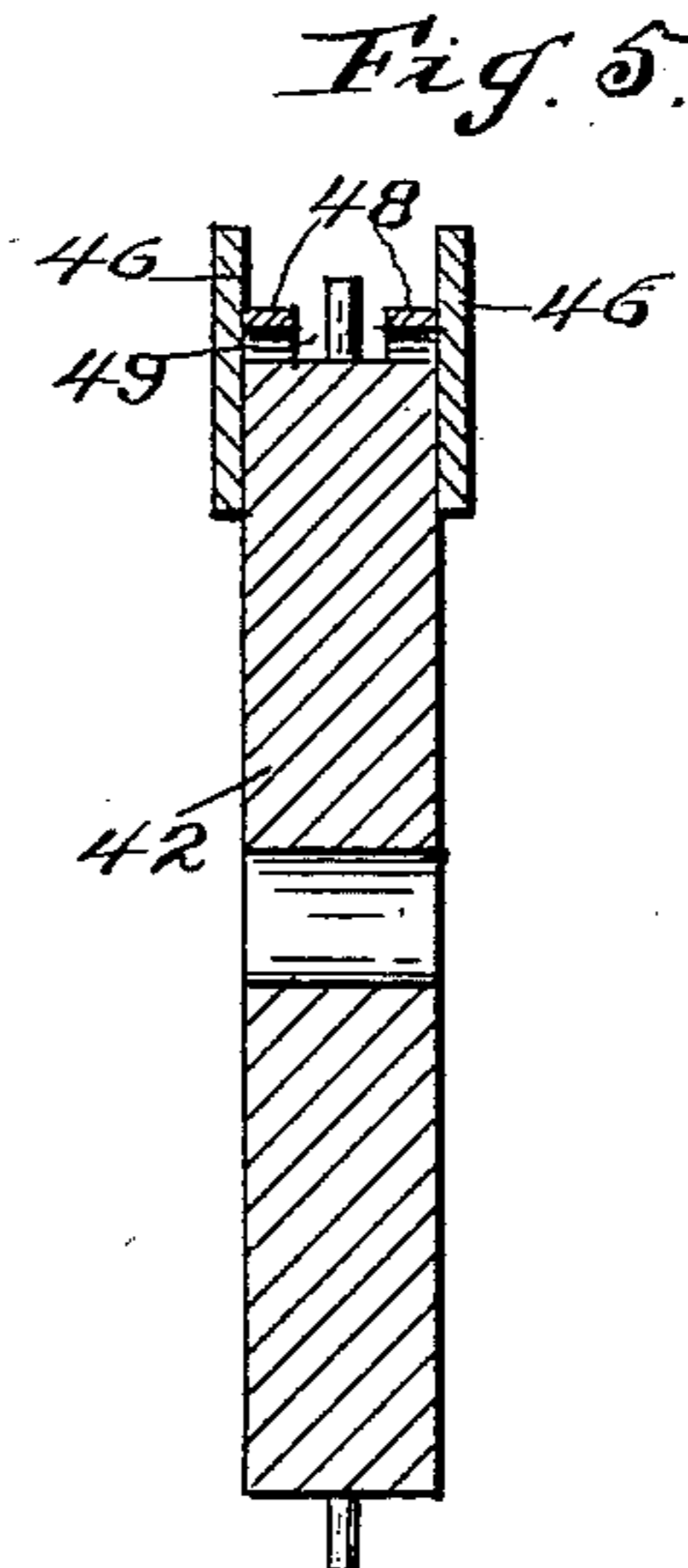
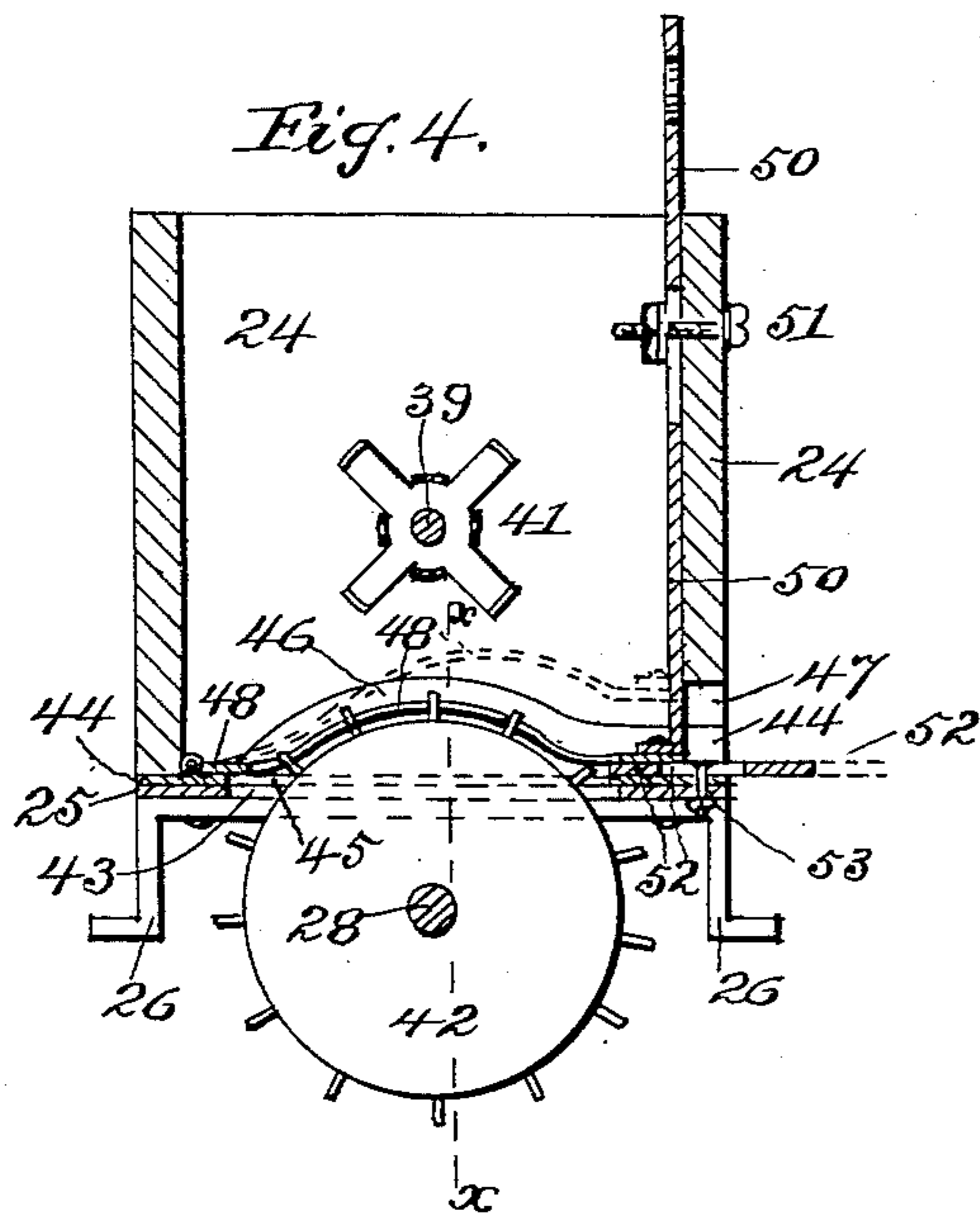
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UNITED STATES PATENT OFFICE.

ROBERT L. MORRISON, OF NATHAN, TEXAS.

COTTON-PLANTER.

SPECIFICATION forming part of Letters Patent No. 677,254, dated June 25, 1901.

Application filed December 20, 1900. Serial No. 40,546. (No model.)

To all whom it may concern:

Be it known that I, ROBERT L. MORRISON, a citizen of the United States, residing at Nathan, in the county of Johnson and State of Texas, have invented certain new and useful Improvements in Cotton-Planters, of which the following is a specification.

This invention relates to planters, and particularly to cotton-seed planters of the type having a single traction-wheel.

One object of the invention is to provide a planter-carriage frame adapted to carry a cotton-seed hopper having novel and peculiar means for feeding the cotton-seed in planting the same, so that the same frame may be employed for both hoppers without alteration of either hopper or frame.

A further object of the invention is to provide a cotton-feeding device of such novel and peculiar construction and arrangement of parts that the feed thereof will not become choked, the lint or surplus from the seed will be divided from the latter, whence it is removed from the cotton-seed hopper, and the seed feed regularly at will.

These with other special features of the invention, which produce important improvements in the structure, operation, and results, will be hereinafter more fully treated.

In the accompanying drawings, forming part of this application, Figure 1 is a side elevation of the planter, partly broken away. Fig. 2 is a top view of the frames, partly broken away, with the hopper removed. Fig. 3 is a rear view of the fixed frame. Fig. 4 is a vertical section of the hopper. Fig. 5 is an enlarged vertical section of the feed-wheel on the line *xx*, Fig. 4. Fig. 6 is a perspective view of the plow-clamp and levers for operating the same, partly broken away. Figs. 7 and 8 are perspective views of the dividing and feeding device.

The same numeral-references denote the same parts throughout the several views of the drawings.

The carriage-frame consists of two parts, the one (fixed) part comprising two pieces 1 and 2, which diverge from a central front standard 3 rearwardly to a point where they are bent toward each other and terminate in forwardly and downwardly bent arms 4. A space is left between the arms 4, in which is

secured the seeding tube or chute 5 and the traction-wheel 6. The rear of the pieces 1 and 2 have secured to them depending U-shaped hangers 7, and said pieces are provided with bolt-holes 8 for the purpose of attaching the hopper of the cotton-seed-feeding apparatus, the latter being hereinafter described. The other (movable) frame portion comprises a plow-standard 9, having or to which are secured forks 10, extending rearwardly and pivoted at 11 to the terminal ends of the arms, 4 said forks 10 forming a furrow runner or shoe, and the front end of the standard has a plow-point pivoted thereto at 1^a, which is provided with a clamp 2^a, slidably connected to the standard 9. A lever 3^a, fixed to the end of the clamp, is operated by a hand-rod 4^a, pivoted at 5^a to raise and lower the plow-point, according to the depth of furrow desired. Said frame portion further consists of beams 13 and 14, having one end pivoted at 15 to the plow-standard 9, whence they extend rearwardly under the frame-pieces 1 and 2, through the U-shaped hangers 7, where they are bent downwardly and are provided with covering plow-points 16. Handle-irons 17 are secured to the plow-beam at 18 and have braces 19, pivoted with the forks 10 and the ends of the arms 4.

To the upper portion of the plow-standard 9 is secured a rack-bar 20, held by a spring-controlled dog 21 on the front standard 3, and the dog has a lever 22, reaching conveniently to the operator, for the purpose of raising the dog out of the rack-bar to permit the last-described frame portion to be moved vertically on the pivot 15 by simply raising and lowering the plow-handles 17. This operation will raise and lower the furrow-plow point without tilting or otherwise affecting the other frame portion or the covering-plows and is accomplished without stopping or interfering with the operation of the machine.

The cotton-seed hopper 24 has a bottom 25, provided with legs 26 for detachably securing the hopper upon the frame-pieces 1 and 2. The under side of the said bottom has journal-brackets 27, in which a shaft 28 is journaled. This shaft has a pinion 29 on one end, which meshes with a gear 30 of a shaft 31 on the first-described frame portion, and

said latter shaft is driven by sprocket-wheels 32 and 33, chain 34, and shaft 35 from the traction-wheel 6. The other end of the shaft 28 has a sprocket-wheel 37, and a chain 38 5 imparts motion therefrom to the stirrer-shaft 39 through a sprocket-wheel 40. The stirrer-shaft has a stirrer 41 secured thereto central of the hopper. The shaft 28 revolves a feed-wheel 42 through a slot 43 in the hopper-bottom. 10

To the inner side of the hopper-bottom is secured one end of a trough 44, having an opening 45 housed by side flanges 46, through which opening and flanges the feed-wheel revolves, and the discharge end of the trough 15 reaches through an opening 47 in the rear of the hopper for the discharge of lint or other refuse from the seed. A curved or arc-shaped dividing-plate 48, having a slot 49, is hinged 20 at one end to the fixed end of the trough. It extends over the feed-wheel, with the teeth of the latter working in said slot, and the other end has a vertical lever 50, secured thereto and held by a set-screw 51, for working 25 the plate 48, so that the space between the feed-wheel and the plate may be varied as desired to permit the wheel to feed only the seed without becoming choked.

A gage-plate 52 is slidably held in the 30 trough-discharge end by a set-screw 53 to vary the quantity of seed fed by the feed-wheel.

It is obvious that the dividing-plate will permit the feed-wheel to revolve with its 35 teeth in the slot of said plate and prevent the cotton-seed from resting upon the periphery of said wheel, and thus choking the feed, while all matter not intended for planting will be carried to the discharge end of the 40 trough and therefrom removed. Thus it will be seen that the weight of the cotton-seed in the hopper over the feed-wheel is sustained by the dividing-plate, and the latter may be 45 feed of said wheel.

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

1. The combination, with the planter-frame 50 having a traction-wheel journaled therein, said frame terminating at one end in a pivot-bearing below the said journal, and a front standard to which the other end of said frame is fixed, of the frame having a standard to 55 which the planter-handles are attached, a furrow-shoe having one end fixed to the standard and the other end pivoted in the pivot-bearing of the other frame, and a connection between the two said standards to permit the 60 frames to be adjusted relative to each other.

2. The combination, with the frame having a front standard and a frame portion termi-

nating below the standard in a pivot-bearing, of the furrow-shoe pivoted in said bearing, the standard to which the said shoe is fixed, 65 and a connection between said standards to permit their being moved relative to each other.

3. In a two-part planter-frame, the combination of the one part comprising the front 70 standard having a spring-controlled dog, frame-pieces diverging from the standard and adapted to hold a seeding apparatus, forwardly-extending arms from the side of said pieces under the latter and adapted to carry 75 a seed-chute and traction-wheel, with the other frame part comprising the plow-standard, the rack secured to the said standard and engaged by the said dog, and the furrow-shoe fixed at one end to the plow-standard 80 and pivoted at the other end to the said arms.

4. The combination with the two frame portions pivoted together to swing vertically one without moving the other, the U-shaped 85 hangers depending from one of said frame portions, and a spring-controlled dog on said portion, of a rack-bar secured to the other frame portion, and held by the dog, and the plow-beams pivoted to the latter frame portion and working through said hangers. 90

5. In a cotton-planter, the combination with the feed-wheel having prongs or pins, and a seed-hopper, of a device for supporting the cotton-seed over the wheel and dividing 95 the seed from lint or other foreign matter, comprising a trough fitted over the wheel having a flanged opening and a discharge end through the hopper, an arc-shaped plate hinged or pivoted at one end to the trough and provided with a slot in which the pins of 100 the feed-wheel work, and a lever secured to the other end of the said plate for working the latter.

6. The combination, with a planter having a plow-standard, a furrow or shoe fixed to the 105 standard and pivotally connecting the plow-point with the standard, of a clamp fixed to the plow and slidable on the standard, the lever attached to the clamp, and a hand-rod for operating the lever to work the clamp. 110

7. The combination, with a planter having a plow-standard, a furrow-shoe fixed to the standard and pivoted to the planter-frame, and a plow pivoted to the said shoe, of a clamp fixed to the plow-point and slidable 115 vertically on the standard, the lever attached to the clamp, and a hand-rod for working the lever and the clamp.

In witness whereof I hereunto set my hand in the presence of two witnesses.

ROBERT L. MORRISON.

Witnesses:

J. A. ELLEDGE,

P. D. WESTBROOK.