No. 819,532. PATENTED MAY 1, 1906.

E. FOWLER.

WHEEL DISK PLOW.

APPLICATION FILED MAR. 28, 1905.

3 SHEETS—SHEET 1.

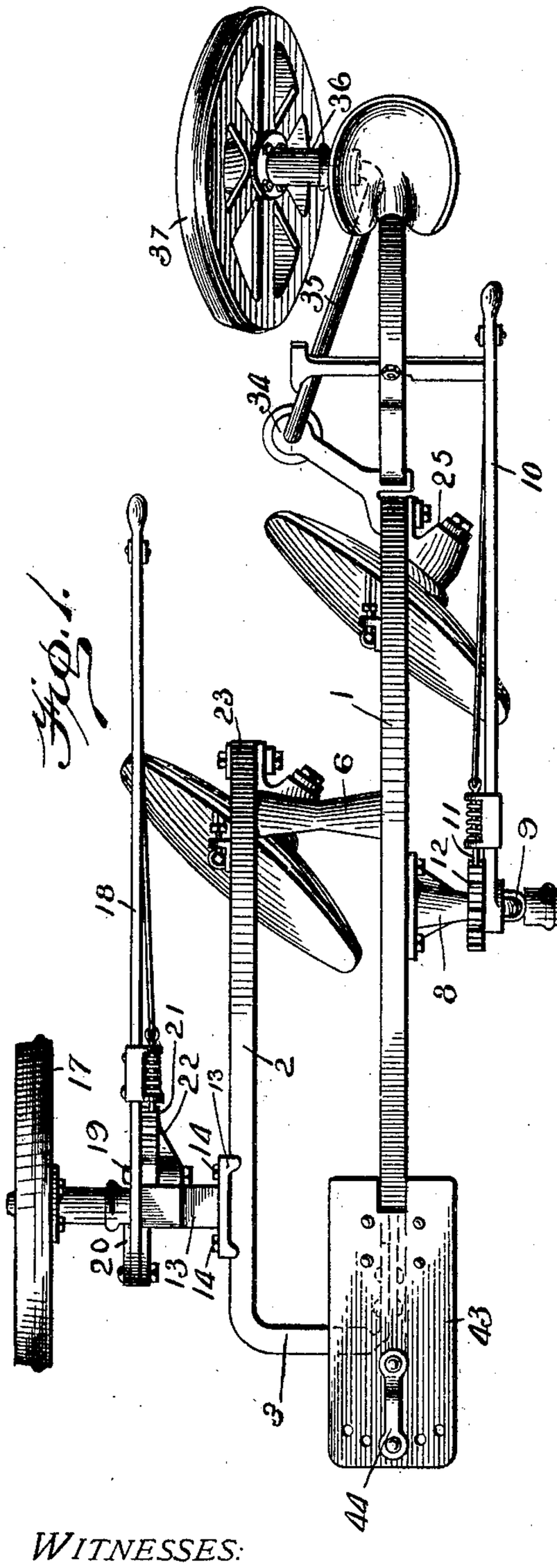

Fig. 1.

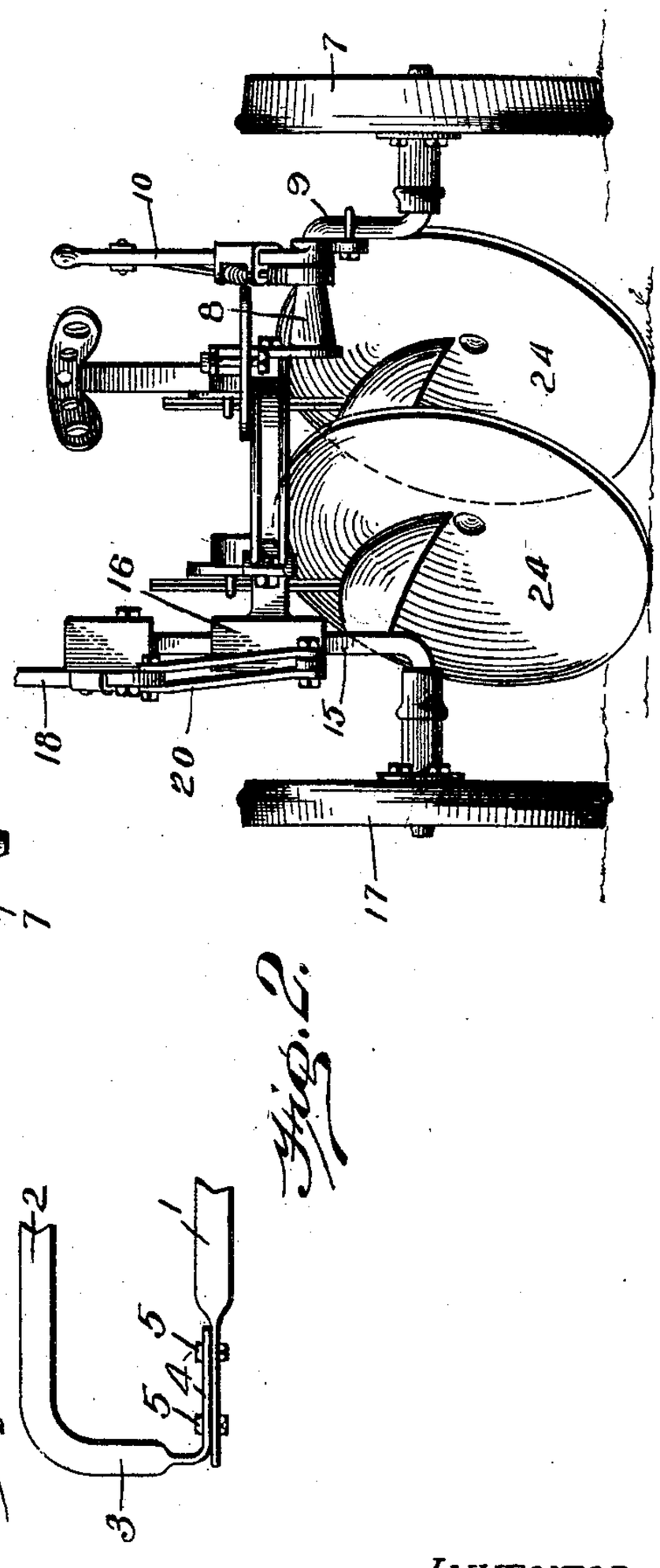

Fig. 2.

Fig. 9.

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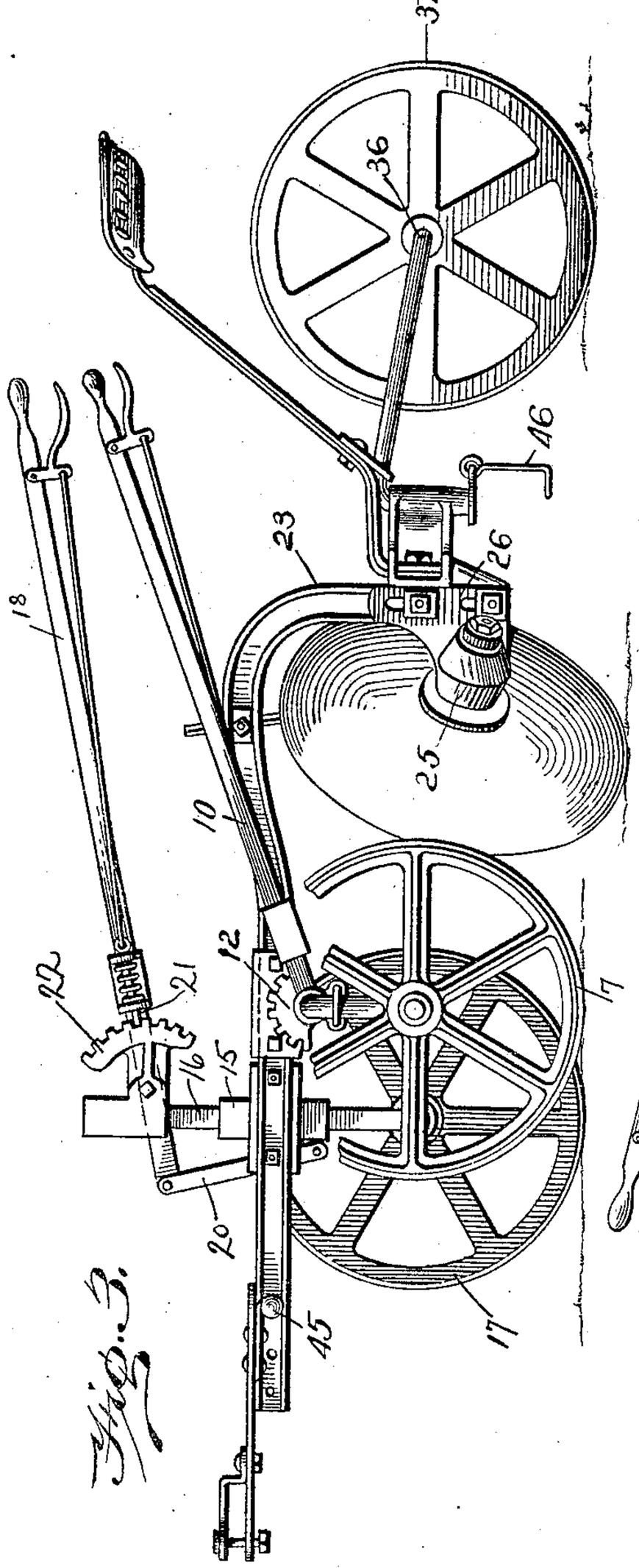
3 SHEETS—SHEET 2.

Fig. 3.



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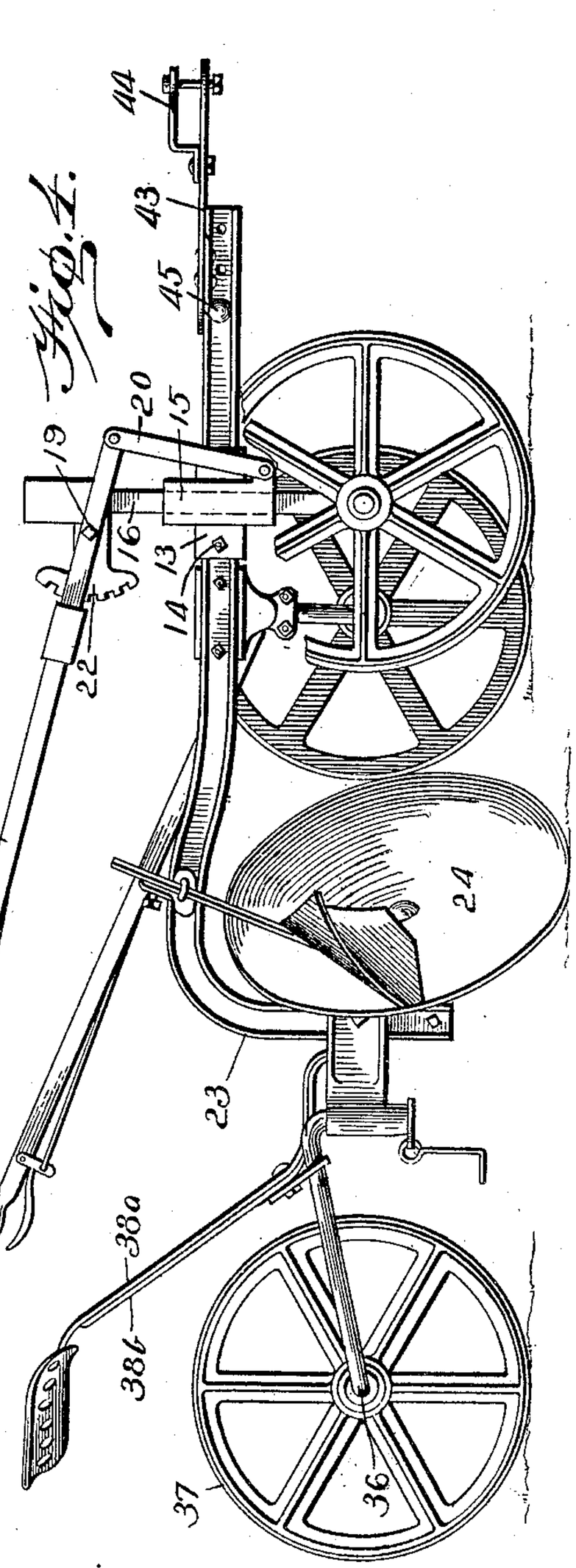

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3 SHEETS—SHEET 3.

Fig. 5.

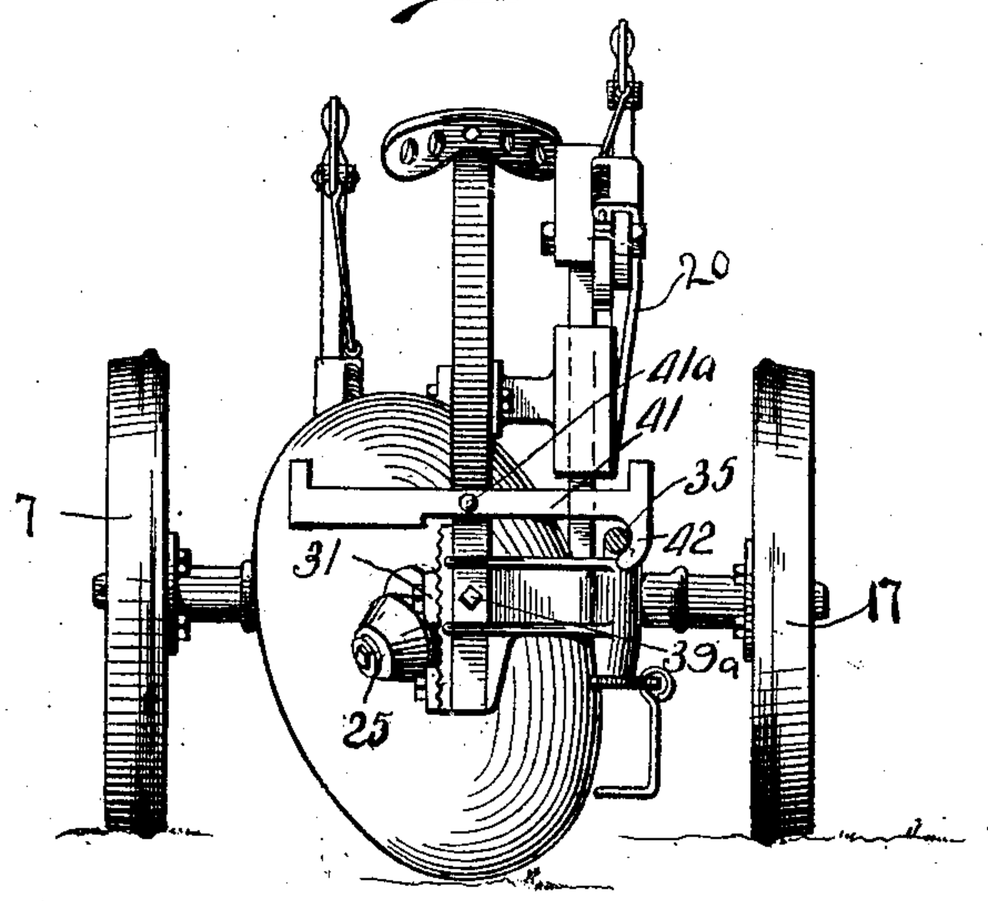


Fig. 6.

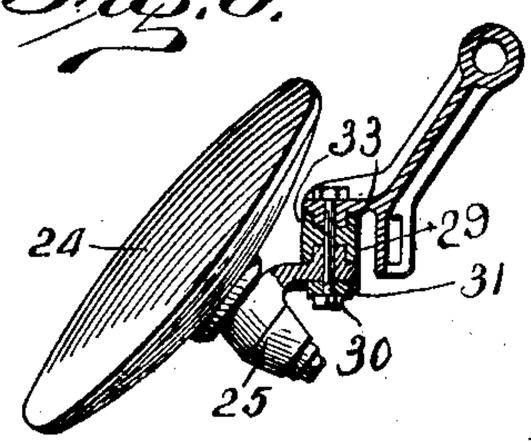


Fig. 7.

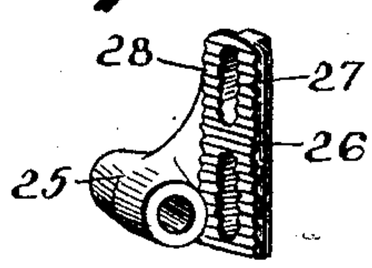
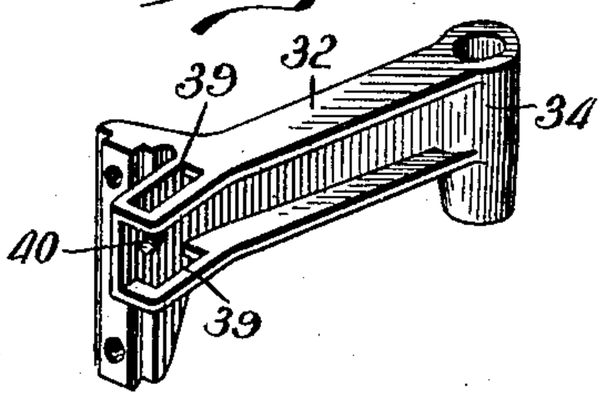


Fig. 8.



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UNITED STATES PATENT OFFICE.

EDWARD FOWLER, OF CEDAR GROVE, GEORGIA, ASSIGNOR OF ONE-HALF TO ADOLPHUS L. FOWLER, OF CEDAR GROVE, GEORGIA.

WHEEL DISK PLOW.

No. 819,532. Specification of Letters Patent. Patented May 1, 1906.

Application filed March 28, 1905. Serial No. 252,516.

To all whom it may concern:

Be it known that I, EDWARD FOWLER, a citizen of the United States, residing at Cedar Grove, in the county of Walker and State of Georgia, have invented certain new and useful Improvements in Wheel Disk Plows, of which the following is a specification.

This invention relates to wheel disk plows.

One object of the invention is to provide a machine of this kind which may be employed as a single or as a double plow.

Further objects are to improve the constructions of the plow-beam, the disk-mounting, the rear furrow-wheel mounting, the animal-hitch, the front furrow-wheel mounting, and the rear furrow-wheel lock.

Other objects will appear in the following description and will be more particularly pointed out in the claims.

In the drawings, Figure 1 is a top plan view of my invention used as a double plow. Fig. 2 is a front elevation. Figs. 3 and 4 are opposite side elevations of the invention as a single plow. Fig. 5 is a rear elevation of a single plow, and Figs. 6, 7, and 8 are detail views of the disk and the rear furrow-wheel mountings. Fig. 9 is a detail showing the manner of securing the two beams together.

Referring more particularly to the drawings, 1 indicates a main plow-beam in alinement with the line of draft throughout its length and of **I** cross-section and of gooseneck form, and 2 indicates the supplemental plow-beam, which is also of **I** cross-section and gooseneck form, but which is shorter than the main plow-beam and is provided with an integral forward spacing member 3 to hold the two beams in proper relation at their forward ends, the member 3 having a rearward extension 4, which is detachably secured to the furrow side of the main beam 1 by means of bolts 5. A spacing member 6 holds the rear of the beams in proper relation, the beams being arranged parallel to one another. The form of the beams makes the plow cheaper to manufacture, of fewer parts, of greater strength, and of less weight. A tall frame is provided which will not choke in thick and heavy cornstalks.

The plow is supported on one side by an unplowed-land wheel 7, which is secured to the main plow-beam 1, about the center thereof, by detachable bearing-box 8, in which is journaled one end of the cranked axle 9, the wheel 7 being journaled on the outer end thereof and the cranked axle turning in the bearing-box 8, so as to raise and lower the plow-beam on this side. The axle 9 is turned by a lever 10, fixedly secured thereto and carrying a pawl 11, adapted to engage with a ratchet-plate 12 on the outer end of the bearing-box 8.

A front furrow-wheel mounting 13 is adapted for connection by bolts 14 either with the supplemental beam 2 when used as a double plow or with the main beam 1 when used as a single plow, both beams being provided with bolt-openings for this purpose. The mounting 13 is provided with a vertical sleeve 15, in which works a slide-bar 16, carrying at its lower end an axle on which is journaled the front furrow-wheel 17. The plow is raised and lowered on this side by means of a lever 18, pivoted intermediate its ends at 19 to the upper end of the slide-bar 16 and connected at one end by a pair of links 20 to the sleeve 15. The lever is held in its various positions by means of a ratchet 21, adapted for engagement with a toothed segment 22 on the upper end of slide-bar 16.

The rear ends of both beams 1 and 2 are formed into short standards 23, which do not extend to the ground and carry no points in the rear of the disks 24, which they support. This construction prevents the collections of trash, &c., and also prevents the plow being hung by roots, stumps, and rocks, which will be passed over by the disks.

Both disks 24 are secured in journal-bearings 25, which hold them, with their cutting edges, directly beneath the plow-beams on an angle to the line of draft and the disk slightly inclined. These journal-bearings are each provided with an attaching-plate 26, having vertical slots 27 therein and horizontal corrugations 28 on the sides of the slots. These attaching-plates are adapted to be secured on the landsides of the plow-beams between the flanges 29 and are held in position by bolts 30 and washers 31, having corrugated inner faces. The slots 27 permit the disks to be adjusted relatively to the beams.

Upon the furrow side of the standard of the main beam 1 is secured a casting or combined seat and rear caster-wheel mounting 32, the bolt 30 also serving to hold this casting in place between the flanges 33 on the standard. This casting is provided with a vertical journal 34, in which turns a depending portion of a swinging arm 35, carrying

the axle 36, the rear furrow-wheel 37 being journaled thereon, and thereby swinging freely. Also mounted on the casting 32 is a rearwardly-inclined seat-post, which is formed of a pair of spring-strips 38[a] and 38[b], the former carrying at its upper end the seat and the latter being in the rear and extending short of the seat. The lower ends of these strips are fitted into two vertically-alined openings 39 in the castings 32 and are held by a bolt 39[a], which passes through both of them into an opening 40 in the casting.

Pivoted intermediate its ends at 41[a] to the seat-post is a foot-rest and rear-wheel lock 41, which carries on its furrow side a hook 42, adapted to be thrown down into the path of the swinging axle-carrying arm 35 and limit the movement of the rear furrow-wheel toward the furrow side of the machine while permitting the movement in the other direction, so that a turn may be made to the unplowed ground and no turn may be made to the plowed ground unless the lock is released.

The animal-hitch 43, carrying the usual clevis 44 at its front end, is broad and flat, so as to support the whiffletree and prevent the swingletrees becoming tangled under the horses' feet, and is pivoted at 45 to the front of the main beam 1, so as to swing vertically and prevent the team carrying the weight of the front end of the plow on their backs while plowing and permit the front end of the plow to drop into low places in the ground. 46 indicates a latch or hook pivoted to the casting 32.

I desire it to be understood that within the scope of the appended claims various changes in the form, proportion, and minor details may be made without departing from the spirit or sacrificing any of the advantages of my invention.

Having thus described my invention, what I claim is—

1. In a plow, the combination with the beam, of a freely-swinging animal-hitch having a broad flat upper face, and a clevis at its front end, and pivoted at a point in the rear of the front end of the beam, so that it may be supported by that portion of the beam in front of its pivot.

2. In a plow, a standard flanged on opposite sides, a disk-mounting secured on one side of the standard between the flanges, a disk carried thereby, a rear caster-wheel mounting secured to the other side of the standard between the flanges and a freely-swinging caster-wheel carried thereby, and securing-bolts engaging both mountings.

3. In a plow, a standard, a disk-mounting on one side of the standard, a casting on the other side of the standard, securing-bolts engaging the disk-mounting and the casting, a disk carried by the disk-mounting, and a seat carried by the casting.

4. In a plow, a standard, a disk-mounting on one side of the standard, a casting on the other side of the standard, securing-bolts engaging the disk-mounting and the casting, a disk carried by the disk-mounting, a seat carried by the casting, and a rear furrow caster-wheel also carried by the casting.

5. In a plow, a standard flanged on opposite sides, a disk-mounting mounted on one side of the standard, between the flanges, a casting mounted on the other side of the standard between the flanges, and a seat and a rear furrow caster-wheel carried by the casting.

6. The combination with the seat-post and the swinging arm of the rear furrow-wheel, of a foot-rest having a hook at one end and pivoted intermediate its ends to the seat-post to move the hooked end into and out of the path of the swinging arm.

7. The combination with the standard, of the rear furrow-wheel mounting, the disk-mounting, bolts engaging both the disk-mounting and the rear furrow-wheel mounting, and means permitting the vertical adjustment of the disk-mounting without disturbing the adjustment of the rear furrow-wheel mounting.

8. In a wheeled disk plow, the combination with the arched beam and the standard depending therefrom, of a rotary cutting-disk vertically adjustable on the standard, with its cutting edge directly beneath the beam, wheels for supporting the front portion of the beam, and a freely-swinging rear furrow-wheel secured to the standard.

9. The combination with the arched main beam, of an arched supplemental beam of less length than the main beam having an integral laterally-extending spacing member at its front end, means detachably securing the free end of the forward spacing member to the main beam, a front furrow-wheel mounting carrying a vertically-adjustable wheel, and means for securing said mounting to the supplemental beam or to the main beam.

10. The combination with the standard, provided with flanges, of a disk-bearing having an attaching-plate movable on the flanges and provided with vertical slots, and a corrugated outer face, and bolts carrying parts provided with corrugations and holding the disk-bearing in its adjusted position.

The foregoing specification signed this 24th day of March, 1905.

EDWARD FOWLER.

In presence of—
OTIS T. SIMMONS,
J. A. LOYD.