No. 805,368. PATENTED NOV. 21, 1905.

M. LUNDIN.

REVERSIBLE DISK PLOW.

APPLICATION FILED MAR. 14, 1905.

2 SHEETS—SHEET 1.

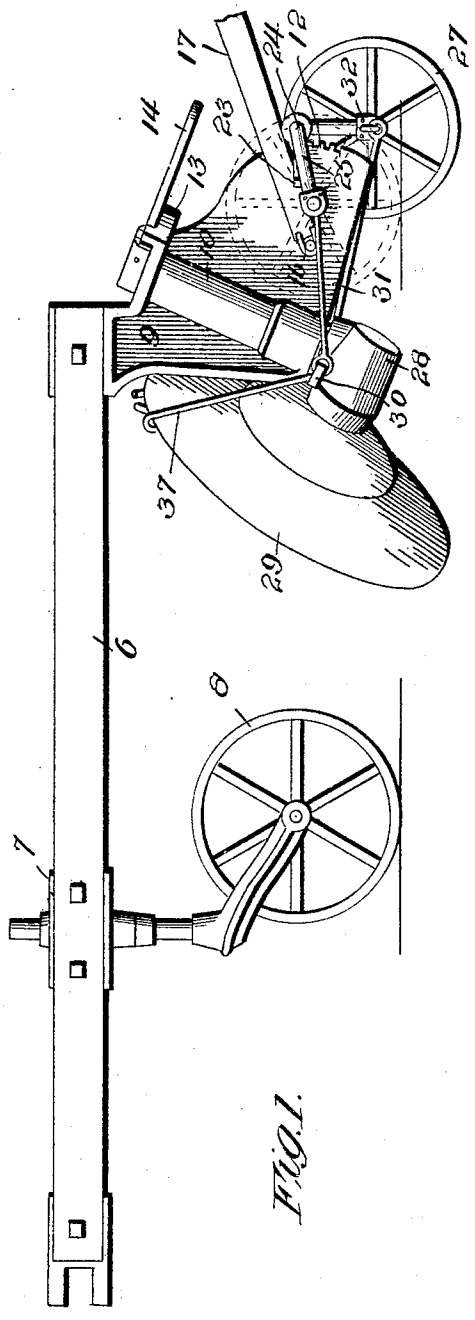


Fig. 1.

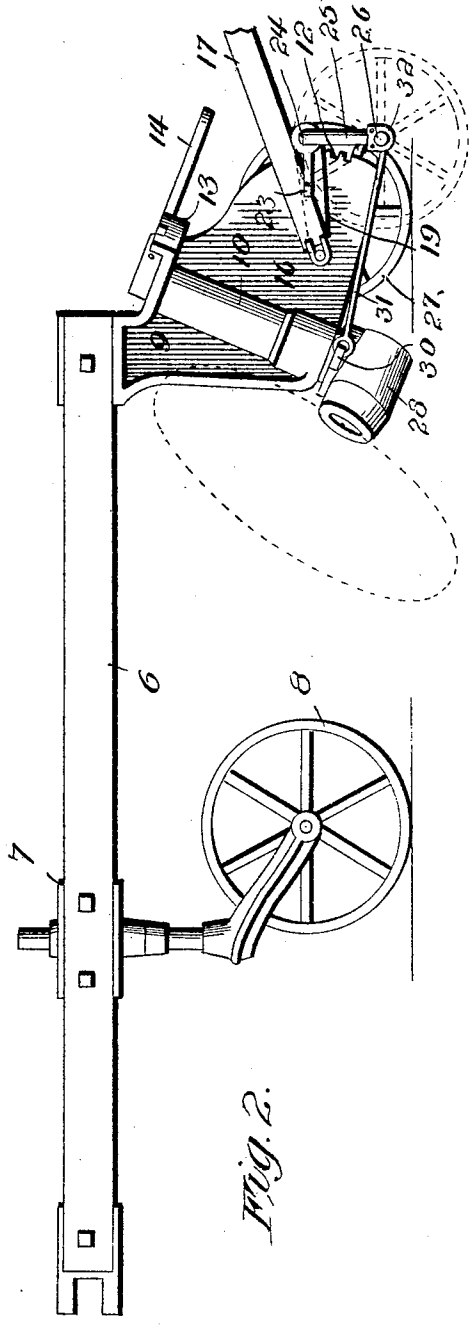


Fig. 2.

WITNESSES:

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2 SHEETS—SHEET 2.

Fig. 5.

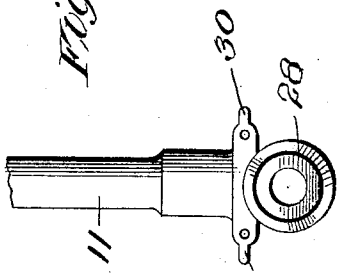


Fig. 6.

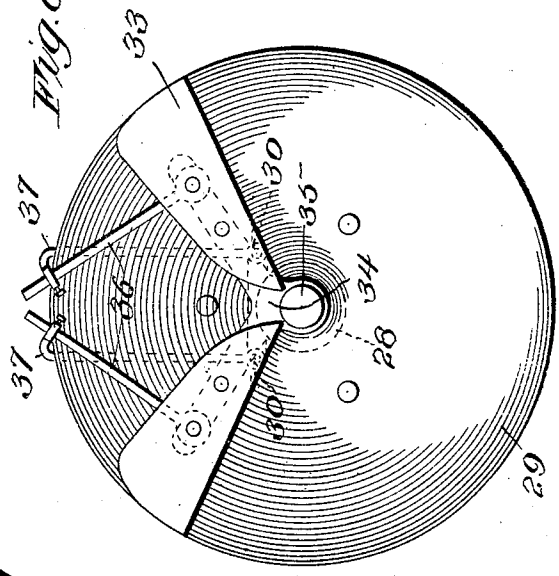


Fig. 7.

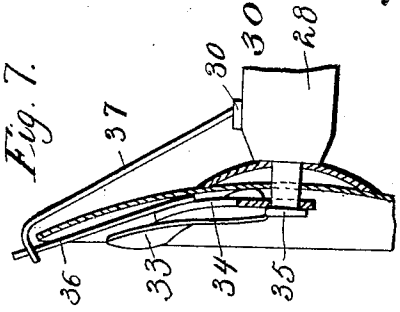


Fig. 3.

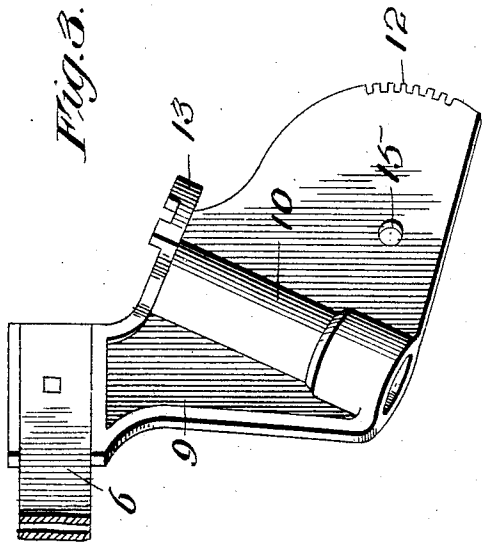
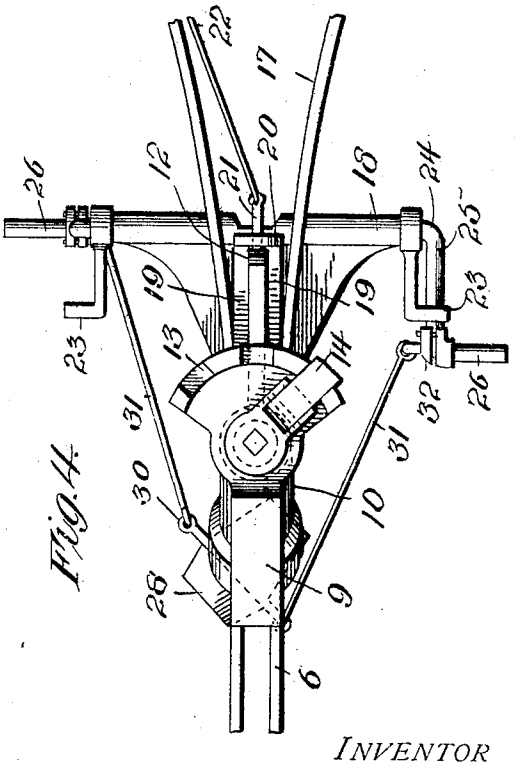


Fig. 4.



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UNITED STATES PATENT OFFICE.

MARTIN LUNDIN, OF CHATTANOOGA, TENNESSEE.

REVERSIBLE DISK PLOW.

No. 805,368. Specification of Letters Patent. Patented Nov. 21, 1905.

Application filed March 14, 1905. Serial No. 250,003.

To all whom it may concern:

Be it known that I, MARTIN LUNDIN, a citizen of the United States, residing at Chattanooga, in the county of Hamilton and State of Tennessee, have invented new and useful Improvements in Reversible Disk Plows, of which the following is a specification.

This invention is a walking reversible disk plow, characterized by improved means whereby it may be changed from right hand to left hand, or vice versa.

It includes means to throw the disk either way, and the furrow and the land wheels are mounted upon a cranked axle, so that they may be shifted accordingly.

The invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a side elevation showing the disk therein thrown to the right for right-hand work. Fig. 2 is a similar elevation with the plow reversed for left-hand work, the disk being removed to show other parts. Fig. 3 is a detail in perspective of the standard or stock which holds the plow. Fig. 4 is a plan view showing the axle-bracket and connections with the disk-holder. Fig. 5 is a face or front view of the disk-holder. Fig. 6 is a face view of the disk, showing the scrapers. Fig. 7 is a section on the line 7 7 of Fig. 6.

The plow is three-wheeled, having a caster-wheel in front and land and furrow wheels in the rear, which on the reverse become furrow and land wheels, respectively. The disk is reversed by hand, and it carries with it the cranked axle which reverses the wheels.

Referring specifically to the drawings, 6 indicates the beam formed of double bars, between which is bolted the socket-piece 7 for the spindle of the caster-wheel 8. The head of the stock or standard 9 is bolted between the rear ends of the bars forming the beam, and this stock has a forwardly and downwardly inclined socket 10, which receives the pivot-post 11 of the disk-holder. At its rear edge the stock has a notched segment 12, by which the depth of the plow may be regulated, and at the top adjacent the upper end of the socket 10 it has a notched segment 13, receiving the lever 14, which projects from the post 11 and by which said post and the disk are turned.

At 15 is indicated the hole in the stock through which the pivot-bolt 16 extends, which connects the wheel-bracket and the handles to the stock, said handles being indicated at 17.

The wheel-bracket consists of the sleeve or tube 18, from the middle of which project two lugs 19, between which the rear portion of the stock fits and works, the pivotal connection being effected by the bolt 16. On the upper side of the sleeve is a rib 20, through which works a latch-pin 21, the point of which engages in one of the notches 12. Said pin is connected to a rod 22, extending toward the grips of the handles in convenient position to be reached and operated. At its ends the sleeve 18 has laterally-extending stops 23, against which one of the cranks of the axle strikes when turned to full extent. Said axle is indicated at 24, and its ends are cranked at ninety degrees with respect to each other, as indicated at 25, and have spindles 26, which receive the land and furrow wheels 27.

The holder for the disk comprises the post 11, at the lower end of which is formed a box 28, in which the disk-spindle fits and rotates, the disk being indicated at 29. Said holder has laterally-projecting arms 30, which are connected by links 31 with clips 32 on the elbows of the axle. When the disk-holder is turned by means of the lever 14, these rods and connections throw the axle, so that one wheel is lifted and the other lowered when the plow is changed from one hand to the other and the furrow-wheel becomes the land-wheel, and vice versa.

The scraper is indicated at 33 and is fixed to oppositely-extending arms of a bracket 34, held in place by the center pin 35 of the disk and by rods 36, connected to arms 37, which are secured to the arms 30 upon the disk-holder. Necessarily two scrapers are employed, because of the contrary rotation of the disk when reversed.

In use to form a right-hand plow the lever is turned to the left, which turns the post 11 and swings the disk to the right. This pulls up the crank 25 on the near side until it strikes the stop 23, so that the near wheel is lifted and runs as the land-wheel and the far wheel is thrown down lower, forming the furrow-wheel. To reverse, the handle 14 is thrown in the opposite direction, which turns the disk back and shifts the cranks, so that the wheels are reversed.

The depth of the plow is regulated by varying the swing of the bracket on the pin 16, the adjustment being fixed by engaging the bolt 21 in an appropriate notch 12.

It will be seen that only one motion is needed to reverse all the parts of the plow. This can

very readily be done, so that a field can be plowed back and forth across one edge of the land. The plow will obviously be found very useful for side-hill work.

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

1. In a reversible disk plow, in combination, a beam and stock, a disk carried by the stock and which may be turned to right or left, and a wheel-bracket connected to the stock and carrying convertible land and furrow wheels and vertically adjustable to vary the depth of the plow.

2. In a reversible disk plow, in combination, a beam and stock, a reversible disk carried by the stock, and a wheel-bracket carrying convertible land and furrow wheels and hinged to the stock for vertical adjustment.

3. In a reversible disk plow, in combination, a beam and stock, a disk-holder having a post which fits in the stock and which may be turned to right or left therein, a bracket connected to the stock, a cranked axle carried by the bracket and having convertible land and furrow wheels thereon, and connections between the holder and the axle adapted to simultaneously turn the same, to reverse the plow.

4. In a reversible disk plow, in combination, a beam and stock, a disk-holder carried by the stock and which may be turned therein to right or left, a bracket hinged to the stock, for vertical adjustment, a cranked axle supported by the bracket and carrying convertible land and furrow wheels, and connecting-rods between the holder and the axle, constructed to turn the latter when the former is turned.

5. In a reversible disk plow, the combination with a beam and stock, and a reversible disk carried by the stock, of a bracket hinged to the stock and having stops at its ends, a cranked axle extending through said bracket and which may be turned therein and arranged to strike said stops, and convertible land and furrow wheels upon the axle.

6. In a reversible disk plow, the combination with the stock and the disk-holder which may be turned therein, of a pair of scrapers supported on the center pin of the disk and extending oppositely therefrom, and the arms extending from the holder and connected to the scrapers.

7. In a reversible disk plow, the combination of a beam and stock, a disk-holder which may be turned in the stock and has laterally-extending arms, an axle supported on the stock and having cranks at each end at an angle to each other, rods connecting the arms and the cranks, and convertible land and furrow wheels on the axle.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MARTIN LUNDIN.

Witnesses:
A. A. STONG,
J. B. MCGHEE.