No. 718,831. PATENTED JAN. 20, 1903.

J. EHLER.

RIDING PLOW.

APPLICATION FILED SEPT. 7, 1897.

NO MODEL.

Fig III

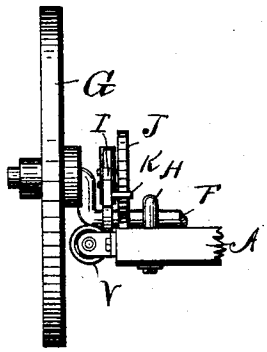


Fig I

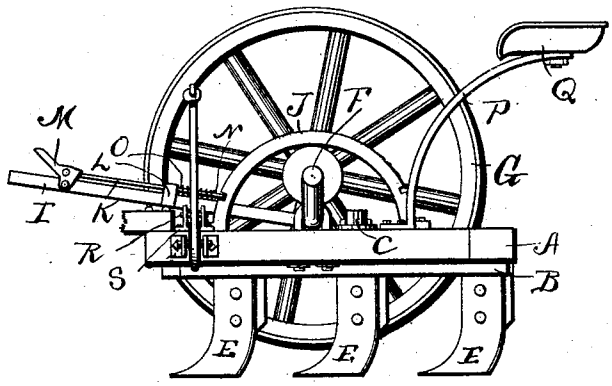


Fig IV

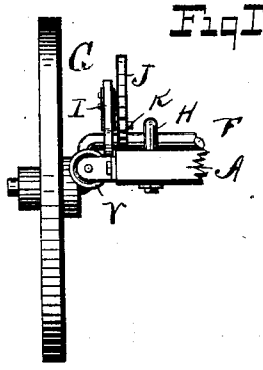


Fig II

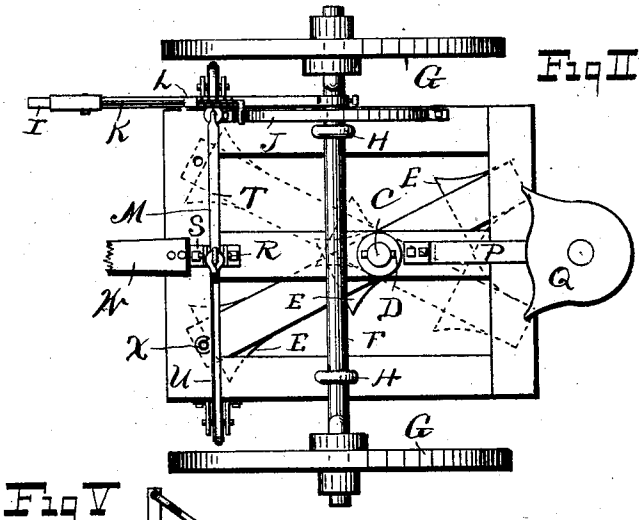
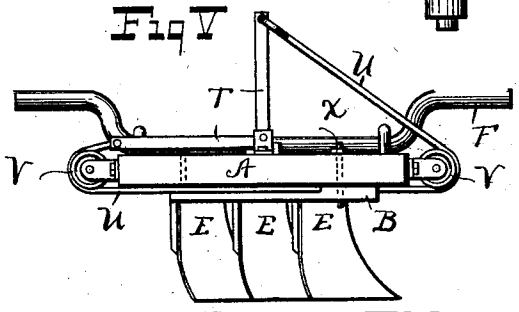


Fig V



Witnesses

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UNITED STATES PATENT OFFICE.

JOSEF EHLER, OF PORT HUDSON, MISSOURI.

RIDING-PLOW.

SPECIFICATION forming part of Letters Patent No. 718,831, dated January 20, 1903.

Application filed September 7, 1897. Serial No. 650,873. (No model.)

To all whom it may concern:

Be it known that I, JOSEF EHLER, a citizen of the United States, residing at Port Hudson, in the county of Franklin and State of Missouri, have invented certain new and useful Improvements in Riding-Plows, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in gang-plows.

The object of my invention is to provide a plow in which one or more shares are mounted upon a beam pivotally swung upon a wheel-carried frame and means for swinging the said beam to the right or left of the line of draft, whereby a strip of land may be plowed by plowing back and forth upon one side only of the strip instead of encircling a strip, as is ordinarily done.

My invention provides also certain new and useful features of construction, hereinafter fully described and claimed.

In the accompanying drawings, illustrative of my invention, Figure I represents a side elevation view showing the frame in the lower position ready for plowing. Fig. II represents a plan view of the same with the pivoted beam shown in solid lines in one position and in dotted lines in the other position. Fig. III represents a front elevation view of a portion of the left side of the plow, showing the frame in the lower position. Fig. IV represents a similar view of the same parts shown in Fig. III, the frame being shown in the raised position. Fig. V represents a front elevation view with the elevating mechanism and the wheels removed.

Similar letters of reference indicate similar parts throughout the several views.

A indicates a rectangular horizontal frame to the under side of which is pivoted near its center a beam B, the pivotal connection between the beam B and the frame being a vertical post C, secured to the beam and extending through an opening in the frame. A transverse pin D extends through an opening in the post C above the frame A and prevents the displacement of the said post.

To the under side of the beam B are secured a series of shares E, located one behind the other. These shares have the forward edge of the blade located perpendicularly to the longitudinal center of the beam.

The frame A is swung under a U-shaped axle F, the vertical arms of which are provided each with a horizontal outwardly-extending projection, upon which the carrier-wheel G is rotatably mounted. Embracing the axle, one near each end, is a U-shaped bolt H, the arms of which extend through the frame A, the lower ends being screw-threaded and provided each with a nut. To the axle F at any convenient place is secured the inner end of a lever I, the function of which is to raise and lower the frame A upon the axle.

Secured to the upper side of the frame A adjacent to the lever I is a vertical arcuate-shaped plate J, provided in its periphery upon opposite sides with notches adapted to receive the inner end of a rod K, which lies parallel with and extends through a lug L on one side of the lever I. The outer end of the rod K is pivoted to a bell-crank lever M, which is pivoted to the lever F in a position convenient for grasping with the hand. To the rear of the lug L, through the rod K, extends a pin N. Encircling the rod K, between the said lug and the said pin N, is a coil-spring O, the tension of which is such as will tend to force the rod K inwardly, so that engagement between the inner end of the said rod and the notches in the arc-shaped plate J may be had.

An upwardly and rearwardly curved plate P has its lower end secured to the upper side of the frame A, and at its upper end is secured a seat Q.

Pivoted at its angle upon a pin R, which extends through two vertical arms upon the upper side of a horizontal plate S, secured to the upper side of the frame A at its front end, is a bell-crank lever T. To the outer end of each arm of the said bell-crank lever T is secured one end of a cord or chain U, which passes over a pulley V, secured one to each side of the frame A, and has its inner end secured to the forward end of the beam B. By rocking the bell-crank lever T from one side toward the opposite side of the frame A the beam B may be swung from one position to the other, as indicated in dotted and in solid lines in Fig. II.

The team is attached to the forward part of the frame A and to the tongue, of which the rear portion only, as indicated by W, is shown in the drawings.

The plow is operated by lowering the frame A, which is accomplished by throwing the lever F into the position shown in Fig. I and moving ahead. When the end of the piece of land to be plowed is reached, the team is turned facing the opposite direction to the one in which they have just been driven and the bell-crank lever T is rocked so as to throw the beam B into the opposite position to the one formerly occupied by it, in which position fresh furrows may be thrown by the shares in the ground immediately adjoining the ground just turned. In this manner a piece of land may be plowed by operating upon but one side of it instead of having to keep encircling it, as is usually done.

Various modifications of my invention may be made without departing from its spirit.

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

1. In a plow, the combination with a suitable frame, of a beam pivotally mounted thereon and provided with one or more shares mounted on the beam, a bell-crank lever pivoted to the frame, and two cords connected respectively to the two arms of the said lever and to the said beam, substantially as described.

2. In a plow, the combination with a suitable frame, of a beam pivotally mounted thereon and provided with one or more shares mounted on the beam, a lever provided with two arms and pivoted to the said frame, and means connecting the said two arms of the lever and the said beam by which the said beam is swung to different positions relative to the line of draft when the lever is properly swung on the frame, substantially as described.

3. In a plow, the combination with a suitable frame, of a beam pivoted thereon and provided with one or more shares, a bell-crank lever pivoted to the frame, two pulleys mounted on the said frame one at each side of the lever and at each side of the beam, and two cords secured respectively to the two arms of the said lever and to the said beam, and passing respectively over the said two pulleys, substantially as described.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

JOSEF EHLER.

Witnesses:

RICHARD WULFERT,

ROBERT WULFERT.