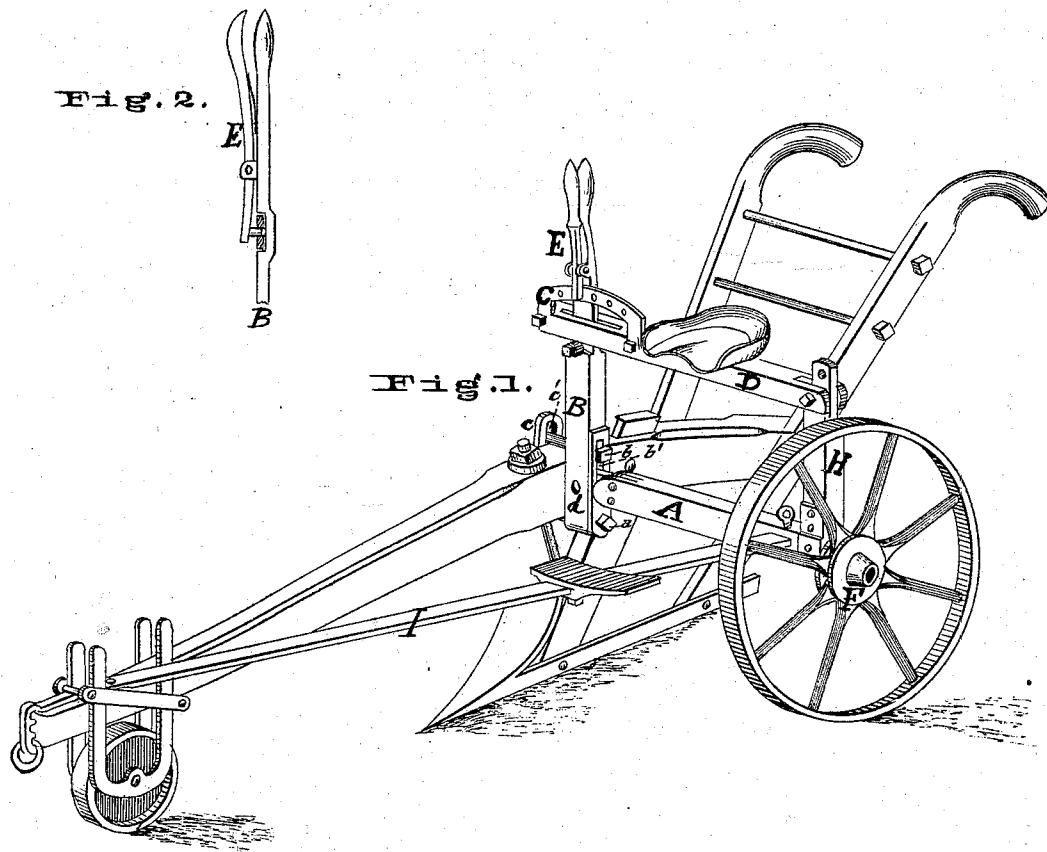


R. B. GROUND.

Plows.

No. 137,915.

Patented April 15, 1873.



ATTEST,
Wm. M. Eells
George Leverett

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INVENTOR,

UNITED STATES PATENT OFFICE.

RICHARD B. GROUND, OF EDWARDSVILLE, ASSIGNOR, BY MESNE ASSIGNMENTS, TO NELSON D. SWEENEY, OF MARINE, ILLINOIS.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **137,915**, dated April 15, 1873; application filed June 27, 1872.

To all whom it may concern:

Be it known that I, RICHARD B. GROUND, of the town of Edwardsville, in the county of Madison and State of Illinois, have invented a certain Improvement on Wheel-Plows, of which the following is a specification:

This invention relates to that class of wheel-plows in which the adjustably-connected plow proper and one-wheeled sulky attachment are combined with a lever controlling the relative positions of the two aforesaid parts.

The ordinary connection of these elements as known heretofore is such that a change in the elevation of the plow necessarily affects the position of the sulky attachment.

This improvement consists in securing the governing-lever to the plow-beam by means of a clamping device so constructed that the plow may be vertically adjusted on the lever, to regulate the depth of cut of the share, without in any manner interfering with the position of the sulky attachment, and using, in connection with said elements, an elevated beam for the support of the driver's seat and an arc to which the governing-lever may be locked, the axle of the sulky attachment being pivoted to the lever at about the height of the plow-beam.

Figure 1 is a perspective view of my improved wheel-plow. Fig. 2 illustrates in detail the governing-lever and locking devices.

The same letters of reference are used in both figures in the designation of identical parts.

The plow proper may be of the usual construction, the beam carrying near its front end a small wheel, vertically adjustable, to determine the depth of the cut of the share. The sulky attachment, connected upon the land-side of the plow, consists mainly of an axle, A, and a single wheel, F, turning upon the journal formed on the outer end of the axle. The other end thereof is pivoted, at *d*, to the lever B, which projects upward, and is firmly clamped to the side of the plow-beam facing the land-side, by means of bolts *a* and *b* and plate *c*. Where the upper bolt *b* passes through the clamping-plate *c* and lever B both have elongated slots, as at *c'* and *b'*, permitting of vertical adjustment of the plow-beam

on the lever without changing the elevation of the inner end of the axle where the lever is pivoted. The lever, extending upward, passes through a slot in the elevated horizontal bar D, which rests at this end loosely upon anti-friction rollers carried on projecting studs on the lever, and is adjustably connected with its other end to the fixed standard H secured to the axle near the wheel F. The lever can be locked to the perforated arc C secured to the bar D by means of the spring lock-lever E, and by shifting it an axial movement is imparted to the plow, turning on the joint *d*, which enables the operator to so dispose the plowshare that it will cut parallel to the surface. A diagonal brace, I, connects the forward end of the plow-beam and the axle A, it being connected to the former by a swivel-joint, and to the latter adjustably, to permit of turning the forward end of the beam to or from land, to regulate the width of land taken by the share. The driver's seat is mounted upon the bar D, and a foot-board is secured to the diagonal brace, as shown.

In former wheel-plows of this kind, where the governing-lever and the riding attachment were pivoted together, the joint was carried quite a distance below the beam of the plow, so that the lower end of the lever and the arm to which it was pivoted moved objectionably close to the surface of the ground, and were liable to injury by coming in contact with stumps or other obstructions, besides presenting points for the accumulation of trash.

These objections are overcome by the modified arrangement of parts hereinbefore specified.

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

A plow in combination with the sulky attachment A F, clamp composed of the bolts *a* *b* and slotted plate *c* *c'*, slotted lever B *b'*, lock-lever E, elevated bar D, and perforated arc C, all the parts being constructed and arranged substantially as and for the purpose specified.

RICHARD B. GROUND.

Witnesses:

WM. M. ECCLES,
GEORGE LEVERETT.