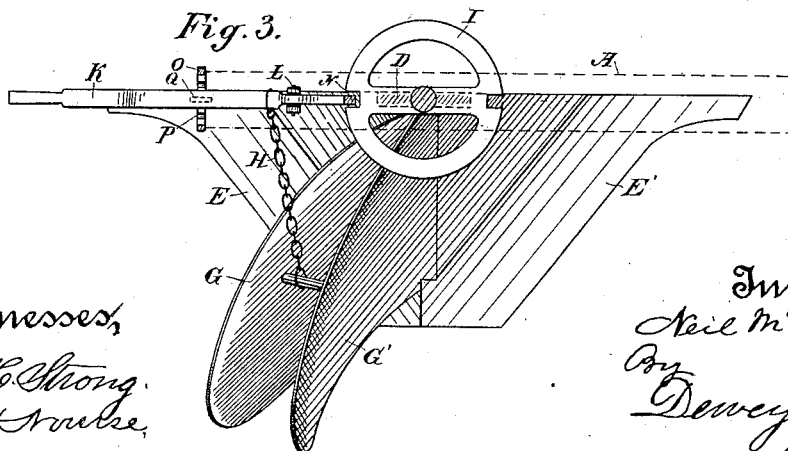
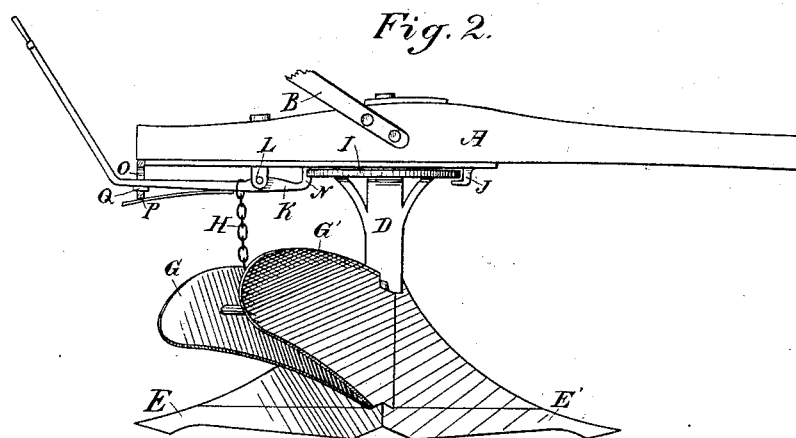
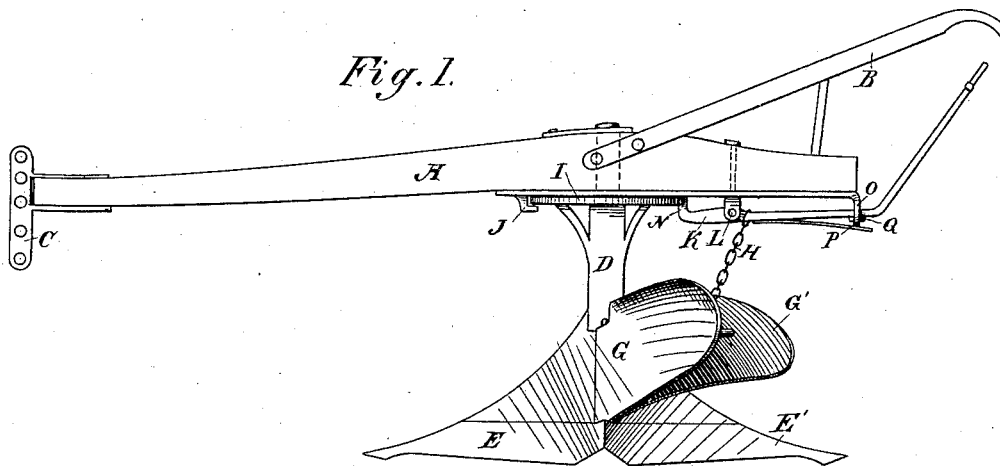


(No Model.)

N. McLEAN.
REVERSIBLE PLOW.

No. 345,797.

Patented July 20, 1886.



Witnesses,
Geo. H. Strong,
J. H. Noble,

Inventor
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attys

UNITED STATES PATENT OFFICE.

NEIL McLEAN, OF WATSONVILLE, CALIFORNIA.

REVERSIBLE PLOW.

SPECIFICATION forming part of Letters Patent No. 345,797, dated July 20, 1886.

Application filed March 23, 1886. Serial No. 196,307. (No model.)

To all whom it may concern:

Be it known that I, NEIL McLEAN, of Watsonville, Santa Cruz county, State of California, have invented an Improvement in Reversible Plows; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to an improvement in reversible plows; and it consists of a double landside and shares having a single double-faced mold-board hinged thereto and movable about the hinge, so as to serve as a mold-board for either share. The standard extends upward from the center of the landside, and is pivoted or journaled within the plow-beam, and has a circular disk turning against the lower surface of the plow-beam. In combination with this disk is a peculiarly-constructed holding and adjusting lever and a means for swinging the double-faced mold-board from one side to the other when the plow is reversed.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a view of my plow in one position. Fig. 2 shows it reversed. Fig. 3 is a plan view of the disk, adjusting-lever, and plow with the beam removed, showing the manner of adjusting.

A is the beam of a plow, having the handles B, by which it is guided, and a fixed clevis, C, upon the forward end of the beam.

D is a standard, the upper end of which is made cylindrical and passes through the plow-beam, turning in a journal-box formed therein, or formed in plates fixed to the upper and lower sides of the beam. At the lower end the standard has secured to it the landside and shares E E' of two plows, the landsides of which are in a straight line with each other, and the two together are made of the same length as would be made for one in an ordinary single plow. The shares extend outwardly from the landside and meet in an angular line, which extends downward and outward from the standard, so that they stand, as it were, base to base.

In this inclined line of the meeting shares is journaled a double-faced mold-board, G G', which has journal-pins or a shaft about which it may swing from side to side. One face of this mold-board G is curved, so that it corresponds with one of the shares and forms a con-

tinuation of it in the manner similar to the share and mold-board of any fixed single plow, when the plow is in position to turn a furrow from that side. When the plow is reversed, by turning the beam about the standard, this mold-board will swing about the hinge or journal, so that its other face will be presented to form a continuation of the other share. By this construction the landside is made no longer than will be necessary for the ordinary single plow. The hinged mold-board enables me to make each plow complete by swinging it about its hinge, so as to form a continuation of either share at will. The upper side of this double mold-board has a short link or chain, H, connecting it with the lower part of the plow-beam, so that when the latter is turned end for end about the standard it will swing the mold-board over at the same time, so that it will stand in proper position for the new direction. Upon the top of the standard about which the plow-beam turns is a circular disk, I, which fits upon the plate just beneath the plow-beam, and its front edge turns in a channel or groove at J, by which it is steadied and guided. Two notches are made in the opposite edges of this disk, and a spring-lever, K, is fulcrumed at L, and has an arm at N, which enters either of the notches in the disk when brought in line with it, and thus holds the plow with either point directed toward the front and in line with the plow-beam. A slotted yoke, O, is secured transversely across the rear end of the plate beneath the plow-beam, to which the lever is fulcrumed, and the lower part of the yoke has on the inside the notches or rack P. A corresponding lug, Q, upon the bottom of the lever falls into either of these notches, as may be desired, the spring forcing the lever down so as to cause it to engage. When the lug engages the central notch, the front of the lever being engaged with the notch on the rear of the disk, as before described, the landside of the plow will stand in line with the plow-beam, or nearly so. When the lever is transferred to the outer notch in the yoke on one side, the lug at the front end will move the disk a little to one side, thus turning the plow so that the landside will stand at an angle with the land, so as to take more or less, as may be

desired. When turned to the other side, the reverse movement takes place. The lug which engages the rack P being more distant from the fulcrum than the lug which engages the notch in the disk, it will be seen that it can be disengaged from the rack by lifting the lever slightly, while the lug at the front will still remain engaged with the notch in the disk, so as to move it; but when it is desired to release the plow, so as to reverse the beam, the rear end of the lever is lifted still higher, when it will release the circular disk, and the horses being turned will turn the beam about the standard until they face in the other direction. By this means I have a very easily adjustable and reversible plow, and by means of the hinged swinging mold-board I avoid the difficulty of an extremely long landside, which would be necessary if two complete mold-boards were employed, placed back to back, so as to form a double plow.

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

A reversible plow with the double points and shares, hinged swinging mold-board, standard extending through the beam, journaled therein, and having a disk fixed to it with locking-notches upon opposite edges, in combination with a lever fulcrumed so as to move vertically to lock the disk and horizontally to adjust the plow, and a transverse yoke or rack, within which the rear end of the lever may be moved from side to side without disengaging the front end from the disk, substantially as herein described.

In witness whereof I have hereunto set my hand.

NEIL McLEAN.

Witnesses:

S. H. NOURSE,
H. C. LEE.