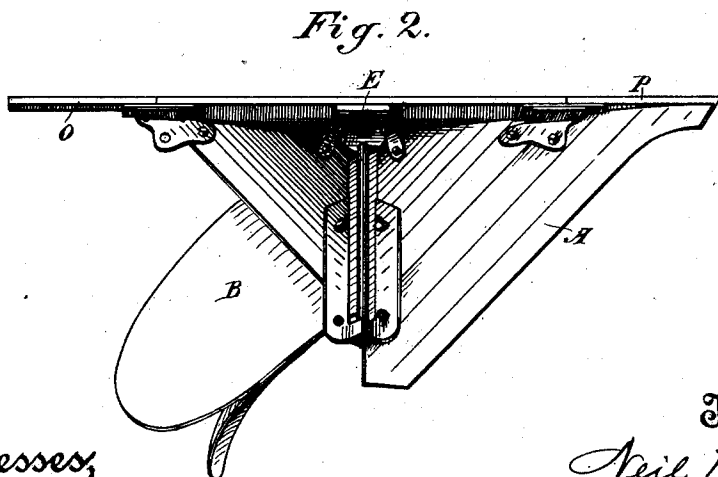
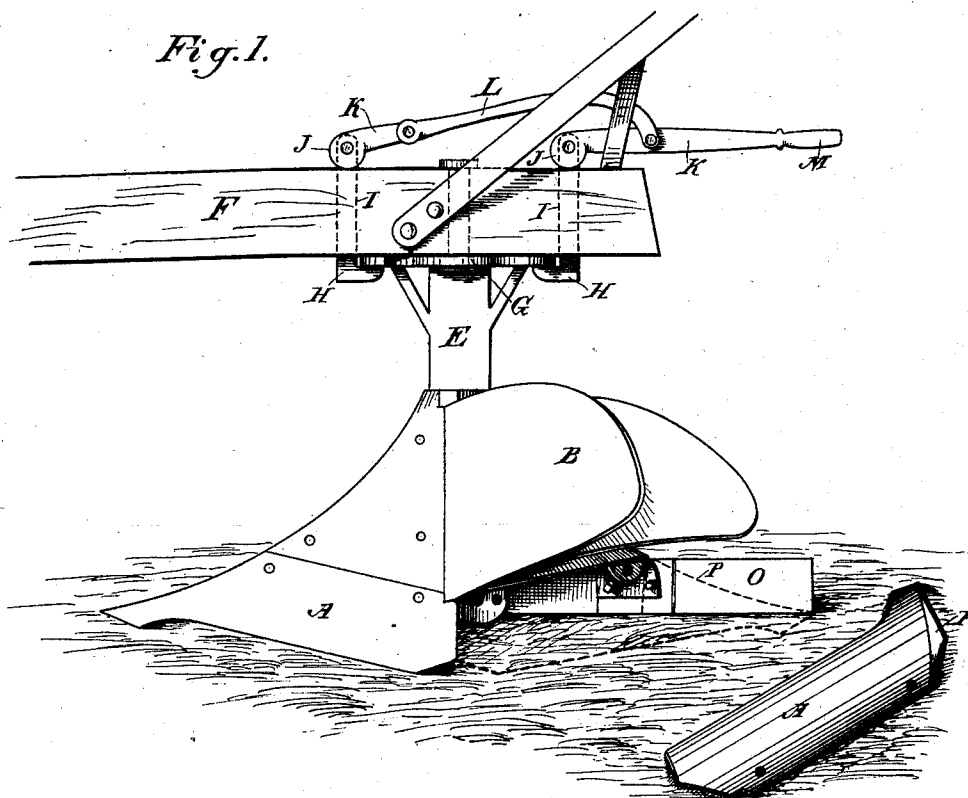


(No Model.)

N. McLEAN.
REVERSIBLE PLOW.

No. 364,362.

Patented June 7, 1887.



Witnesses,
Geo. H. Strong.
J. H. Morse.

Inventor,
Neil McLean
By Duvey & Co.
attys

UNITED STATES PATENT OFFICE.

NEIL McLEAN, OF WATSONVILLE, CALIFORNIA.

REVERSIBLE PLOW.

SPECIFICATION forming part of Letters Patent No. 364,362, dated June 7, 1887.

Application filed March 30, 1887. Serial No. 233,062. (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 certain improvements in plows, and it is more especially applicable to a plow for which a patent was issued to me July 20, 1886, No. 345,797, in which a hinged swinging mold-board is fitted to two plow-shares which face in opposite directions from a single standard, said mold-board being adjustable, so as to form a continuation of either of the shares, while the beam is allowed to swing about the standard as a vertical axis to point in either direction.

My present invention has for its object such a construction of the frame-work and the shares that either one may be removed when desired to use the plow as a single plow only, and a short supplemental landside may be put on in place of the one removed.

It also relates to certain improvements in the device for holding and locking the beam, as will be more fully described by reference to the accompanying drawings, in which—

Figure 1 is a view of the plow, showing a device for locking the beam. Fig. 2 is a bottom view of the same, looking into the interior between the landside and shares.

A A are the shares of two plows, having a single landside extending in a straight line and serving for both the plows.

B is a mold-board formed with two wings, which unite at a central line and are pivoted on the angular outer uniting line where the plowshares meet. The curve of these mold-boards is such that when swung to one side one of these wings forms a continuation of one of the shares, and thus completes the plow which is moving in that direction; the other remaining idle, and when running in the other direction it is swung about its pivot-pins or axis, so that the other wing forms a continuation and complete plow with the opposite mold-board.

E is the standard, the upper end of which forms a journal which extends up through the plow-beam F, so that the beam may turn about this journal.

In my former patent I show a lever and a notched circle, by which the beam may be held after having been turned around from one side to the other; but the objection to this device is, that there is no adjustment of the beam and some lost motion, and in order to overcome it I have devised an improved locking device which allows of more delicate adjustment and a firm holding of the parts after they are adjusted. Upon the upper end of the standard, and just beneath the beam, is a plate, G, the edges of which form small arcs of a circle having the standard for a center. Clamps H project over each of these arcs, and the vertical shanks I extend up through the plow-beam and are pivoted in the cams or eccentric heads J. These heads have extensions or levers K, and where two are used they are united by an intermediate connecting-bar, L, so that they will move in unison. The one nearest the rear of the plow-beam is extended so as to form a handle, as shown at M, by which the locking-cams may be actuated. When this handle is raised, the cams or eccentrics are turned so as to loosen the clamps, and thus allow the segments or circle to turn freely between them; but when the lever is thrown down the cams act to draw the clamps up, and thus bind the arcs firmly enough, holding the plow in any desired position. By means of these clamps it is possible to set the beam exactly at any desired angle with relation to the position of the plowshares or to the landside, which would be impossible where notched holding devices are depended on. All looseness and side-play are also prevented by this device.

In order to properly support the mold-board in each of its positions, a block is formed, against which it rests when it turns from one side to the other. The shares are bolted to an interior frame, as shown in Figs. 1 and 2, and if it is desired to use the plow as a single plow, either of the shares may be unbolted from the frame, so as to leave either the right or left one, as may be desired, the mold-board remaining in its place. Although it is not necessary to use it in more than one position under these conditions, still it will not be necessary to fasten the mold-board in any way, as it will remain at the angle which adapts it to the plowshare in use, remaining without any

fastening of any kind. When the opposite plowshare has been removed, the landside P at that end will be removed with it, and a short section, O, may be bolted on and form
5 a continuation of the remaining part of the landside, which makes the plow as a single plow.

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

1. The reversible plow composed of the single continuous landside with the double points and shares and the hinged swinging moldboard, as shown, the standard extending up-
15 ward through the plow-beam and journaled therein, with the disk or segment secured to the standard beneath the beam, the locking-clamps embracing the edge of the segment

and having the shanks extending up through the beam, in combination with the eccentrics 20 or cams to which they are attached and a lever by which they may be turned so as to securely hold the standard at any desired point, substantially as herein described.

2. The reversible plow having the removable shares and landsides secured to the standard and interior frame, in combination with a supplemental landside extension to reduce the plow to a single plow, substantially as herein
described. 25

In witness whereof I have hereunto set my
hand. 30

NEIL McLEAN.

Witnesses:

W. S. HUDELSON,
HARRY PETERSEN.