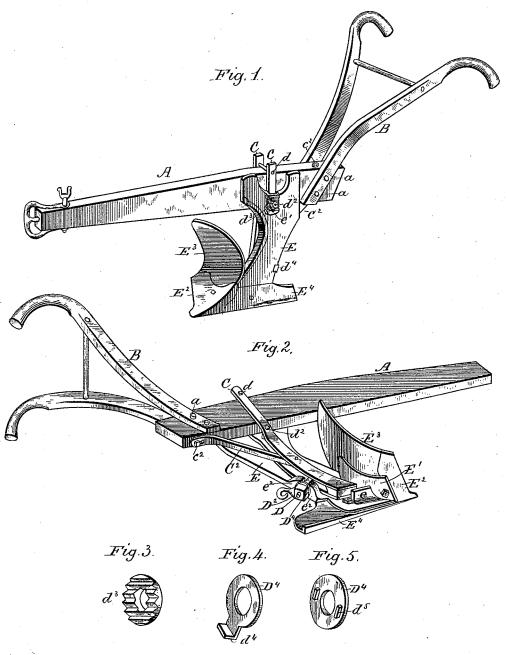
T. W. BOYLE.

PLOW.

No. 345,027.

Patented July 6, 1886.



Witnesses: E.Wurdeman/ W.P.Mossow

Inventor: Thaddeus W. Boyle, by E.E.Masson atty.

UNITED STATES PATENT OFFICE.

THADDEUS W. BOYLE, OF AUGUSTA, GEORGIA.

PLOW.

SPECIFICATION forming part of Letters Patent No. 345,027, dated July 6, 1886.

Application filed March 15, 1886. Serial No. 195,258. (No model.)

To all whom it may concern:

Be it known that I, Thaddeus W. Boyle, a citizen of the United States, residing at Augusta, in the county of Richmond and State of 5 Georgia, have invented certain new and useful Improvements in Plows, of which the following is a specification, reference being had therein

to the accompanying drawings.

My invention relates to improvements in 10 plows; and the objects of my improvements are to combine with the wrought-iron footstock of a shovel-plow a cast-iron standard or attachment carrying a mold-board and point, and secure said standard adjustably to the side 15 of the plow-beam and foot-stock with the same bolts that are already provided for securing a plow-shovel to the foot-stock and the latter to the beam. I attain these objects by the con-struction illustrated in the accompanying

20 drawings, in which— Figure 1 is a front perspective view of a plow constructed in accordance with my invention. Fig. 2 is a rear perspective view of the same, taken with the plow lying on its side. 25 Fig. 3 is a perspective view of the washer used upon the bolt passing through the upper portion of the standard. Fig. 4 is a perspective view of the washer upon the heel-bolt of the foot-stock and standard. Fig. 5 is a modifica-

30 tion of the same.

A represents the beam, and B the handles, united together by means of the bolts a. To the beam is secured the foot-stock consisting, preferably, of two parallel flat bars, C, of 35 wrought-iron, suitably bent to embrace the sides of the beam, and bolts d and d^2 are made to pass through said bars Cimmediately above and under the beam. The foot-stock is further secured to the beam by a back brace, C2, 4c pivoted at one end to the flat bars of said footstock, and secured at the other end to the rear of the beam by a bolt, c^2 . The slotted rear end of the brace C2 may be provided with transverse serrations to receive a serrated 45 washer, as shown in Fig. 3.

The above described construction represents the frame of a shovel-plow, and the foot-stock carries between its flat bars C the heel-bolt D, and nut D2 thereon, by which the shovel is 50 usually secured to the foot-stock. To transform this shovel-plow into a mold-board plow,

the shovel is simply removed, and to one side of the foot stock and beam is secured a moldboard attachment or standard, E. The lower end of this standard is provided at its front 55 edge with a foot, E', to which are secured the plow-point E² and the mold-board E³, and to the side is secured the landside E4. From the inner side of the standard, and in the rear of the foot E', projects a shelf, e, upon which so rests the lower end of the foot-stock. In the upper end of the standard there is an outward bend or offset, e', or it may be an opening, to allow one of the bars C of the foot-stock to pass through. The face of this offset has a 65 series of horizontal corrugations with a vertical slot across them, through which passes the bolt d^2 , that also secures the foot-stock to the beam, and upon this bolt is placed a washer, d, having a series of transverse grooves that 70 can interlock with the corrugations in the face of the offset, and a nut retains all these parts together.

To secure the lower portion of the attachment or standard E to the foot-stock C, the rear 75 part of said standard may be provided with a perforation; but in place of it, to simply facilitate the molding of said standard at that point, it is provided with two contiguous lugs, e2, between which the heel-bolt D is made to pass, 8c and to prevent said heel-bolt from moving laterally out from between the lugs e^2 , the washer D³ upon said bolt is either provided with a hooked lug, d^4 , Fig. 4, to engage with the rear edge of the standard, or, as shown in Fig. 5, 85 with lugs d^5 , made to enter into recesses formed into the rear face of the lugs e^2 ; and thus, although the standard E is firmly secured to the foot-stock and beam, the latter can be adjusted in its relation to the foot-stock and beam 90 so as to run deep or shallow by means of the retaining-bolts \hat{c}^2 , d, d^2 , and \vec{D} , that are also used as adjusting-bolts.

Having now fully described my invention, I claim-

1. The combination of a plow-beam and a standard bearing against the side of said beam and a bolt passing through said standard and a foot-stock, C, serving as a fastener and brace for said standard, substantially as and for the 100 purpose described.

2. The combination of a plow-beam and a

standard bearing against the side of said beam and provided with an offset, a slot in said offset, and a bolt passing through said offset, whereby it is adapted to receive a branch of a foot-stock, substantially as described.

3. The combination of a plow-beam and a standard bearing against the side of said beam and having its lower portion provided with a shelf, e, whereby it is adapted to receive the toe of the foot-stock C, to rest upon said shelf, substantially as and for the purpose described.

4. The combination of a plow-beam and a standard bearing against the side of said beam and having a pair of contiguous lugs, or its described equivalents, at the rear thereof, and a heel-bolt, whereby the latter is adapted to connect the standard with the foot stock, substantially as described.

5. The combination of a plow-beam and a

standard bearing against the side of said beam, 20 a washer having lugs engaging with the rear of said standard, and the heel - bolt passing through said washer, whereby said bolt is also adapted to engage with a foot stock, substantially as described.

6. The combination of a plow-beam and a plow-point support or standard, a washer engaging with the rear of said standard, and a heel-bolt passing through said washer, whereby said bolt is also adapted to engage with a footstock, substantially as described.

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

THADDEUS W. BOYLE.

Witnesses:

THOS. M. GOLDSBY, CHAS. U. TURPIN.