

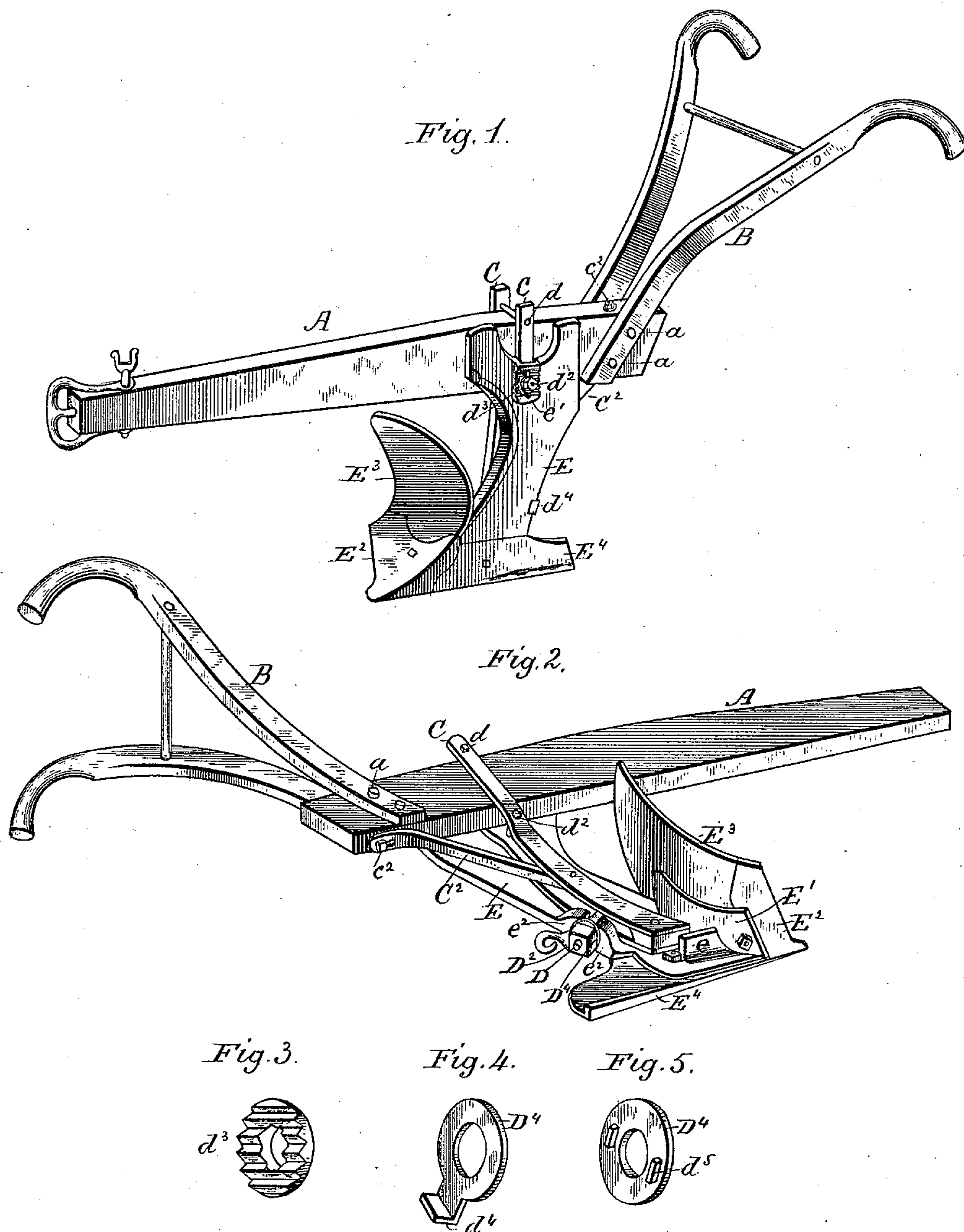
(No Model.)

T. W. BOYLE.

PLOW.

No. 345,027.

Patented July 6, 1886.



Witnesses:  
E. C. Murdeman,  
W. B. Masson

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 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 plows; and the objects of my improvements are to combine with the wrought-iron foot-stock of a shovel-plow a cast-iron standard or attachment carrying a mold-board and point, and secure said standard adjustably to the side 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 construction illustrated in the accompanying 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. 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 modification 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 wrought-iron, suitably bent to embrace the sides of the beam, and bolts *d* and *d*<sup>2</sup> are made to pass through said bars C immediately above and under the beam. The foot-stock is further secured to the beam by a back brace, C<sup>2</sup>, pivoted at one end to the flat bars of said foot-stock, and secured at the other end to the rear of the beam by a bolt, *e*<sup>2</sup>. The slotted rear end of the brace C<sup>2</sup> may be provided with transverse serrations to receive a serrated 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 D<sup>2</sup> thereon, by which the shovel is 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 mold-board attachment or standard, E. The lower end of this standard is provided at its front edge with a foot, E', to which are secured the plow-point E<sup>2</sup> and the mold-board E<sup>3</sup>, and to the side is secured the landside E<sup>4</sup>. From the inner side of the standard, and in the rear of the foot E', projects a shelf, *e*, upon which 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 series of horizontal corrugations with a vertical slot across them, through which passes the bolt *d*<sup>2</sup>, that also secures the foot-stock to the beam, and upon this bolt is placed a washer, *d*<sup>3</sup>, having a series of transverse grooves that 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 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, *e*<sup>2</sup>, between which the heel-bolt D is made to pass, and to prevent said heel-bolt from moving laterally out from between the lugs *e*<sup>2</sup>, the washer D<sup>3</sup> upon said bolt is either provided with a hooked lug, *d*<sup>4</sup>, Fig. 4, to engage with the rear edge of the standard, or, as shown in Fig. 5, with lugs *d*<sup>5</sup>, made to enter into recesses formed into the rear face of the lugs *e*<sup>2</sup>; 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 so as to run deep or shallow by means of the retaining-bolts *e*<sup>2</sup>, *d*, *d*<sup>2</sup>, and 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 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  
5 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  
10 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  
15 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, substan-  
tially as described. 25

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 foot- 30  
stock, 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.