(No Model.)

S. P. RICHMOND.

PLOW.

No. 487,643. Patented Dec. 6, 1892.

Fig. 1.

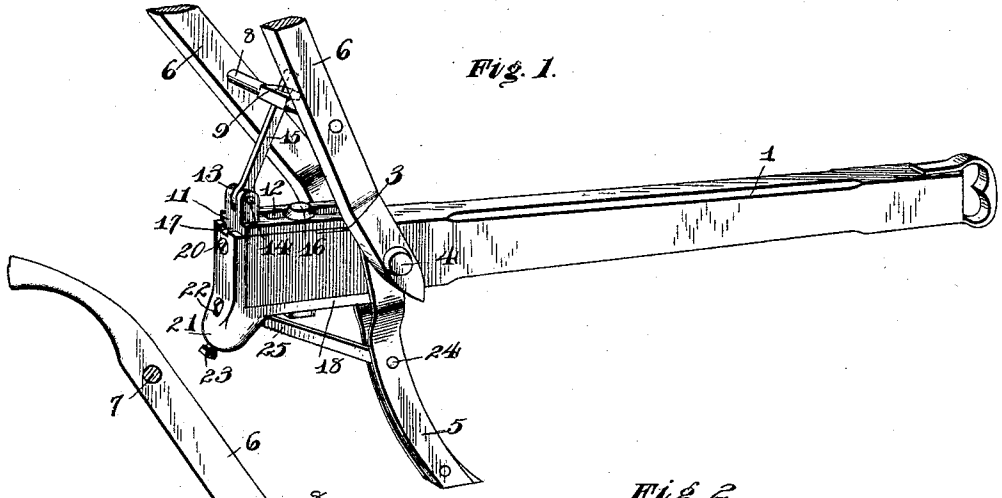


Fig. 2.

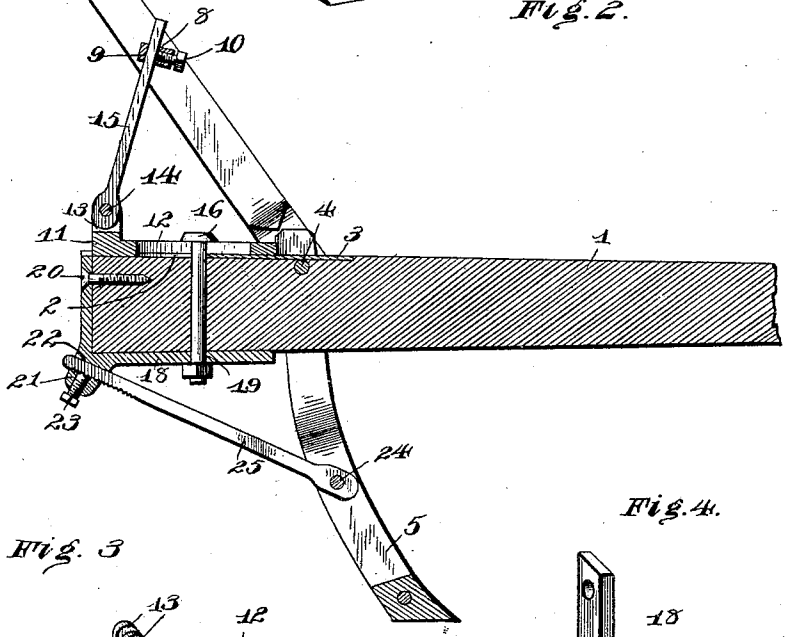


Fig. 3

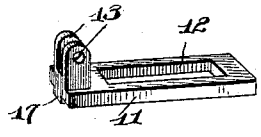
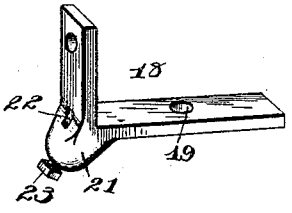


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

STIRLING P. RICHMOND, OF WEATHERFORD, TEXAS.

PLOW.

SPECIFICATION forming part of Letters Patent No. 487,643, dated December 6, 1892.

Application filed August 31, 1892. Serial No. 444,663. (No model.)

To all whom it may concern:

Be it known that I, STIRLING P. RICHMOND, a citizen of the United States, residing at Weatherford, in the county of Parker and State of Texas, have invented a new and useful Plow, of which the following is a specification.

My invention relates to improvements in plows, and particularly to plow-stocks.

The objects in view are to provide a plow of cheap and simple construction and the arrangements of whose parts will permit of a ready adjustment of the handles, both as to height and point of pressure, and also a ready adjustment of the plow-standard, whereby the plow as a whole is adapted for large and small horses.

Other objects and advantages of the invention will appear in the following description, and the novel feature thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective view of a plow embodying my invention, the view being taken from the rear. Fig. 2 is a vertical longitudinal section of the rear portion of the plow, the front end of the beam being broken away. Fig. 3 is a detail in perspective of the adjustable cast-metal plate for supporting the handle-brace. Fig. 4 is a detail in perspective of the casting for receiving the standard-brace.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates the plow-beam, and the same is provided upon its upper side at its rear end with a longitudinal groove 2, and has let into said upper side in front of the groove a metal plate 3. A bolt 4 is passed transversely through the beam near its rear end or just below the metal plate 3, and said bolt is provided with a suitable tap or nut.

5 designates a bifurcated plow-standard, the upper ends of which embrace the beam 1 and are provided with perforations for the passage of the bolt 4, by means of which the aforesaid standard is pivotally connected to the beam. A pair of handles 6 are perforated at their lower ends, embrace the bifurcations of the standards, and also are pivoted by means of the bolt to the beam. These handles diverge toward their upper ends and are braced apart about midway by means of an ordinary rung 7. Below the rung 7 a second pivoted rung 8 is located, the ends of the same being journaled loosely in perforations formed in the handles. The perforated rung 8 is provided with an enlargement at its center, which is slotted, as indicated at 9, and passing through the enlargement and communicating with the slot of the opening is a set-screw 10.

11 designates an oblong cast-metal plate, which is provided with a longitudinal slot 12, and near its rear end with a pair of lugs 13, which rise from said plate, and have pivoted therein by means of a pintle 14 a brace-rod 15, whose upper end passes through the opening 9 of the before-described loose rung 8, and is designed to be impinged upon by means of the set-screw 10, whereby the brace 15 may be secured at any point within the slot 9, and thus the handles raised and lowered to suit persons of different heights. A bolt 16 passes through the slot 12 of the plate 11 and is provided upon its under side below the beam with a tap or nut. By loosening this nut the plate 11 may be moved along the beam, so as to vary the point of bearing of the brace 15, and thus bring the same nearer to or farther from the point of connection between the plow-standard and the beam, as will be readily apparent. The under side of the plate 11, near the rear end thereof, is provided with a lug 17, which is designed to ride in the groove 2 of the beam, and thus maintain the plate in alignment with said beam.

18 designates an L-shaped cast-metal plate, which embraces the under side and rear end of the beam 1. This plate is provided at its horizontal portion with a bolt-receiving opening 19, through which the lower end of the bolt 16 passes, so that the same bolt serves to maintain both of the plates 11 and 18 in position. The vertical portion of the plate 18 has a screw 20 passed therethrough into the heel of the beam. The plate 18 is further provided at its angle with a lug 21, and the same is provided with an opening 22, with which communicates the inner end of a binding-screw 23, passed through said lug. Pivoted at 24 to the bifurcated standard is a brace-rod 25, whose rear end passes through

an opening in the lug 21 and is impinged upon by means of the set-screw 23.

It will be observed that by a loosening of the set-screw 23 and adjusting the brace 25 in the opening of the lug 21 the standard 5 may be given a proper inclination, so as to raise or lower the beam 1, and thus adapt it for horses of various sizes. When thus adjusted, a retightening of the set-screw locks the standard against movement.

By loosening the set-screw 10 and adjusting the brace 15 of the handles in the opening of the loose rung 8 said handles may be raised and lowered to any desired extent, so as to adapt them for convenient use by persons of different heights. By loosening the lower end of the bolt 16 the plate 11 may be moved along over the beam, so as to bring the point of bearing of the lower end of the brace 15 nearer to or farther from the point of connection between the beam and the standard.

From the foregoing description, in connection with the accompanying drawings, it will be seen that I have provided a plow-stock that may be cheaply and simply constructed and which is adapted for a ready adjustment as regards its handles, whereby it is adapted for persons of different heights; furthermore, that the beam may be raised and lowered to adapt the plow for horses of different heights, and, finally, that the point of bearing of the weight of the handles and pressure exerted thereon may be changed with relation to the standard.

Having described my invention, what I claim is—

1. In a plow, the combination, with the plow-beam, the upper side of which is grooved, and a standard depending from the beam, of a cast-metal plate mounted upon the beam, said plate being provided with a longitudinal slot and upon its upper side with a pair of bearing-ears and upon its lower side with a guide-lug taking into the groove of the beam, a bolt passed through the beam and slotted, a pair of handles pivoted to the beam in front of the plate, a rung loosely mounted in the handles and having an opening, a set-screw passing through the rung and communicating with the opening, and a brace pivoted at its lower end between the bearing ears and having its upper end passed through the opening in the rung and impinged upon by the set-screw, substantially as specified.

2. In a plow, the combination, with the beam, the bifurcated standard embracing the beam, the pair of handles embracing the standard, the bolt passed through the handles, bifurcations of the standards and beam, and the rung mounted in the handles and provided with an opening having a set-screw, of a slotted plate mounted upon the upper side of the beam and provided with bearing-lugs, a brace having its lower end pivotally connected with the bearing-lugs and its upper end passed through the opening in the rung, an L-shaped plate embracing the heel of the plow, a bolt passed through said plate and the slot of the upper plate, a lug having an opening depending from the L-shaped plate, a set-screw passed through the lug and communicating with the opening, and a brace having its rear end passed through the opening and its front end pivotally connected with the standard, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

STIRLING P. RICHMOND.

Witnesses:
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JOHN M. LIONBERGER.