J. C. WILLIAMSON.

Improvement in Plows.

No. 129,196. Patented July 16, 1872.

Fig. 1.

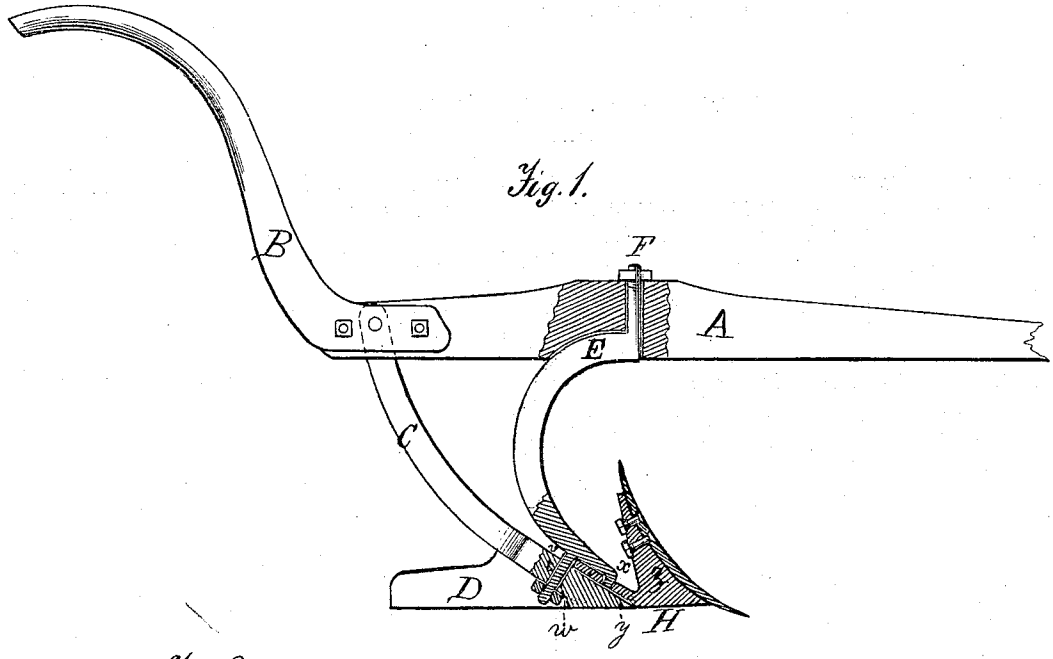


Fig. 2.

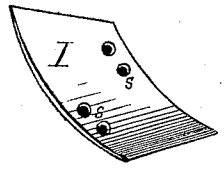


Fig. 3.

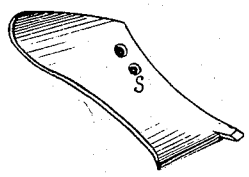


Fig. 4.

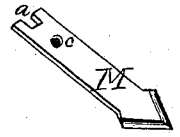
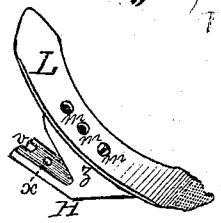


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOSHUA C. WILLIAMSON, OF WASHINGTON, GEORGIA.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. 129,196, dated July 16, 1872.

To all whom it may concern:

Be it known that I, JOSHUA C. WILLIAMSON, of Washington, in the county of Wilkes and State of Georgia, have made certain new and useful Improvements in Plows, of which the following is a specification, reference being had to the accompanying drawing.

Nature and Objects of the Invention.

The invention relates to providing the stock of a plow with a plowshare-seat, to which reversible shares or shovels can be attached, or which seat can be removed and the frame provided with a subsoil attachment; the object of the invention being to furnish a plow-stock to which may be attached such reversible shares or shovels as shall avoid the necessity of using more than one plow-stock in the cultivation of a crop.

Description of the Accompanying Drawing.

Figure 1 is a vertical central longitudinal section of the invention. Fig. 2 is a form of plowshare. Fig. 3 is also a form of plowshare. Fig. 4 is a subsoil plowshare and shank. Fig. 5 is a cultivator, double-ended, and mounted upon a plow-seat.

General Description.

A in the accompanying drawing represents the beam of a plow, to which the handles B are attached, as shown. The brace C is firmly secured in a mortise in the under side of the beam A and near its rear end. This brace extends downward and forward a proper distance, and is provided on one side with the mold-board D of usual construction. The plow-iron E is bolted to the under side of the plow-beam A by a bolt having its nut, F, on the upper side of the plow-beam. This plow-iron E is curved toward the brace C, and terminates at a point directly under the nut F, its extreme lower end being provided with a stud, *x*, projecting downward and backward. A proper distance above the stud *x* the plow-iron is provided with a standard, *w*, inclining downward and backward, being provided on its lower extremity with a thread and nut, and serving to connect the brace C and plow-iron E. The plowshare-seat H consists of the upright seat *z*, having its front properly curved, and the tongue *y*, having the notch *v*, which fits upon the front of the standard *w*, and provided with an aperture, *t*, to receive the stud *x*. Thus the tongue *y* is held in position between the lower parts of the brace C and plow-iron E against lateral or vertical motion when the nut on the end of the standard *w* is screwed up. The lower surfaces and sides of the seat H, brace C, and mold-board D are in the same planes. To this plowshare-seat H may be secured any one of the following shares and cultivators: The plowshare I, as shown at Fig. 2, which consists of a parallelogram-shaped plate of metal, properly curved, sharpened on its shorter sides, and provided with the apertures *s*, by means of which it is properly attached to the concave face of the plowshare-seat H in such manner that one of the longer sides of the share is flush with that side of the seat H adjacent the mold-board; and one of the acute angles of the share I projects below and before the front of the seat H. When the plowing-point of the share I becomes dull the share can be removed from the seat H by simply withdrawing the screws or other means of attachment therewith, reversing the position of the share I, and reattaching it to the seat H through the other set of apertures. The double reversible cultivator-shovel L, as shown at Fig. 5, consists of a strip of metal properly curved, pointed, and sharpened at each end on the convex surface, and provided with the apertures *m*, arranged in a row in the longitudinal center of the shovel L. By this arrangement, as the shovel becomes dull it is only necessary to draw the means attaching it to the seat H, reverse it, and replace the means of attachment. As the shovel wears shorter it is only necessary to move the means of attachment to an upper aperture or apertures.

It is obvious that any form of plowshare can be used upon the plowshare-seat H, so that it be provided with apertures, as shown, and is so curved as to conform to the curved face of the seat H.

The subsoil plowshare attachment M is self-sharpening, and may be attached to the stock by removing the seat H, inserting the shank of the share M, so that the rectangular notch *a* fits upon the standard *w* and the stud *x* passes through the aperture *c*. The nut upon

the standard is then screwed up, thus holding the share M in a fixed position.

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

The plowshare-seat H, provided with the tongue *y* secured between the brace C and plow-iron E, substantially as shown and described.

In testimony that I claim the foregoing invention of improvements in plows as above described I have hereunto set my hand and seal this 15th day of January, 1872.

JOSHUA C. WILLIAMSON. [L. S.]

Witnesses:
J. W. BALDWIN,
GEO. DYSON.