(No Model.) 2 Sheets—Sheet 1.

W. H. MYERS.

PLOW.

No. 469,584. Patented Feb. 23, 1892.

Fig. 1.

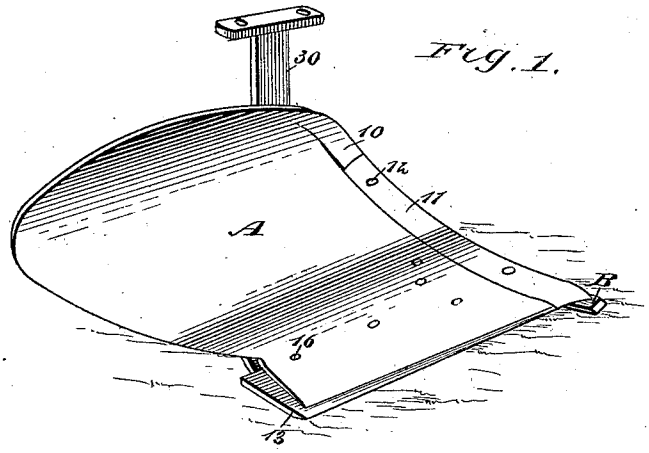


Fig. 2.

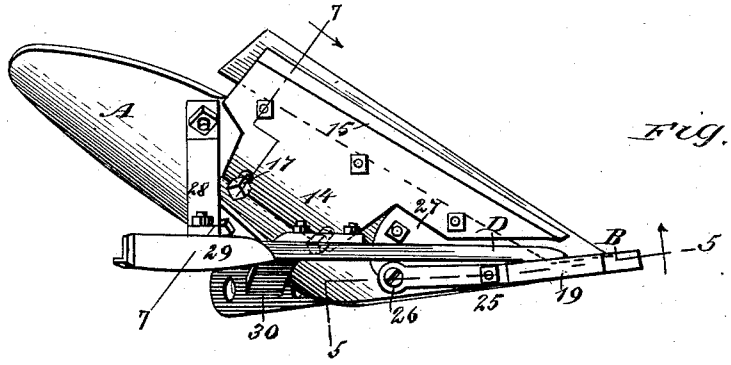
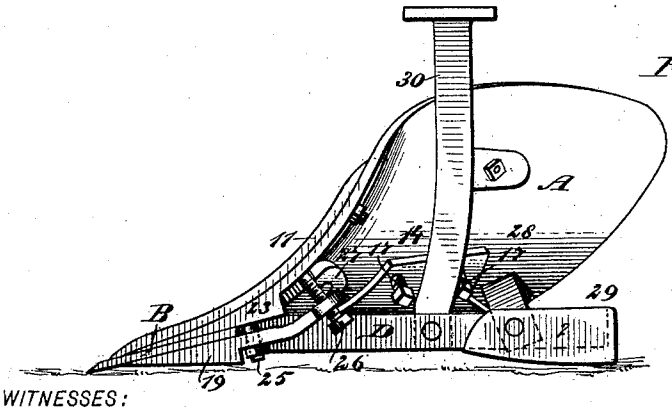


Fig. 3.



WITNESSES:

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C. Sedgwick

INVENTOR:

W. H. Myers

BY Munn & Co

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(No Model.) 2 Sheets—Sheet 2.

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Fig. 4.

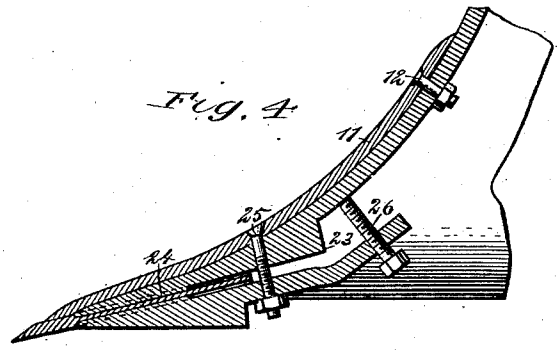

Fig. 5.

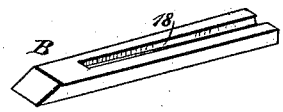

Fig. 6.

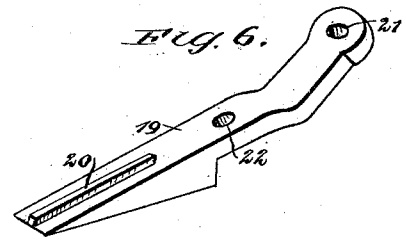

Fig. 7.

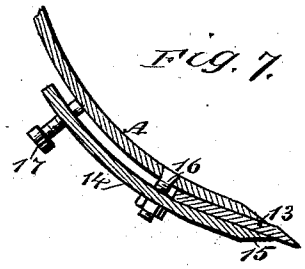

Fig. 8.

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UNITED STATES PATENT OFFICE.

WILLIAM H. MYERS, OF OREGON, WISCONSIN.

PLOW.

SPECIFICATION forming part of Letters Patent No. 469,584, dated February 23, 1892.

Application filed July 25, 1891. Serial No. 400,665. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. MYERS, of Oregon, in the county of Dane and State of Wisconsin, have invented a new and useful Improvement in Plows, of which the following is a full, clear, and exact description.

My invention relates to an improvement in plows, especially to an improvement in the construction of plowshares, and has for its object to provide a means whereby the mold-board is fitted with a removable and adjustable plate constituting the lower cutting-edge thereof, and whereby also the point may be removed and sharpened or adjusted as it becomes worn, and also to provide a removable share upon the forward edge of the mold-board.

Another object of the invention is to construct the mold-board, its attachments, and the point and landside in a simple, durable, and economic manner.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the improved share, looking at the mold-board. Fig. 2 is a bottom plan view. Fig. 3 is a side elevation viewed from the landside. Fig. 4 is a section taken practically on the line 5 5 of Fig. 2. Fig. 5 is a perspective view of the point. Fig. 6 is a perspective view of a clamp or clip adapted for use in connection with the point. Fig. 7 is a section taken practically on the line 7 7 of Fig. 2, and Fig. 8 is a plan view of the removable and adjustable plate attached to the mold-board.

The mold-board A is provided at its forward edge with a beveled surface 10, extending practically from the top to the bottom, and upon this beveled surface a share 11 is secured by means of bolts 12 or the equivalents thereof. At the lower edge of the mold-board it is beveled upon its rear face to fit snugly upon a cutting-plate 13, which plate is adapted to constitute the lower cutting-edge of the mold-board, and the front edge of the plate is preferably beveled to the edge. The plate is held in position in connection with the mold-board through the medium of a clamping-plate 14. This plate at its lower edge is provided with a beveled surface 15 upon its back, and the plate is shaped to the convexity of the mold-board. The cutting-plate 13 is located between the mold-board and the clamping-plate 14, and the latter is connected with the mold-board through the medium of a series of bolts 16, having their heads flush with the outer face of the mold-board and provided with nuts upon their inner ends. These bolts do not pass through the cutting-plate, but preferably at one side of its upper edge, and in order that the clamping-plate may be made to firmly grasp the cutting-plate near its lower edge set-screws 17 are passed through the upper edge of the cutting-plate to an engagement with the back of the mold-board. It will thus be observed that the cutting-plate 13 may be removed when found desirable, or as it becomes worn it may be carried outward and thus keep the mold-board in the same condition as when new. The point B is preferably made rectangular, as illustrated in Fig. 5, and its outer end is beveled in the usual manner. The point is provided with a longitudinal groove or recess 18 in both the upper and lower faces and extending through the rear end. The grooves or recesses may be independent, or a single groove or recess may be employed, extending through from top to bottom.

In connection with the point a clamping-block 19 is used. (Illustrated in detail in Fig. 6.) The upper face of this block is inclined, and near the bottom portion thereof upon said upper face a rib 20 is formed. The toe of this block 19 is more or less wedge-shaped, and the shank-section, which is its upper end, is preferably slightly curved, and the shank-section is provided with two apertures 21 and 22, extending through from face to face.

The mold-board upon its under face near its lower end at the landside is provided with a reinforcing-block 23, or with an enlargement, as shown in Fig. 4; and the said enlargement upon its under face is ordinarily provided with a longitudinal rib 24.

The point B is attached to the mold-board

in the following manner: When two independent channels or grooves 18 are made in the point the upper one is adapted to receive the rib 24 upon the inner face of the mold-board, and the lower one receives the rib 20 upon the clamping-block 19. Between the clamping-block and the mold-board the point is firmly held by passing a bolt 25 through the mold-board at the rear of the point and through the aperture 22 in the clamping-block, the head of the bolt being preferably flush with the mold-board's outer face and the lower end being provided with a nut. In order to give the clamping-block sufficient cant to firmly clamp the point at its lower end, a set-screw 26 is passed through the upper aperture 21 of the clamping-block to a bearing against the under face of the mold-board, as is shown in Fig. 4. It will thus be observed that the point, should it become worn, may be slid downward and beveled off again, rendering it as new, and it is also evident that when the groove or channel 18 extends entirely through the point the rib 24 upon the mold-board may be omitted and the rib 20 only be employed to prevent lateral movement of the point. The landside D is secured to the mold-board, preferably, through the medium of ears 27, formed thereon near its forward end, and bolted or otherwise secured to the mold-board, the rear end of the landside being ordinarily braced by a strap 28, and at the rear of the mold-board a heel 29 is adjustably secured through the medium of a screw or bolt, the said heel being triangular or L-shaped in cross-section. A standard 30, adapted to attach the share to the plow-beam, is secured in any suitable or approved manner to the inner face of the landside.

It will be observed from the construction above set forth that the plowshare is not only durable, but exceedingly economic, as all of the wearing-surfaces may be replaced, if desired, or may be adjusted to compensate for wear.

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

1. A plow having a separate and independent point B, provided on its lower face with a longitudinal groove, a block 19, having apertures 21 22 and a longitudinal rib 20 on its upper face entering the groove in the point B, the bolt 25, extending through the mold-board and the block in rear of the point B, and the screw 26, extending up through the aperture 21 and bearing against the lower side of the mold-board, substantially as set forth.

2. A plow comprising the mold-board provided on its lower face with the enlargement 23, having a longitudinal rib 24 along its lower face, the point B, having a longitudinally-grooved upper and lower face, the upper groove receiving the rib 24, the block 19, having a rib 20 on its upper face entering the lower slot in the said point, and the apertures 22 21 in rear of the rib 20, the bolt 25, extending down through the mold-board, its enlargement, and the said block, and the set-screw 26, extending up through aperture 21 and bearing against the mold-board, substantially as set forth.

3. A plow consisting in the mold-board A, having the beveled surface 10 extending from top to bottom, a share 11, bolted to said curved surface, the point B, projecting under the lower beveled end of the share and having a longitudinal slot in its lower face, the block 19, having rib 20 on its upper face entering said groove, the bolt 25, extending down through the share, mold-board, and block, the set-screw 26, extending up through the rear end of the block into contact with the mold-board, the cutting-plate 13, extending along the lower edge of the mold-board, abutting against the point, the plate 14, bolt 16, and set-screw 17 for clamping and adjusting the said cutting-plate, substantially as set forth.

WILLIAM H. MYERS.

Witnesses:
GEO. W. GETS,
N. L. PRATT.