(No Model.) 2 Sheets—Sheet 1.

D. B. ENGLISH.

HILLSIDE PLOW.

No. 472,112. Patented Apr. 5, 1892.

Fig. 1.

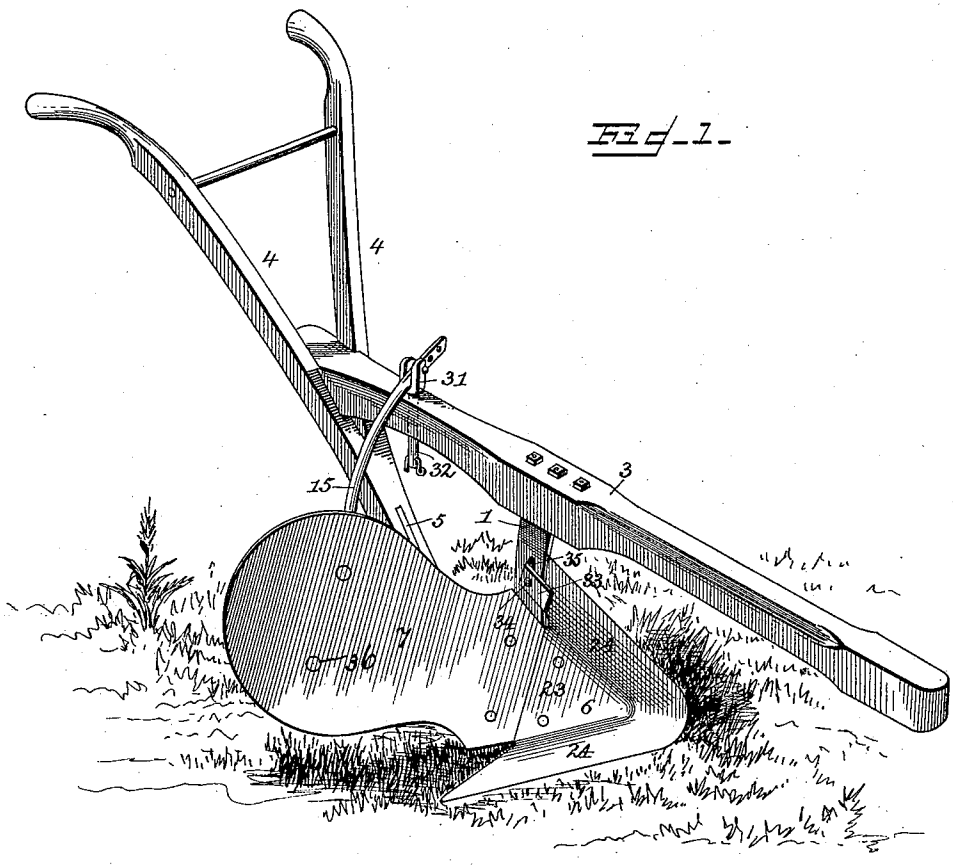
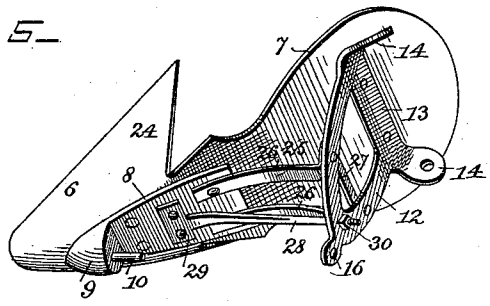


Fig. 5.



Witnesses

Chas. C. Durand

H. C. Riley

Inventor

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By his Attorneys,

C. A. Snow & Co.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

(No Model.) 2 Sheets—Sheet 2.

D. B. ENGLISH.

HILLSIDE PLOW.

No. 472,112. Patented Apr. 5, 1892.

Fig. 2.

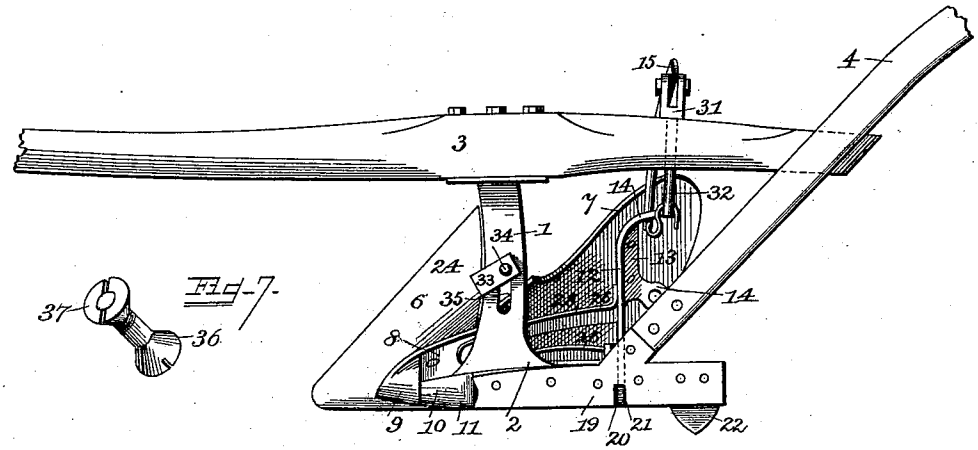


Fig. 7.

Fig. 3.

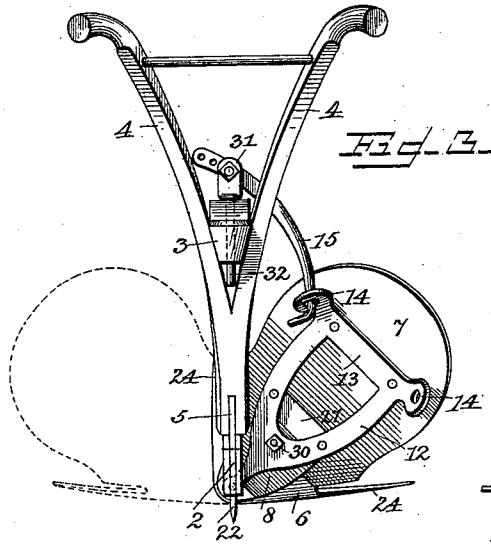


Fig. 4.

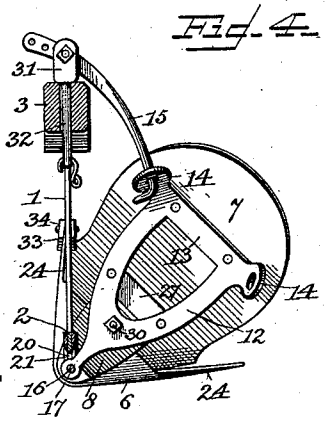
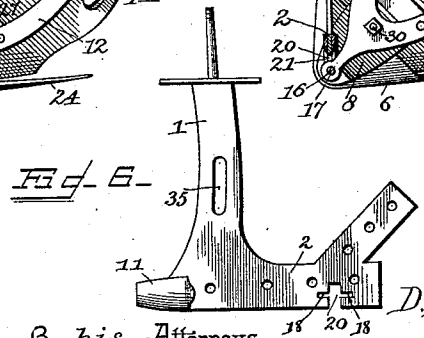


Fig. 6.



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UNITED STATES PATENT OFFICE.

DAVID BARTON ENGLISH, OF GUERNEVILLE, CALIFORNIA.

HILLSIDE-PLOW.

SPECIFICATION forming part of Letters Patent No. 472,112, dated April 5, 1892.

Application filed July 21, 1891. Serial No. 400,195. (No model.)

To all whom it may concern:

Be it known that I, DAVID BARTON ENGLISH, a citizen of the United States, residing at Guerneville, in the county of Sonoma and State of California, have invented a new and useful Hillside-Plow, of which the following is a specification.

The invention relates to improvements in hillside-plows.

The object of the present invention is to simplify and improve the construction of hillside-plows and to enable them to be readily controlled, to regulate the depth and the size of the furrow-slice, and to adapt them to be readily reversed and quickly secured at either side of the beam.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a hillside-plow constructed in accordance with this invention. Fig. 2 is a side elevation of the same. Fig. 3 is a rear elevation. Fig. 4 is a transverse sectional view. Fig. 5 is a detail perspective view of the plowshare and mold-board detached. Fig. 6 is a detail view of the standard and the landside. Fig. 7 is a detail perspective view of one of the bolts.

Referring to the accompanying drawings, 1 designates a plow-standard having formed integral with it a rearwardly-extending landside 2, and secured to the upper end of the standard 1 is a beam 3, extending rearward and having secured to opposite sides of its rear end plow-handles 4, which have their lower ends secured to an upwardly and rearwardly inclined extension 5 of the landside 2. A plowshare 6 and a mold-board 7 are hinged to the landside and are adapted to be reversed and be brought to either side of the plow, and they are secured together by a plate 8, which is bolted to the plowshare and the mold-board and is provided at its front end with an enlargement 9 and a pin 10. The pin 10 is journaled in a socket 11, which is secured to the front end of the landside and is provided with a recess to receive the same. The mold-board is connected with the landside by a rear hinge 12, which is aproximately Y-shaped and has the ends of its arms connected by an integral cross-bar 13, and is provided with perforated lugs 14, extending from the arms at an angle and adapted to be engaged by a hook 15, whereby the plow is secured in its adjustment. The stem of the hinge 12 is provided with a perforation 16, which receives a pintle 17, and the latter is secured in a longitudinal slot 18 of the landside and is retained therein by landside-plates 19, and the landside 2 and the landside-plates 19 are provided with transverse slots 20 and 21. The landside-plates are bolted or otherwise secured to opposite sides of the landside and they extend rearward therefrom and have secured between them a reversible cutting-blade 22 for severing roots and the like.

The plowshare is spoon-shaped and consists of a central portion 23 and sides 24, which are arranged at an angle and extend rearward from the central portion, and the plowshare is short and wide, which makes it very easy to guide and govern with regard to the depth of the plow and the size of the furrow-slice. The mold-board and plowshare are supported by an approximately triangular brace 25, which consists of sides 26, arranged at angle and having their outer ends bolted to the plate 8, and a cross-piece 27 bent at an angle and secured to the rear hinge 12. The plate 8 and the rear hinge 12 are connected by an adjusting-bar 28, which is provided at its forward end with a transverse piece 29 secured to the plate, and the rear end of the adjusting-bar is threaded and is provided with nuts 30. The threaded end of the adjusting-bar extends through a perforation of the rear hinge, and the nuts 30 are arranged on opposite sides of the latter and by adjusting the nuts 30 the parts are held perfectly rigid, and any wear is readily taken up. The bolts 36, which secure the parts together, have nuts similar in shape to the heads and both the heads and the nuts 37 are countersunk, and their outer faces are arranged flush with the adjacent parts.

In reversing the plow the plowshare and the mold-board are swung beneath the landside, and they are secured at either side of the plow by the hook 15, which engages the perforated lugs 14. The shank of the hook is secured in a bifurcation 31 of a swiveled

stem 32, and is provided with a series of adjusting perforations. The side 24 of the plowshare, which is arranged adjacent the standard, is engaged by clip-plates 33, which are arranged on opposite sides of the standard and are connected by a rivet 34, arranged in a slot 35 of the standard, and the plates are adapted to be moved on the standard to engage and to be withdrawn from engagement with the plowshare.

The plowshare, by being spoon-shaped and very short and wide, makes the plow easy to guide and easy to regulate as to the depth, and it dispenses with the usual caster-wheel, and this construction of share brings the cutting portion in a position relative to the soil similar to that of the ordinary land-turning plow, thereby enabling a clean clear furrow to be cut on a hillside. The plow is designed for turning the furrow uphill, and the sides of the plowshare hold the soil compact and render it easy to turn by the mold-board, and the particular shape of the plowshare enables the plow to be readily adjusted to suit the inclination of the hill to be plowed.

It will readily be seen that the plow is simple, strong, and durable, and is adapted to be adjusted to the inclination of a hill and is easy to guide and to regulate its depth.

What I claim is—

1. In a hillside-plow, the combination of a plow-beam, a standard, a landside, the plowshare pivoted to the front of the landside and being spoon-shaped and having its sides extending rearward from the central portion, the mold-board connected with the plowshare, the rear hinge connecting the mold-board and the landside and provided with perforated lugs, the bifurcated stem swiveled in the standard, the hook adapted to engage the perforated lugs and provided with perforations and secured in the bifurcation of the stem, and the clip-plates adjustably secured to the opposite sides of the standard and adapted to engage the plowshare, substantially as described.

2. In a plow, the combination of the landside provided with a longitudinal slot and an intersecting transverse slot, the landside-plates secured to the landside and provided with transverse slots registering with the transverse slot of the landside, a pintle secured in the longitudinal slot, and the rear hinge for the mold-board, provided with a perforation to receive the pintle arranged in the transverse slots, substantially as described.

3. In a hillside-plow, the combination of a plow-beam, a standard, a landside, the plowshare pivoted to the front of the landside, the mold-board connected with the plowshare, the rear hinge connecting the mold-board and the landside, means for adjustably connecting the mold-board, and the clip-plates adjustably secured to the opposite sides of the standard and adapted to engage the plowshare, substantially as described.

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

DAVID BARTON ENGLISH.

Witnesses:
HENRY BEAVER,
T. A. MCCOOL.