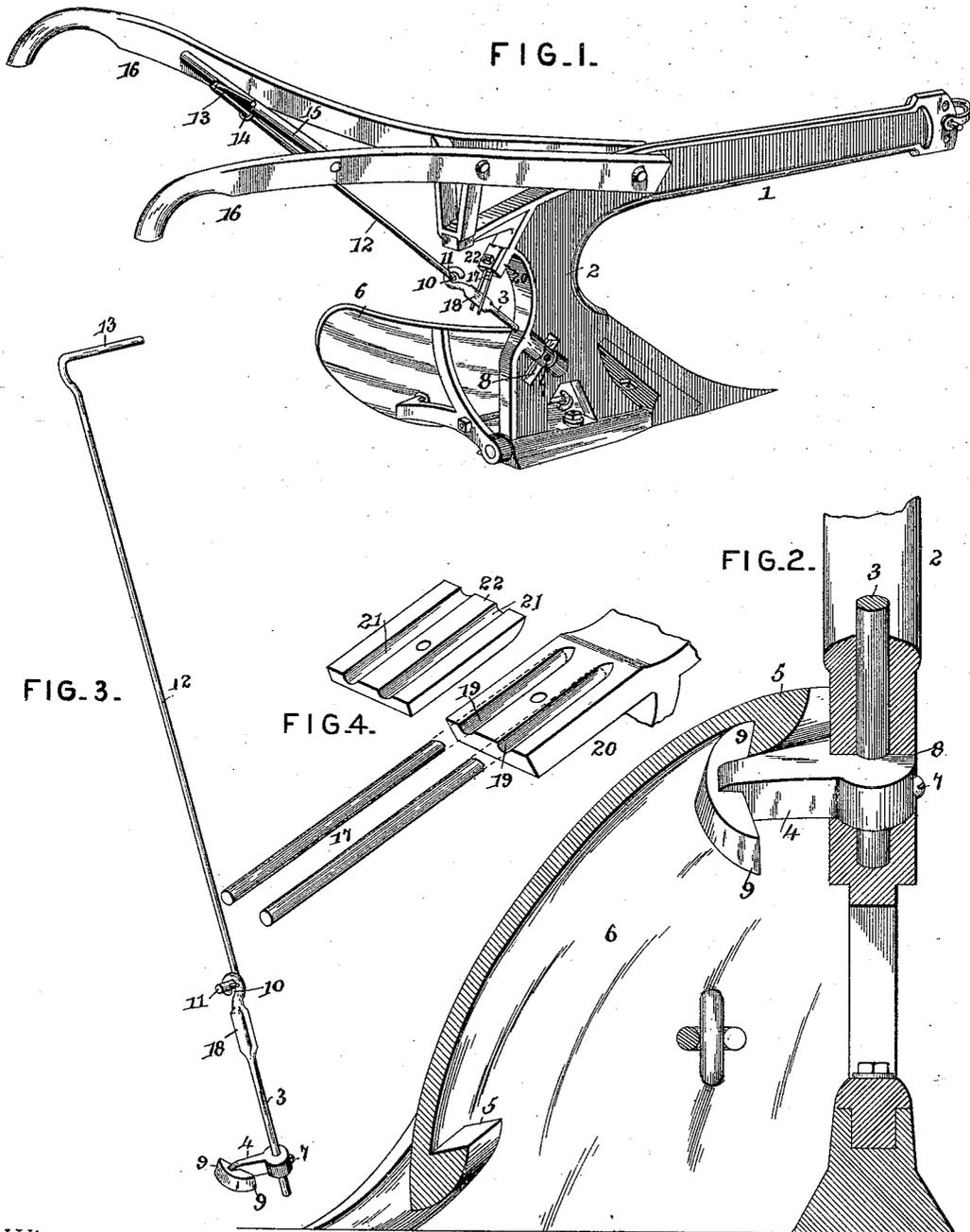


(No Model.)

C. P. McWANE.
HILLSIDE PLOW.

No. 484,043.

Patented Oct. 11, 1892.



Witnesses

Inventor

Jas. H. McLaughlin
J. H. Wiley

By His Attorneys,

C. P. McWane

Chas. Snow & Co.

UNITED STATES PATENT OFFICE.

CHARLES P. MCWANE, OF GRAHAM, VIRGINIA.

HILLSIDE-PLOW.

SPECIFICATION forming part of Letters Patent No. 484,043, dated October 11, 1892.

Application filed March 2, 1892. Serial No. 423,513. (No model.)

To all whom it may concern:

Be it known that I, CHARLES P. MCWANE, a citizen of the United States, residing at Graham, in the county of Tazewell and State of Virginia, have invented a new and useful Hillside-Plow, of which the following is a specification.

The invention relates to improvements in reversible plows.

10 The object of the present invention is to simplify and improve the construction of the mechanism employed for securing the mold-boards of reversible plows to either side of the latter and to enable the mold-boards to be readily detached from such securement at
15 one side of the plow for turning and to be quickly secured at the other side.

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 plow constructed in accordance with this invention. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a detail perspective view of the rock-shaft and the operating-rod. Fig. 4 is a detail perspective view of the spring-rod and the seats therefor,
30 the parts being separated.

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

1 designates an iron plow-beam having integral standards 2, in which is journaled an inclined rock-shaft 3, having a hook-arm 4, adapted to engage shoulders 5 at opposite sides of a mold-board 6, which is hinged at the bottom of the standards, and is adapted to swing beneath the plow to render the latter reversible. The hook-arm 4 is provided at one end with an opening to receive the rock-shaft, and is detachably secured thereto by a screw 7. It works through a slot 8 in the standards 2, and it is provided at its outer end with oppositely-disposed hook projections 9, which engage the shoulder 5. The outer or upper end of the rock-shaft is provided with an eye 10, to which is secured an angularly-bent end 11
45 of an operating-rod 12, which has its upper end provided with a handle 13 and which is journaled in an eye 14 on a cross-bar 15, which

connects the plow-handle 16, and the said operating-rod is adapted to turn the shaft to carry the hook-arm from one side of the plow
55 to the other.

The hook-arm of the rock-shaft is held in engagement with the shoulders of the mold-board by parallel spring-rods 17, between which is arranged a flattened portion 18 of the rock-shaft, and which are adapted to engage the flattened portion to hold the rock-shaft against turning. When the mold-board is swung from one side of the plow to the other, the shoulders 5, which are beveled at their outer sides, automatically engage the hook-arm 4. The parallel spring-rods are arranged in sockets formed by the grooves 19 of a projection 20 and grooves 21 of a removable plate 22. The projection 20 is arranged at and depends from the upper end of the standard, and the removable plate 22 is secured to the projection 20 by a bolt 23, which causes the plate 22 to clamp the spring-rod.
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It will be seen that the means for securing reversible mold-boards in operative position at the sides of plows are simple and comparatively inexpensive in construction and are adapted to permit a mold-board to be quickly turned and secured at the other side of a plow.
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I do not wish to be limited to the particular construction of the spring, as shown, as some other construction and arrangement of spring could be adapted for use and answer every purpose. I therefore reserve the right to make this and other modifications in the mechanical workmanship without departing from the spirit or sacrificing any of the advantages of my invention.
85

What I claim is—

1. The combination, in a plow, of a standard having an inclined slot and provided with bearings at opposite sides of the slot, said bearings extending to the rear edge of the standard, a rock-shaft journaled in said bearings and extending upward from the rear edge of the standard, an arm secured to the rock-shaft and arranged in the slot and adapted to swing through the same and provided at its outer end with oppositely-disposed hook projections, a hinged mold-board provided at opposite sides with shoulders adapted to be engaged by said hook projections, and a rod having its lower end connected to the rock-
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shaft and adapted to extend to the handles of a plow and provided at its upper end with a handle, substantially as described.

2. In a plow, the combination of a stand-
 5 ard, a hinged mold-board provided with oppo-
 site shoulders, a rock-shaft journaled on the
 standard, a hook-arm carried by the rock-
 shaft and adapted to swing to opposite sides
 10 of the standard and provided at its outer end
 with oppositely-disposed hook projections
 adapted to engage said shoulder, and a spring
 for holding the rock-shaft against turning to
 maintain the hook projections in engagement
 with the shoulders, substantially as described.
 15 3. In a plow, the combination of a stand-
 ard, a mold-board hinged at the bottom of the
 standard and provided at opposite sides with
 shoulders, a rock-shaft journaled on the stand-
 ard and provided with a hook-arm adapted
 20 to engage either one of the shoulders and
 having an intermediate flattened portion,
 springs bearing on the flattened portion and
 adapted to hold the hook-arm in engagement
 with the shoulders, and means for turning the
 25 rock-shaft, substantially as described.

4. The combination of a standard provided
 with a slot, a mold-board hinged at the bot-
 tom of the standard and having shoulders at
 the opposite sides, a rock-shaft journaled on
 the standard and having a flattened portion 30
 and provided with a hook-arm arranged op-
 posite said slot and adapted to engage the
 shoulders of the mold-board, a projection ex-
 tending from the top of the standard and pro-
 35 vided with grooves, a removable plate ar-
 ranged on the projection and provided with
 grooves, parallel resilient rods clamped in
 said grooves and arranged on opposite sides
 of the said flattened portion of the rock-shaft,
 and an operating-rod extending from the 40
 rock-shaft and connected therewith and
 adapted to extend to the handles of a plow,
 substantially as described.

In testimony that I claim the foregoing as
 my own I have hereto affixed my signature in 45
 the presence of two witnesses:

C. P. McWANE.

Witnesses:

J. H. HARRELL,
 T. J. HARRIS.