J. W. BUCHANAN.

REVERSIBLE MOLDBOARD PLOW.

APPLICATION FILED APR. 13, 1909.

943,516. Patented Dec. 14, 1909.

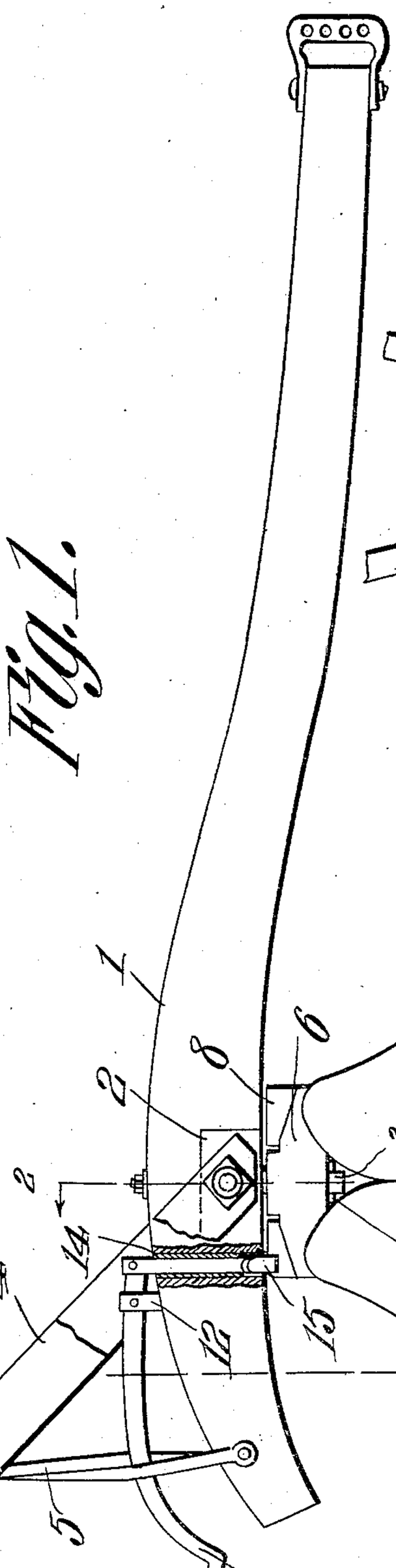

Fig. 1.

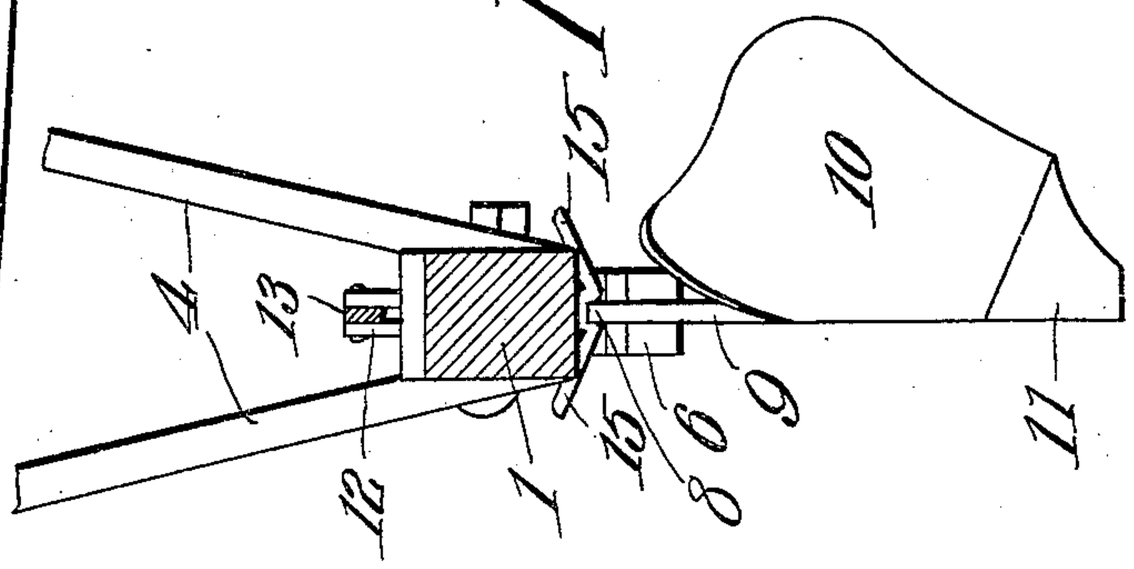

Fig. 3.

Fig. 2.

Witnesses

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REVERSIBLE MOLDBOARD-PLOW.

943,516. Specification of Letters Patent. Patented Dec. 14, 1909.

Application filed April 13, 1909. Serial No. 489,598.

To all whom it may concern:

Be it known that I, JAMES W. BUCHANAN, a citizen of the United States, residing at Asheville, in the county of Buncombe and State of North Carolina, have invented a new and useful Reversible Moldboard-Plow, of which the following is a specification.

This invention has relation to reversible mold board plows, and it consists in the novel construction and arrangement of its parts, as hereinafter shown and described.

The object of the invention is to provide a plow of the character indicated which is of durable construction, having its parts so assembled as to withstand the strain to which such an implement is usually subjected.

With the above object in view the plow includes a beam having a pin depending therefrom and fixed with relation thereto. A head is journaled upon the pin below the beam and from the said head is supported a double mold-board and share structure. A gravity catch mechanism is mounted at the rear end portion of the beam and is provided with a keeper which is adapted to engage flanges provided upon the said head, whereby the said head may be held in fixed relation to the beam.

In the accompanying drawings:—Figure 1 is a side elevation of the plow. Fig. 2 is a transverse sectional view of the same, cut on the line 2—2 of Fig. 1. Fig. 3 is a transverse sectional view of the same, cut on the line 3—3 of Fig. 1.

The plow comprises a beam 1, to the lower rear portion of which is attached a metallic clip 2. A pin 3 passes through the said clip 2 and projects below the lower end of the beam 1. The said pin 3 is fixed with relation to the beam and the clip. Handles 4 are attached at their lower forward ends to the beam 1 preferably at the clip 2, and the upper rear portions of the said handles are braced by means of the braces 5, which are attached at their lower ends to the rear end portion of the beam, and at their upper ends to the intermediate points of the handles 4. The said braces 5 cross each other, as indicated in Fig. 1 of the drawings. A head 6 is journaled upon the pin 3, and is retained against longitudinal movement thereon by means of a cotter-pin 7, which passes transversely through the said pin 3, or an equivalent device. The head 6 is provided with upstanding flanges 8, located in the vicinity of its forward and rear ends. A double plow frog 9 is attached at its upper edge to the head 6, and the said frog supports a double mold-board 10 and a double share 11.

A catch mechanism is mounted at the rear end portion of the beam 1 and said mechanism includes a lever 13, which is fulcrumed in a lug 12, carried by the beam 1, and the rear end of the said lever 13 projects beyond the rear end of the beam 1. A keeper 14 has a shank which passes vertically through the rear portion of the beam 1, and the upper end of the shank of the keeper is pivotally connected with the work end of the lever 13. At its lower end the said keeper 14 is provided with the inclined wings, the inner ends of which are spaced from each other, and in the space thus provided room is left to receive the upper edge portion of one or the other of the flanges 8 carried by the head 6. The inclined wings 15 of the keeper 14 are located in the paths of movement of the upper rear portions of the flanges 8.

From the above description it is obvious that as the implement is passed along the ground and a furrow is opened, and when the end of the furrow is reached, or a point at which it is desired to reverse the beam and open another furrow, the operator places his foot upon the rearwardly projecting end of the lever 13 and depresses said end of the said lever, which movement on the part of the lever moves the keeper 14 vertically through the beam 1, and the wings 15 are moved above the upper end of the flange 8 disposed toward the rear end of the beam 1. By such movement on the part of the wings 15, the beam 1 is free to turn upon the axis of the pin 3 with relation to the head 6. Inasmuch as the share and mold-board are in the furrow, the said head 6 and attached parts are held in stationary positions while the beam 1 turns upon the axis of the pin 3 during the act of reversion. When the beam 1 is reversed in its position upon the head 6 and as the upper portion of the flange 8 engages one of the wings 15 of the keeper 14, the said keeper is first moved vertically and when the upper edge of the flange 8 arrives under the space between the inner ends of the wings 15, the said keeper 14 moves downward in a vertical direction, and the upper edge portion of the flange 8 is retained between the inner ends of the wings 15. Thus

a gravity lock-catching mechanism is provided for holding the mold-board and share in fixed relation to the beam.

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

A reversible mold-board plow comprising a beam, a pin fixed to the beam, a head journaled upon the pin and having at its opposite ends upwardly extending flanges, a frog attached to the head and carrying a double mold-board and share, a keeper slidably mounted in the beam and having at its lower end inclined wings with spaced inner ends adapted to engage the flanges provided upon the head, a lever fulcrumed upon the beam and being operatively connected with said keeper.

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

JAMES W. BUCHANAN.

Witnesses:
J. H. TUCKER,
J. H. MARTIN.