

No. 677,255.

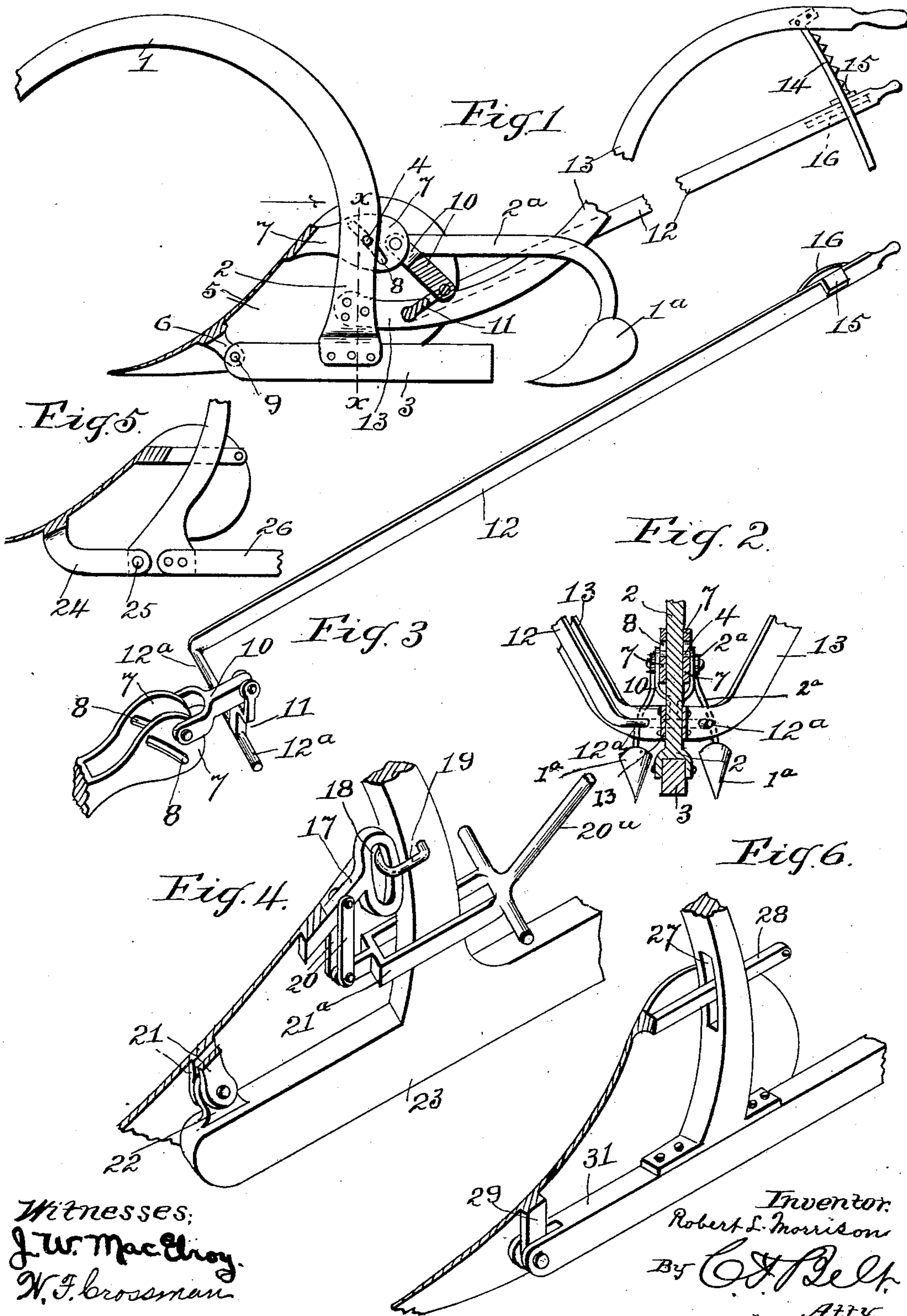
Patented June 25, 1901.

R. L. MORRISON.

PLOW.

(Application filed Dec. 20, 1900.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

ROBERT L. MORRISON, OF NATHAN, TEXAS.

PLOW.

SPECIFICATION forming part of Letters Patent No. 677,255, dated June 25, 1901.

Application filed December 20, 1900. Serial No. 40,547. (No model.)

To all whom it may concern:

Be it known that I, ROBERT L. MORRISON, a citizen of the United States, residing at Nathan, in the county of Johnson and State of Texas, have invented certain new and useful Improvements in Plows, of which the following is a specification.

This invention relates to plows, and pertains more particularly to improvements on my Patent No. 664,570, issued December 25, 1900.

One object of the present invention is to provide means for slidably connecting the moldboard to the plow-standard and for pivotally connecting the moldboard with a furrow-shoe.

A further object of the invention is to provide means for operating the plow-point to make a deep or shallow furrow and for raising and lowering covering-plows simultaneously with the operation of said opener.

To these ends the invention consists in the novel arrangement and construction of parts, and resides, essentially, in the manner of connecting the moldboard with the furrow-shoe and the former with the plow-standard.

In the accompanying drawings, forming a part of this application, Figure 1 is a longitudinal section. Fig. 2 is a vertical section on the line *xx*, Fig. 1, looking in the direction indicated by the arrow. Fig. 3 is a perspective view of the levers for operating the moldboard, with the latter broken away. Fig. 4 is a perspective view of a modification, partly broken away. Fig. 5 is a further modification in longitudinal section, partly broken away. Fig. 6 is a still further modification in perspective view, partly broken away.

The same numeral-references denote the same parts throughout the several views of the drawings.

The plow-beam 1 is of ordinary construction, having a depending standard 2, to which is fixed a furrow-shoe 3. The standard 2 has a pin extending through it or is otherwise made with a projection 4 on each side. The moldboard 5 is provided with a lug 6 and projections 7. The said lug and projections may be made integral with the moldboard or attached to it in any suitable manner. The projections 7 have slots 8, fitting the pins 4, to permit the projections 7 to slide thereon, and the lug 6 is slotted to receive the front

end of the furrow-shoe 3, to which it is hinged or pivoted at 9. Covering-plows 1^a have their beams 2^a to the projections 7.

To the projections 7 is pivoted a depending lever 10, the other ends thereof being pivoted together and to the short arm 11 of a hand-lever 12, one end 12^a of the hand-lever being pivoted to turn in the forward ends of the plow-handles 13 and the other end extending up at the side of one of the plow-handles, the latter being provided with a rack-bar 14 and the former with a plate 15 and a spring 16 to keep the plate in mesh with the rack-bar. It will be seen that by raising the hand-lever the slotted end of the projections 7 will be forced upwardly. This will throw the point of the moldboard downwardly and the said ends 7 carry the pivoted ends of the covering-plow beams upwardly, thus lowering the covering-plows, so that by one movement of the hand-lever all the plows are given a downward movement, and by a reverse movement of the said lever all the plows are raised.

Referring to the modification shown in Fig. 4, the moldboard has one arm 17 projecting therefrom and integral therewith, which is provided with a slot 18, and the said projection is slidably connected with the plow-standard by a ring or staple 19. The levers 20 for sliding the arm or projection 17 are pivoted to the latter forward of the slot 18, and a central hand-lever 20^a is connected to the levers 17 by a yoke-lever 21^a. The moldboard has ears 21 cast or otherwise formed thereon, which are pivoted to a lug 22 on the forward end of the shoe or land-bar 23. This shoe or bar is made in the same piece with the plow-standard and forms the lower terminal of the latter. This form is shown without covering-plows; but they may be pivoted at the lever pivot-points, if desired.

In Fig. 5 is shown a further modification, having the forward portion 24 of the landside or shoe pivoted at 25 to the plow-standard and made integral with the moldboard and the rear portion 26 fixed to the said standard.

In Fig. 6 is shown a still further modification, the plow-beam having a slot 27, through which works a single arm 28 of the moldboard, the latter having a depending lug 29, pivoted at 30 in the forked end of the landside or shoe 31.

It is obvious that in arranging a moldboard to make either of the connections the devices for accomplishing the same may be bolted, riveted, or otherwise attached to the moldboard, or such devices may be cast or welded in place. I therefore do not wish to be understood as limiting myself to any particular material or to any special manner of making the connections.

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

1. In a plow, the combination, with a furrow-shoe carried by the plow-standard, of a
15 furrow-opener hinged or pivoted to the shoe, the moldboard slidably connected to the standard, and means on the standard to limit the movement of the moldboard.

2. In a plow, the combination of a furrow-shoe carried by the plow-standard, a furrow-opener pivoted to the shoe and slidably connected to the standard, and the levers for working the furrow-opener on said pivot.

3. A plow having a hinged or pivoted moldboard, beams carrying covering-points and
25 pivoted to the moldboard, and the levers for

simultaneously working the moldboard and the beams.

4. In a plow, a furrow-opener having a pivot bearing under the moldboard, an arm or projections extending from the moldboard and engaging the plow-standard to limit the movement of the moldboard, and a furrow-shoe pivoted to said bearing and fixed to the plow-standard, substantially as set forth. 30 35

5. In a plow, the combination of a furrow-shoe attached to the plow-standard, a moldboard pivoted to the shoe and having slotted projections engaging a pin on the standard, covering-plow beams pivoted to said ends, levers depending from said pivot, a lever pivoted to the depending lever ends, and having a hand-lever for simultaneously working the moldboard and the covering-plows on their respective pivots. 40 45

In witness whereof I hereunto set my hand in the presence of two witnesses.

ROBERT L. MORRISON.

Witnesses:

IDA H. EVANS,

BONNIE WESTBROOK.