J. M. TINGLEY.

Plows.

No. 149,694. Patented April 14, 1874.

Fig. 1

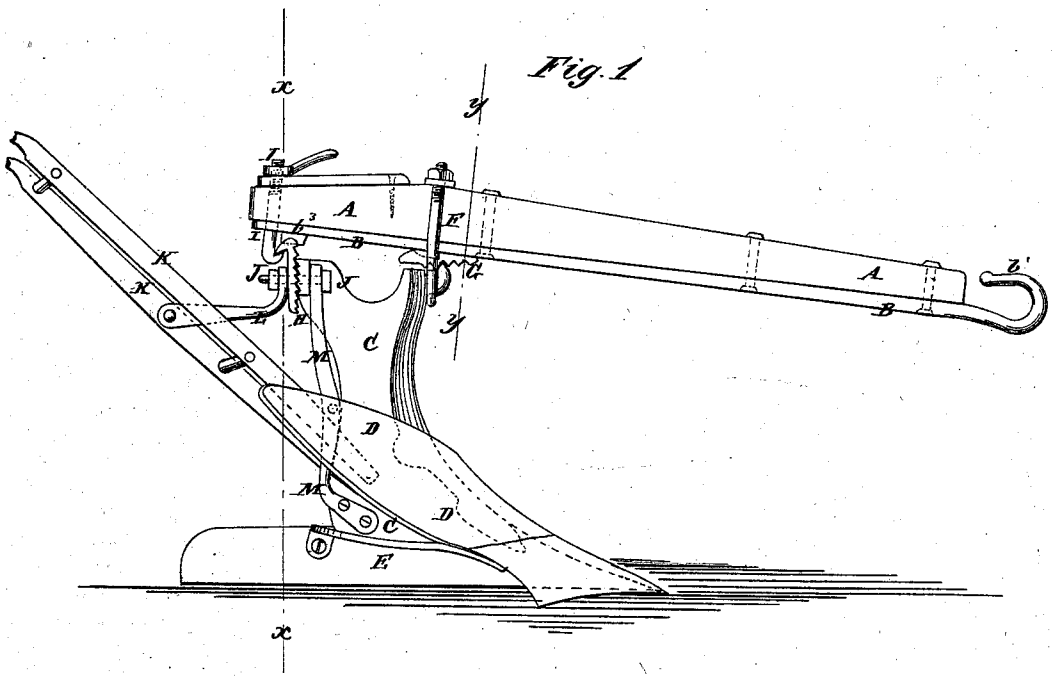



Fig. 3

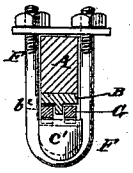



Fig. 2

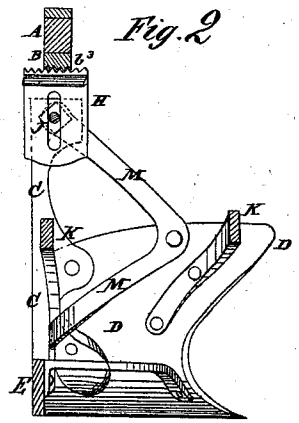
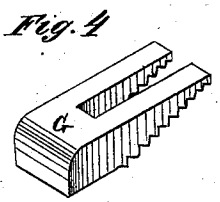



Fig. 4




WITNESSES.

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# UNITED STATES PATENT OFFICE.

JOHN M. TINGLEY, OF CLIFTON HILL, MISSOURI.

## IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **149,694**, dated April 14, 1874; application filed February 14, 1874.

*To all whom it may concern:*

Be it known that I, JOHN MARTIN TINGLEY, of Clifton Hill, in the county of Randolph and State of Missouri, have invented a new and useful Improvement in Plows, of which the following is a specification:

Figure 1 is a side view of my improved plow. Fig. 2 is a detail vertical section of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a detail section taken through the line *y y*, Fig. 1. Fig. 4 is a detail perspective view of the notched and slotted wedge.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved short-beam plow, which shall be so constructed that the beam may be adjusted to cause the plow to run deeper or shallower, and to take or leave land, without removing a bolt, and which will enable the beam to be easily detached without removing a bolt. The invention relates specifically to the combination, with the standard and beam, of devices for adjusting the beam, as hereinafter described.

A is the plow-beam, which is made of wood, and to the under side of which is securely bolted a cast-metal bar or plate, B, having a draft-hook, *b*, formed upon its forward end. C is the plow standard or upright, to the lower part of which are secured the mold-board D and the land-side E. The upper part of the upright C is notched or branched, and upon the forward side of the top of its forward part is formed a knob or projection, *c'*, upon the upper edge of which is formed a knife-edge for the beam A B to rest upon, and to pivot the said beam, and against the rear side of the top of which rests the projection or catch $b^2$ of the beam-plate B, to prevent the said beam from being drawn out of the bow F. The bow F passes around the neck of the knob *c'*, and around the beam A B, and is secured by a yoke and nuts, as shown in Figs. 1 and 3. G is a wedge, which is inserted between the beam A B and the knob *c'* of the upright C. The wedge G is slotted to receive the catch $b^2$, and its lower edge is notched to receive the knife-edge of the knob *c'*, so that by moving the wedge G forward or back the forward end of the plow-beam A B will be raised or lowered to cause the plow to work deeper or shallower in the ground, as may be desired. The wedge G is adjusted by simply loosening the nuts of the bow F. The plow may be used without the wedge G, if desired. Upon the rear side of the rear part or arm of the upright C are formed notches, into which fit the notches of the vertical plate H, which has also cross-notches formed in its upper edge, to receive the edge of the catch or projection $b^3$, formed upon the beam-plate B. Upon the upper edge of the notched vertical plate H is formed a rearwardly-projecting flange to receive the hook of the bolt I, which passes up through the rear end of the plow-beam A B, and has a hand or lever nut screwed upon its upper end. The notched and flanged plate H is secured to the upright C by a straight bolt, J, which passes through a hole in the rear part of the said upright C, and through a vertical slot in the said plate H. By this construction, by loosening the hook-bolt I, the rear end of the beam A B may be moved to the left or right, to cause the plow to take or leave land; and, by loosening the bolt J, the plate H may be moved up or down to raise or lower the rear end of the plow-beam, to cause the plow to run shallower or deeper in the ground, as may be required. K are the handles, the lower ends of which are attached to the mold-board D and the lower part of the upright C, and which are connected and held in their proper relative position by rounds. The handles K are strengthened by the brace L, the rear end of which is bolted to the land-side handle, and its forward end is secured to the bolt J. The mold-board D and upright C are mutually supported by the bent or crooked brace M, the lower end of which is bolted to the lower part of the upright C. Its middle part or bend is bolted to the upper part of the mold-board D, and its upper end is secured to the upper part of the upright C by the bolt J.

By this construction, the plow-beam A B and handles K are entirely disconnected, and the said plow-beam may be detached without interfering with the said handles.

To detach the plow-beam A B, the hook-bolt I is loosened, and the rear end of the

plow-beam is moved to one side sufficiently to cause the hook of the said bolt to slip off the flange of the plate H. The nuts of the yoke F are loosened, the wedge G is detached, the beam A B turned upon its side, and the bow F is slipped from the knob $c'$, and the beam is detached, leaving every bolt in place.

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

1. The notched and slotted wedge G, in combination with the knob $c'$ of the upright C, the bow F, the plow-beam A B, and the projection or catch $b^2$, substantially as herein shown and described.

2. The notched, flanged, and slotted vertical plate H, the hook-bolt I, and the bolt J, in combination with the rear upper part of the upright C, the plow-beam A B, and the projection or catch $b^3$, substantially as herein shown and described.

JOHN MARTIN TINGLEY.

Witnesses:
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