

(No Model.)

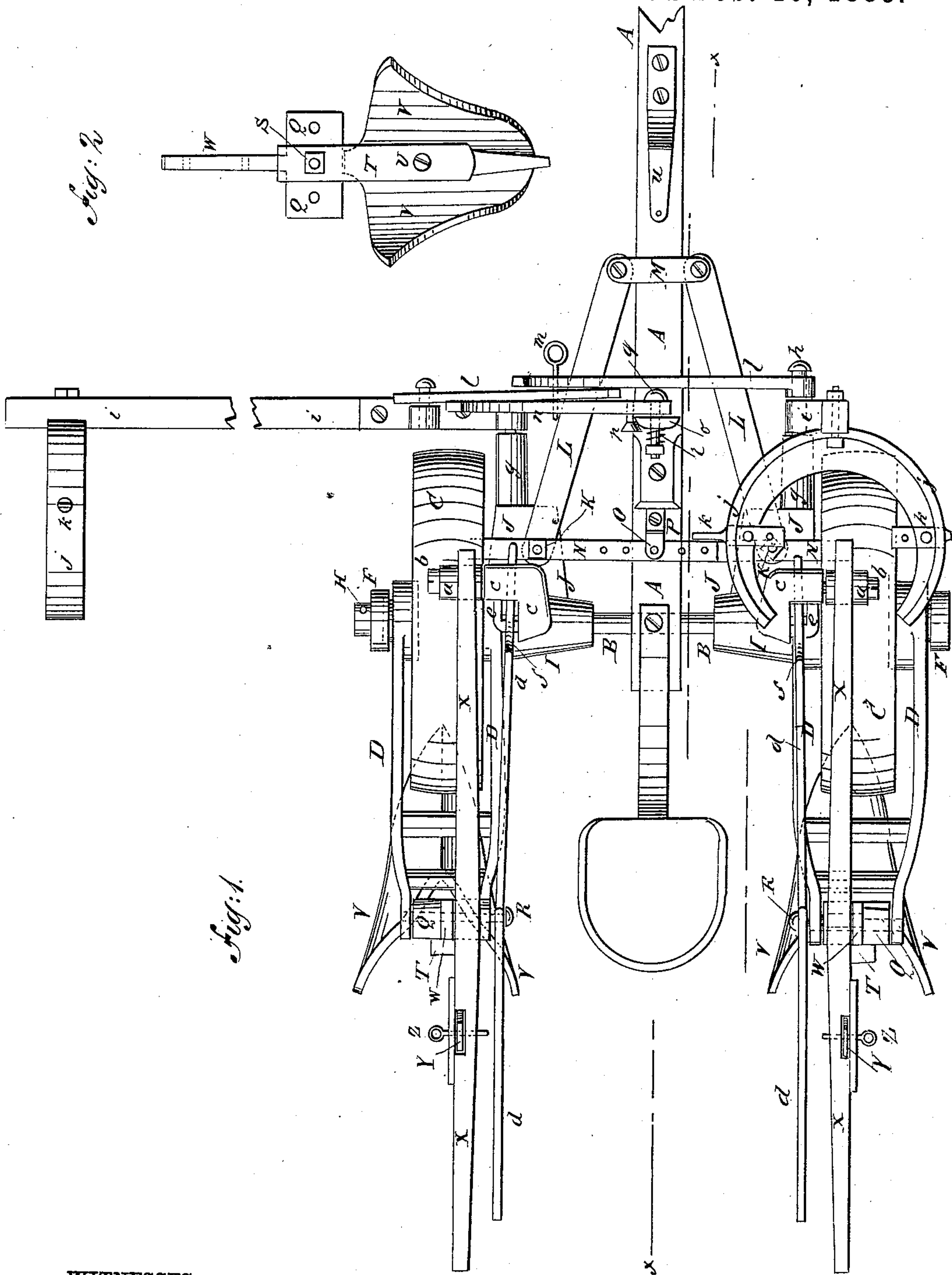
2 Sheets—Sheet 1.

W. H. KING.

LAND MARKER.

No. 312,130.

Patented Feb. 10, 1885.



WITNESSES:

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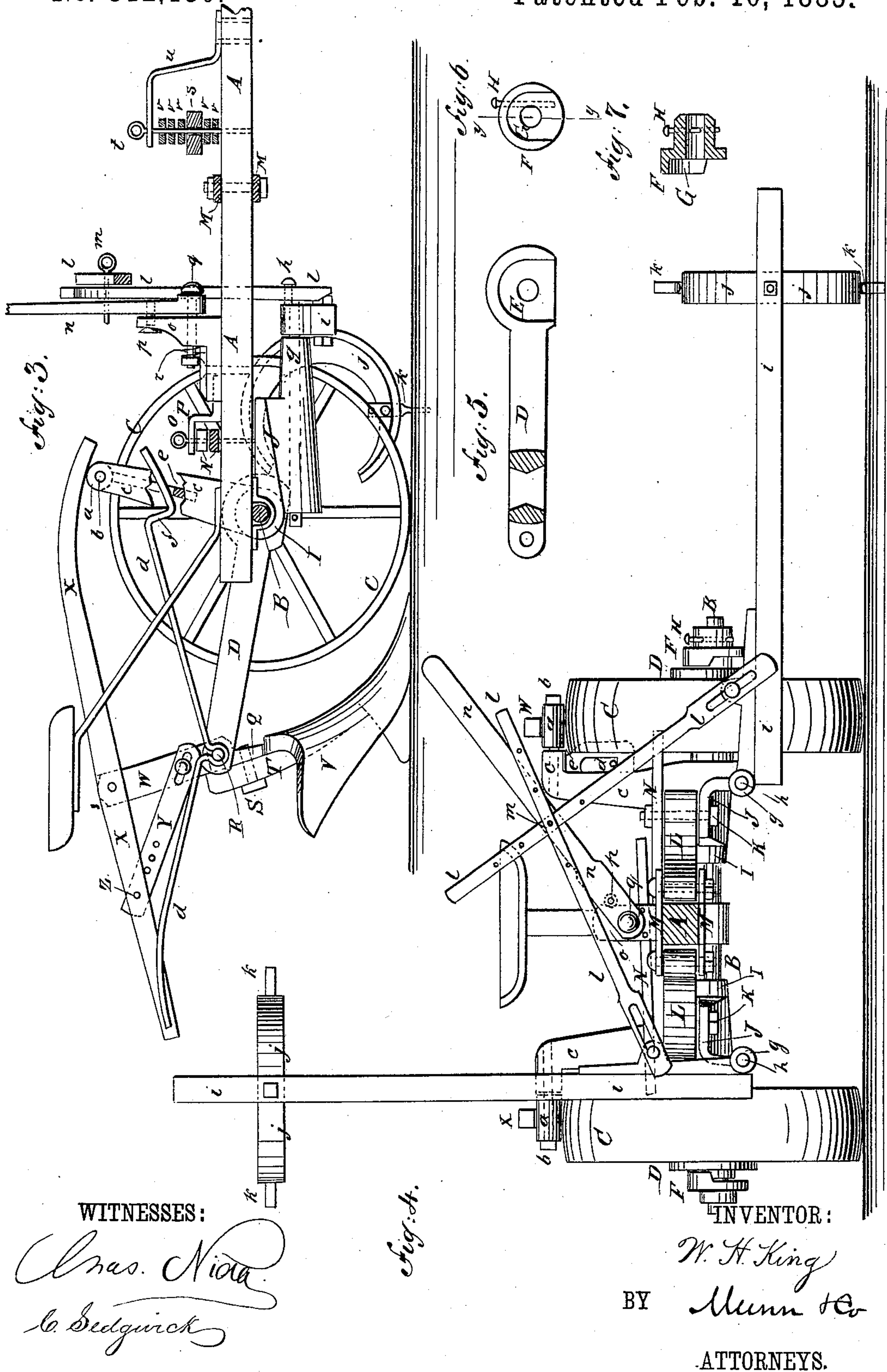
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# UNITED STATES PATENT OFFICE.

WILLIAM H. KING, OF LITTLE SILVER, NEW JERSEY.

## LAND-MARKER.

SPECIFICATION forming part of Letters Patent No. 312,130, dated February 10, 1885.

Application filed April 7, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. KING, of Little Silver, in the county of Monmouth and State of New Jersey, have invented a new and  
5 useful Improvement in Land-Markers, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate  
10 corresponding parts in all the figures.

Figure 1, Sheet 1, is a plan view of one of my improved land-markers. Fig. 2, Sheet 1, is a rear elevation of one of the marking-plows. Fig. 3, Sheet 2, is a sectional side elevation of the machine taken through the line  
15  $x x$ , Fig. 1, and part being broken away. Fig. 4, Sheet 2, is a front elevation of the same, the tongue being shown in section. Fig. 5, Sheet 2, is a sectional side elevation of one of the plow draw-frames. Fig. 6, Sheet 2, is an elevation of the inner side of the dust-guard. Fig. 7, Sheet 2, is a sectional side elevation of the same, taken through the line  $y y$ , Fig. 6.

25 The object of this invention is to facilitate the marking of land and promote convenience in adjusting and controlling land-markers.

The invention consists in a land-marker made with a hub placed upon the shaft at the  
30 inner side of the wheel, and provided with an arm having roller and keeper to engage with the plow-raising lever and the catch-lever, a lug to receive the brace-bar, and the adjusting-bar connected with the tongue, and a long bearing to receive the pivot of the marker-bar. The marker-bar is connected with the  
35 tongue by a slotted adjustable bar, a lever having a catch and a spring, and a supporting-bracket, whereby the marker can be readily raised and lowered. The marking-plow, the plow draw-frame, and the plow-raising lever are connected by a separable standard, a hinged block having an upwardly-projecting  
40 arm and a brace, whereby the plow can be readily detached, adjusted, and replaced. The marker-shoe is made double, is curved in the arc of a circle, and is provided with a projecting marking-pin, so that the said shoe can be used with either arm downward, as will be  
45 hereinafter fully described.

A represents the tongue, to the rear end of which is attached the center of the shaft B. Upon the end parts of the shaft B revolve the wide wheels or rollers C, to smooth the soil in

front of the marking-plows, hereinafter de- 55 scribed.

Upon the shaft B, at the opposite sides of the rollers C, are placed the forward ends of the side bars of the frames D, which ends have  
60 recesses E upon their inner sides to receive the ends of the hubs of the rollers C, so that the said ends will act as guards to protect the bearings of the rollers C from dust and sand. The recesses E are open upon the lower side, as shown in Fig. 5, to allow any dust that may  
65 find its way into the said recesses to drop out. The draw-frames D and the rollers C are kept from outward movement upon the shaft B by collars F, placed upon the said shaft B, and which have recesses G upon their inner  
70 sides to receive the hubs of the ends of the side bars of the frame and prevent dust from finding its way into the said hubs. The recesses G are open upon the lower sides to allow any dust that may enter them to drop out. 75 The collars F are secured in place adjustably by set-screws, or by pins H, passed through them in such positions as to bear against the side of the shaft B, as indicated in Figs. 6 and 7. The rollers C and draw-frames D are kept from  
80 inward movement upon the shaft B by the hubs I, placed upon the said shaft B, and which have angular lugs J upon their forward sides. To the upper wings of the lugs J are secured by a bolt, K, the rear ends of the braces L, 85 the forward ends of which are secured to the tongue A by clamps M, or other suitable means.

To the bolts K are also secured the outer ends of the bars N, the inner ends of which are  
90 secured to the tongue A by a pin, O, passing through a keeper, P, attached to the tongue A through the said bars N, and into or through the said tongue A. Several holes are formed in the bars N to receive the bolts K and the  
95 pin O, so that the hubs I can be readily adjusted closer to or farther from the tongue A, as may be desired.

Q are blocks, through the upper forward parts of which are formed holes to receive pins 100 or bolts R, which also pass through the projecting rear ends of the side bars of the draw-frames D, and thus hang the said blocks from the said frames. To the rear sides of the blocks Q are secured by bolts S the upper 105 ends of the standards T, the lower ends of which are secured by bolts U in the angles of the double mold-board marking-plows V. Sev-



eral holes are formed in the blocks Q to receive the bolts S, so that standards T and plows V can have a slight lateral adjustment by adjusting the said bolts S. Upon the blocks Q are formed upwardly-projecting arms W, to which are secured the levers X and the lower ends of the braces Y. The upper ends of the braces Y are secured to the levers X by pins Z, which pass through the said braces and levers. Several holes are formed in the braces Y to receive the pins Z, so that the position of the levers X can be readily adjusted by moving the said pins Z from one to another of the holes in the braces Y. The rear ends of the levers X project to serve as handles in raising the plows. The forward parts of the levers X rest upon small rollers *a*, placed upon pins *b*, formed upon or attached to the upper ends of the arms *c*, formed upon the upper sides of the hubs I, so that the said rollers *a* will serve as revolving fulcrums for the levers X when raising the plows V from the ground.

To the pivots R of the blocks Q are pivoted levers *d*, the rear ends of which project to or nearly to the rear ends of the levers X, so that they can be readily reached and operated by the plowman. The forward ends of the levers *d* pass through keepers *e*, formed upon or attached to the arms *c*, and have shoulders *f* formed upon them to engage with the lower ends of the said keepers *e* when the plows V are raised, to support the said plows above the ground when turning the machine and when passing from place to place.

Upon the lower wings of the angular lugs J and the lower sides of the hubs I are formed long bearings *g*, through which pass long pins or bolts *h*.

To the forward ends of the pins or bolts *h* are pivoted the inner ends of bars *i*, to the outer ends of which are bolted the centers of the curved double shoes *j*, so that either part of the said shoes may be used for marking the ground.

In the parts of the shoes *j* that rest upon the ground are secured pins *k*, to enter and mark the ground, and which when worn can be readily removed and replaced by new pins.

To the bars *i*, near their inner ends, or to supports attached to the said bars, are pivoted the ends of bars *l*, which are slotted to receive the said pivots to give the bars *i* the play necessary to adjust themselves to the surface of the ground.

The upper parts of the bars *l* are pivoted by pins, screws, or bolts *m*, to the lever *n*, so that the said bars *l* can be operated by operating the lever *n* to raise the bars *i* and shoes *j* from the ground. Several holes are formed in the bars *l* and lever *n* to receive the pin, bolt, or screw *m*, so that the said bars *l* can be readily adjusted as may be required. The lower end of the lever *n* is pivoted to the upright right arm of an elbow-bracket, *o*, the lower arm of which is attached to the tongue. The

lever *n* is provided with a headed projection or pin, *p*, to engage with the side edge of the upright arm of the bracket *o* and hold the said lever in position at either side of the said bracket *o*.

Upon the pivot *q* of the lever *n* is placed a spiral spring, *r*, to hold the said lever *n* against the arm of the bracket *o*, so that the catch of the said lever will not be liable to become accidentally detached. The spring *r* will yield to allow the lever *n* to be moved from one side of the bracket *o* to the other to lower the marker at one side of the machine and raise the one at the other side. The double-tree *s* is secured to the tongue A by the pin *t*, which passes through the said tongue A and the hammer-strap *u*, attached to the said tongue. The upwardly-projecting part of the hammer-strap *u* is made long, so that the point of draft attachment can be raised or lowered by placing blocks *v* upon the pin *t* above or below the said double-tree, or some above and some below it.

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

1. In a land-marker, the combination, with the shaft B, roller C, marker-bar *i*, and tongue A, of the hub I, having arm *c*, lug J, and socket-bearing *g*, the brace-bar L, and the adjusting-bar N, substantially as herein shown and described, whereby the markers will be carried and the wheels and markers can be readily adjusted, as set forth.

2. In a land-marker, the combination, with the plow draw-frame D, the plow-raising lever X, and the arm *c*, of the hub I, having keeper *e* and the catch-lever *d*, substantially as herein shown and described, whereby the plow can be locked in place when raised from the ground, as set forth.

3. In a land-marker, the combination, with the marker-bar *i* and the tongue A, of the bracket *o*, secured to the tongue, the lever *n*, pivoted to said bracket, and provided with the catch *p*, the spring *r* on the pivot of said lever, and the slotted bar *l*, pivoted to the marker-bar and adjustably pivoted to lever *n*, substantially as herein shown and described.

4. In a land-marker, the combination, with the marking-plow V, the draw-frame D, and the lever X, of the apertured block Q, pivoted between the arms of the frame D, and provided with the arm W, the standard T, secured to the said plow and block, and the brace Y, pivoted to the arm W and to the lever X, substantially as herein shown and described.

5. In a land-marker, the marker-shoe *j*, made double, curved in the arc of a circle, and provided with a projecting marking-pin, *k*, substantially as herein shown and described, whereby the said shoe can be used with either arm downward, as set forth.

WILLIAM H. KING.

Witnesses:

THOS. DAVIS, Jr.,  
JOSEPH REILLY.