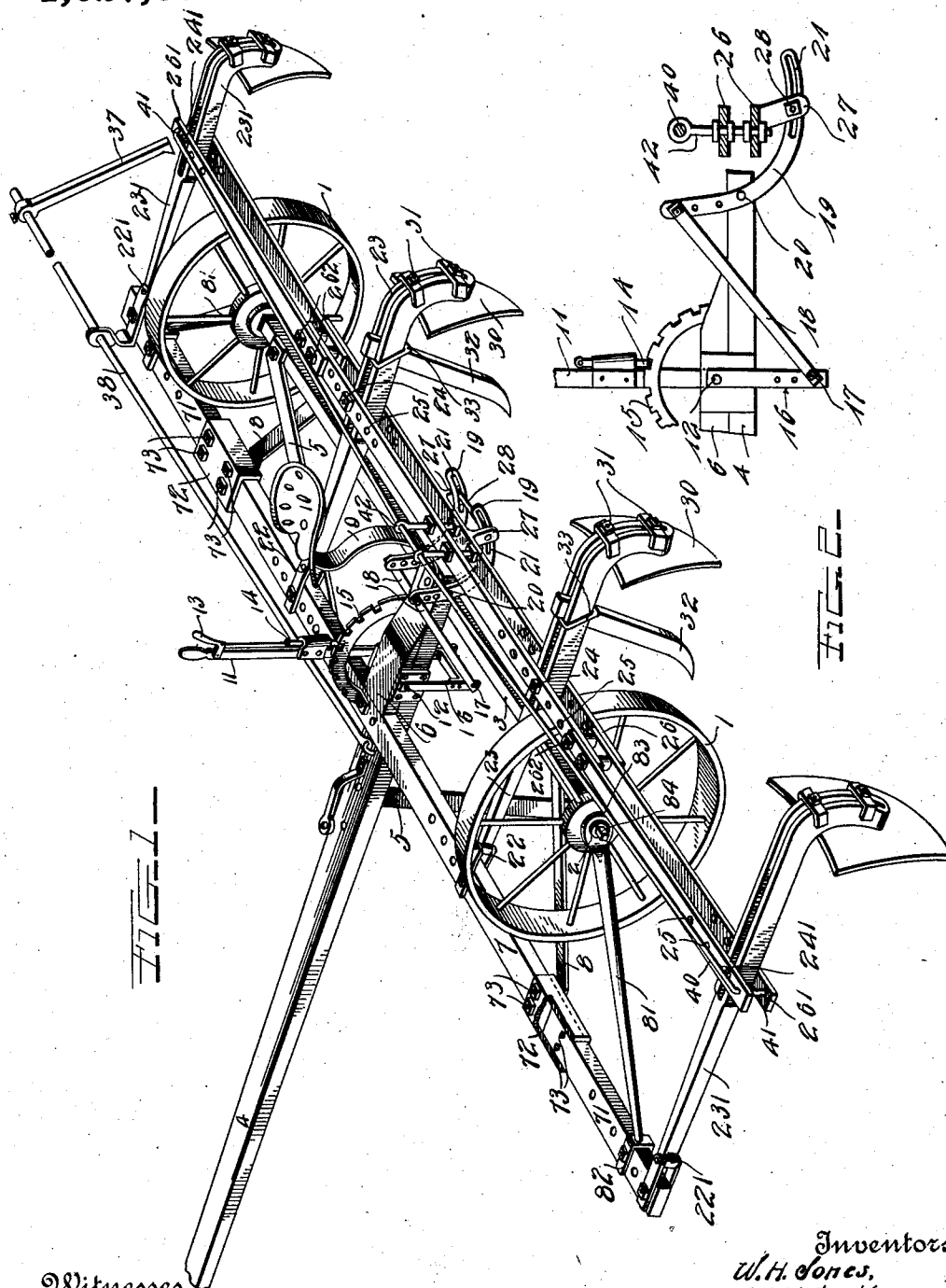


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LAND MARKER.

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Patented May 28, 1912.



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# UNITED STATES PATENT OFFICE.

WILLIAM H. JONES, FRANK K. METCALF, AND JAMES S. WEAR, OF DELTA, COLORADO;  
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## LAND-MARKER.

1,027,609.

Specification of Letters Patent.

Patented May 28, 1912.

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*To all whom it may concern:*

Be it known that we, WILLIAM H. JONES, FRANK K. METCALF, and JAMES S. WEAR, citizens of the United States, residing at Delta, in the county of Delta and State of Colorado, have invented certain new and useful Improvements in Land-Markers; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to the class of seeders and planters, and more especially to land markers which are used in connection therewith; and the object of the same is to produce a combination machine capable of use as a marker in the orchard or for alfalfa or grain, and having attachments by means of which it may be adapted for leveling the ground and for cleaning a furrow.

The following specification describes the construction of our improved machine, reference being had to the drawings in which—

Figure 1 is a general perspective view of this machine; Fig. 2 is an enlarged side elevation of the link mechanism by means of which the cross bar and the parts connected therewith can be elevated with respect to the main frame.

In the drawings the main wheels 1 are journaled on spindles 2 at opposite ends of an axle 3 which is secured beneath the rear end of a tongue 4 and braced by hounds 5. Upon the tongue forward of the axle is mounted a block 6 and forward of that a draft bar 7 standing at right angles to the tongue and extending across and above the hounds and braced from the axle as at 8.

The seat spring 9 rises from the rear end of the axle and supports the seat 10. Just forward of the latter is the main lever 11 pivoted at 12 in one side of the block 6 and having a thumb lever 13 for actuating a latch 14 which moves over a toothed segment 15 as usual. The lower end of the lever is preferably forked as shown at 16 so that it comprises two members below the block 6, and pivoted at 17 to these members are two links 18 leading backward and upward astride the rear end of the tongue to rock levers 19 having L-shaped bodies piv-

oted near their angles at 20 to opposite sides of the tongue and having their rear ends slotted as at 21.

Connected with the draft bar 7 inside the wheels 1 by any suitable form of link hinges 22 are beams 23 each of which is by preference in two members standing parallel and spaced slightly apart so that an adjusting bolt 24 may be passed down through the slot between the members and into one of a series of holes 25 in a cross bar 26 which therefore connects the two beams 23 and extends across the rear of the machine beneath the seat spring 9 and above the rock levers 19. At proper points two lugs 27 depend from this cross bar and are connected by a rod or bolt 28 which passes through the slots 21 in the rock levers 19; and it follows from this construction that when the main lever 11 is adjusted around its pivot 12 its forked lower end 16 through the links 18 swings the two rock levers 19 on their pivots 20 so that their slots 21 slidably engage the bolt 28 and raise or lower the cross bar 26 according to the direction of movement of the main lever. In the upright movements of the cross bar 26, the beams 23 are caused to rise and fall because they are bolted as at 24 to said bar 26 and their front ends are linked or hinged at 22 to the draft bar 7. Therefore the driver sitting on the seat 10 may readily adjust the height of whatever shovels or colters are carried by the beams without the necessity for lifting any more weight than the beams themselves, the devices carried by them, and the cross bar which connects said beams. Especial attention is called to the shape of the rock levers 19 and their slidable connection with the bolt 28 between the lugs 27. By the employment of a number of holes 25 through the cross bar 26, the connection between each beam and said bar 23 can be adjusted laterally so as to set its rear end and whatever is carried thereby more or less inward or outward and thus adapt the machine to rows of different width.

The numeral 30 designates a shovel which may be secured as by a clip 31 to the downturned rear end of each beam, and the shape of this shovel will be determined by the work it is to do.

The numeral 32 designates a colter whose upper end may extend through the slot be-

tween the two members of each beam and be secured therein by a clip or other device 33, and herein again the shape of the colter will depend upon the work it is to do. The vertical adjustment of either a shovel or a colter is effected by the mechanism above described and the lateral adjustment thereof by the setting of the beam on the cross bar 26 as also has been explained.

10 An attachment capable of use with this machine is a side row marker 37 which is attached to the outer end of a long rod 38 (its length depending upon the distance from the machine where the row or line is to be marked) whose inner end lies upon and is detachably secured to the draft bar 7 in any suitable manner; and this entire device is removable when it is not desired for use.

20 When this machine is used on two rows as for alfalfa or grain, its construction will be about as described, but when used for four rows its frame members must be extended laterally for the addition of two more beams and the implements carried by them. In order to lengthen the frame, an extension draft bar 71 is attached to each extremity of the main draft bar 7 by means of a sleeve 72 bolted thereon as at 73; and an oblique brace 81 is connected at its front outer end with this extension bar as at 82 and at its rear end has an eye 83 detachably engaged beneath the nut 84 at the extremity of the axle spindle 2. To the outer end of the extension draft bar 71 at the point 221 is hinged an additional beam 231 whose construction follows that of either beam 23 above described and need not therefore be amplified, but it is important to note that this beam and the implement carried by it travel outside the adjacent wheel. By attaching an additional beam of this kind at one end of the machine it would mark three rows, and by attaching such beams at both ends of the machine it would be extended to mark four rows. In similar manner the cross bar 26 is lengthened by attaching an extension cross bar 261, whose inner end is preferably bolted as at 262 into some of the holes 25, its outer end being bolted as at 241 to the additional beam 231 in the same manner as above described. Here again one or two of these extension cross bars may be added to convert the machine into a three-row or four-row marker. With this attachment we preferably employ a truss rod 40 connected at its extremities as at 41 to the outer ends of the extension cross bars 261, and passing near its center over a strut 42 which is superimposed upon the center of the cross bar 26. We find this truss arrangement quite serviceable in bracing and strengthening an extended cross bar at the rear of the machine, especially where the original cross bar was of considerable length and perhaps where the extensions

themselves are each rather long, but its use is optional and it may be dispensed with if desired.

We have illustrated and described this machine as provided with a tongue 4 where- 70 by two draft animals may be hitched thereto, but it is obvious that instead of the tongue a pair of thills might be attached to the machine if the latter were light and the soil soft so that a single animal could perform the necessary work. However, when the extension members are attached it may be desirable to attach the tongue and employ two horses. 75

For the sake of brevity we will not 80 amplify the uses to which this machine can be put and in fact by supplying it to the user with a number of shovels and colters and perhaps other implements capable of attachment to the rear ends of the beams, 85 the uses of this machine may be amplified almost indefinitely.

What is claimed as new is:

1. In a machine of the class described, the combination with the main wheels and axle, 90 a tongue secured to the latter, and a draft bar extending across the tongue and connected with said axle; of beams loosely connected at their front ends with said bar and extending over the axle and turned down at their rear ends, implements detachably connected with said beams, a cross bar extending in rear of the tongue, means for connecting it with said beams so as to permit their lateral adjustment thereon, L-shaped rock levers 95 pivoted at their angles to opposite sides of said tongue and slotted in their rear ends, lugs depending from said cross bar and connected by a bolt passing loosely through said slots, and a main lever for rocking said rock 100 levers on their pivots. 105

2. In a machine of the class described, the combination with the main wheels and axle, a tongue secured to the latter, and a draft bar extending across the tongue and connected with said axle; of beams loosely connected at their front ends with said bar and extending over the axle and turned down at their rear ends, their bodies being longitudinally slotted, implements detachably connected with said beams, a cross bar extending in rear of the tongue and having a series of holes near each extremity, a bolt for each series removably engaging one of said holes and the slot in one beam, rock levers pivoted to opposite sides of said tongue and slotted in their rear ends, lugs depending from said cross bar and connected by a bolt passing loosely through said slots, and a main lever for rocking said rock levers on their pivots. 110 115 120 125

3. In a machine of the class described, the combination with the main wheels and axle, the tongue secured to the latter, and the draft bar extending across the tongue and connected with said axle; of beams loosely 130

connected at their front ends with said bar and extending over the axle and turned down at their rear ends, implements detachably connected with said beams, a cross bar  
 5 extending in rear of the tongue, means for connecting it with said beams so as to permit their lateral adjustment thereon, L-shaped rock levers pivoted at their angles to opposite sides of said tongue and slotted in  
 10 their rear ends, lugs depending from said cross bar and connected by a bolt passing loosely through said slots, links pivotally connected with the front ends of said levers and passing astride said tongue, a main le-  
 15 ver mounted on a pivot through the tongue and having a forked lower end pivotally connected with the front ends of said links, a toothed segment alongside which said lever moves, and a thumb lever and latch for  
 20 engaging the same.

4. In a machine of the class described, the combination with the running gear including a transverse draft bar, two beams loosely connected at their front ends with said bar  
 25 and carrying implements at their rear ends, a cross bar upon which said beams are adjustably mounted, and means for adjusting the height of the cross bar relative to that of the running gear; of an extension draft bar hav-  
 30 ing a sleeve at its inner end removably engaging the outer end of said main draft bar, a brace connected at its front end with said extension draft bar and removably attached at its rear end to the running gear, an extension  
 35 cross bar removably connected with the extremity of said main cross bar, and a supple-

mental beam loosely linked at its front end to said extension draft bar and connected with the outer end of said extension cross bar.

5. In a machine of the class described, the combination with the running gear including a transverse draft bar, two beams loosely connected at their front ends with said bar and carrying implements at their rear ends,  
 45 a cross bar upon which said beams are adjustably mounted, and means for adjusting the height of the cross bar relative to that of the running gear; of two extension draft bars detachably connected with the extremi-  
 50 ties of said main draft bar, and suitably braced, two extension cross bars detachably connected with the extremities of said main cross bar, a strut superimposed upon the center of the latter, a truss connected with  
 55 the outer ends of said extension cross bars and passing over said strut, and two supplemental beams loosely connected at their front ends with the outer ends of said extension draft bars and having their bodies con-  
 60 nected with the outer ends of said extension cross bars.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

WILLIAM H. JONES.  
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 JAMES S. WEAR.

Witnesses:

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