(No Model.)

R. L. KIRBY.

RIDING HARROW.

No. 473,933. Patented May 3, 1892.

Fig. 1.

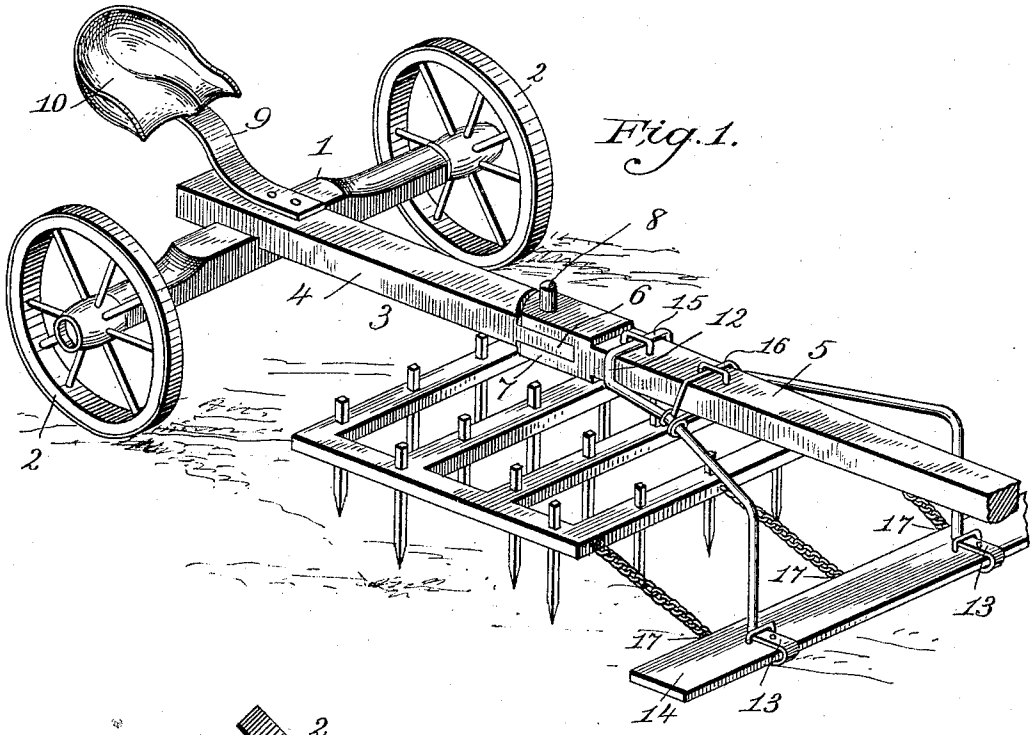
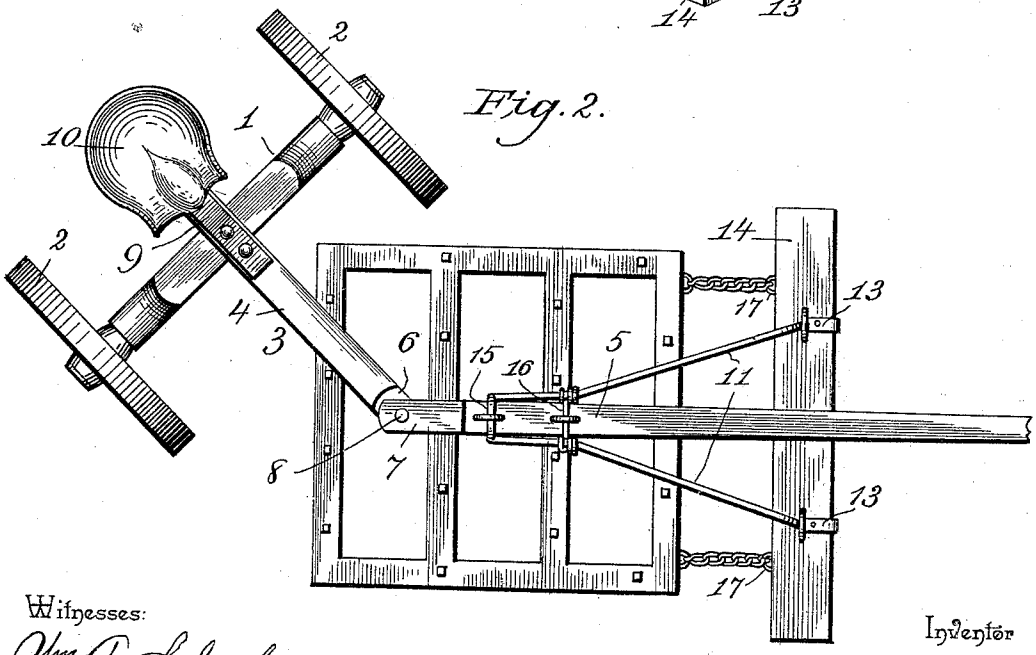


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

REMEMBRANCE L. KIRBY, OF POMEROY, WASHINGTON.

RIDING-HARROW.

SPECIFICATION forming part of Letters Patent No. 473,933, dated May 3, 1892.

Application filed July 2, 1891. Serial No. 398,291. (No model.)

To all whom it may concern:

Be it known that I, REMEMBRANCE L. KIRBY, a citizen of the United States, residing at Pomeroy, in the county of Garfield and State of Washington, have invented a new and useful Riding-Harrow, of which the following is a specification.

This invention relates to improvements in riding-harrows, the objects being to provide a harrow so constructed that the wheels or truck will follow directly in the wake of the harrow and which is capable of turning short at the ends of the travels and close to fences and other obstructions.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a harrow constructed in accordance with my invention. Fig. 2 is a plan of the same in the act of turning.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates the axle of the truck of the harrow, which axle is reduced at its ends to form bearings and has mounted thereon the ground-wheels 2. The upper side of the axle has let therein the rear end of the reach 3, the two being rigidly and securely bolted together, as shown. The reach comprises the rear rigid section 4 and the front hinged section 5. The front end of the section 4 is reduced and perforated, as shown at 6, while the rear end of the front section is bifurcated and perforated, as at 7, to embrace the reduced portion 6, the two being coupled or pivoted together by means of a pivot-pin 8. Upon the rear end of the reach the seat-standard 9 is located, and the driver's seat 10 is supported thereby.

11 designates a V-shaped bail, formed of rod-iron, said bail at its angle portion being offset, as at 12, to embrace the front section 5 of the reach. The two diverging terminals of the bail extend beyond the front end of the reach and are bent downwardly at a right angle, terminating in clevises 13, which connect with a transverse evener-bar 14. Staples 15 are located in the upper side of the front reach-section 5, and a binding-strap 16, of wire of suitable gage, passes through one of the staples around and under the reach and is coiled about the V-shaped bail.

Clevises 17 are located at intervals in the evener-bar, and to the same are attached any number of harrow-sections of any desired style. The evener-bar is of course provided with proper draft appliances, to which the team may be hitched.

In operation the harrow is dragged along in the usual manner by the team, the harrow-sections being dragged over the ground and located under the reach. When the end of the field has been reached and it is desired to turn the harrow, it will be seen that the same may be accomplished within the length of the harrow and team, by reason of the fact that the rear reach-section and truck will swing to a right angle to the front section of the reach and follow the harrows around. In this manner it will be seen that the advantages accruing from a riding-harrow—such as saving the driver the fatigue of following thereafter—are secured without any of the disadvantages arising from the increased length of the harrow, whereby unharrowed spaces are left at the ends of the field. It will be seen that the connection between the evener-bar and the front reach-section is rigid, and hence any movement upon the part of the bar is imparted to the reach, whereby the rear reach-section and truck are immediately influenced to follow a proper course.

Having described my invention, what I claim is—

1. The combination, in a riding-harrow, of the axle carrying ground-wheels, the rear reach-section rigidly connected thereto, the front reach-section pivoted at its rear end to the front end of the rear section, the V-shaped bail secured at its angle to the front section and having its terminals downwardly bent, the evener-bar secured thereto, the harrow-section located under the reach, and the chains connecting the front end of the harrow and evener-bar, substantially as specified.

2. In a harrow, the combination, with the axle having the ground-wheels, the rear reach-section rigidly mounted on the axle and reduced and perforated at its front end, of the front reach-section bifurcated at its rear end to embrace the rear reach-section, the pivot-bolt connecting the two, the V-shaped bail

offset at its angle to embrace the front reach-section and at its front ends downwardly bent and terminating in clevises, the evener-bar connected with the clevises, the staple mounted on the front reach-section, and the binding-wires passed around the reach through the staple and around the terminals of the bail, substantially as specified.

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

REMEMBRANCE L. KIRBY.

Witnesses:
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