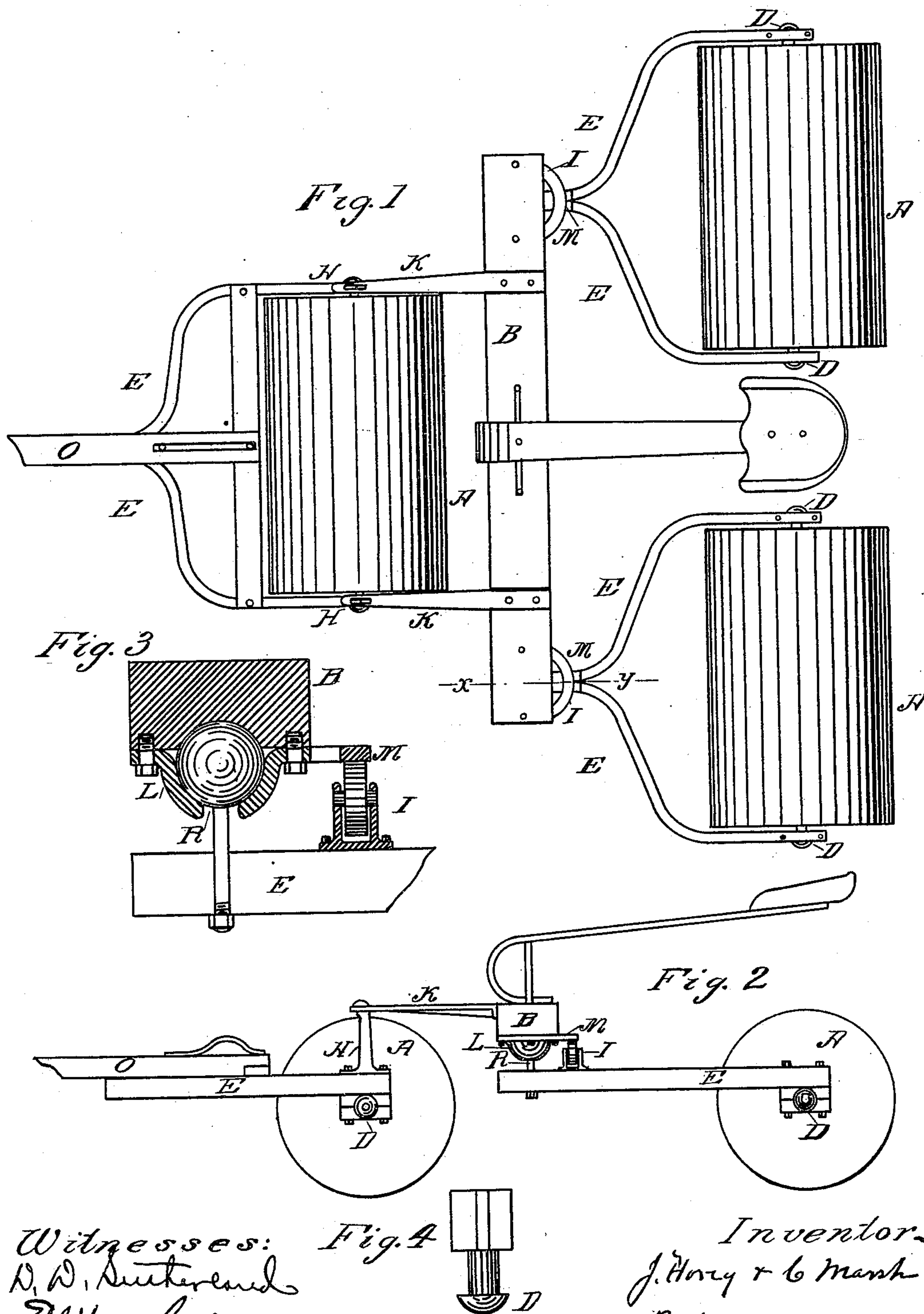


(No Model.)

J. HOREY & C. MARSH.  
LAND ROLLER.

No. 353,679.

Patented Dec. 7, 1886.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

JOHN HOREY AND CANFIELD MARSH, OF SPRINGVALE, WISCONSIN.

## LAND-ROLLER.

SPECIFICATION forming part of Letters Patent No. 353,679, dated December 7, 1886.

Application filed March 15, 1884. Serial No. 124,349. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN HOREY and CANFIELD MARSH, citizens of the United States, residing in the town of Springvale, county of Fond du Lac; and State of Wisconsin, have invented a new and useful Land-Roller, of which the following is a specification.

Our invention relates to improvements in sectional land-rollers composed of three or more rollers connected together; and the objects of our improvements are, first, to provide connections or joints easily attached or detached; second, to relieve the weight of the tongue and draft-frame upon the neck-yoke of the team; third, to support and distribute the weight of the driver's seat and platform; and, fourth, to adapt the working of the several rollers to any and every inequality or variation of ground surface and impediment. We attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the entire machine. Fig. 2 is a side elevation of the machine. Fig. 3 is a sectional view taken on the line *a b x y* of the coupling of the rear rollers. Fig. 4 is a view of the journal or gudgeons.

Similar letters refer to similar parts throughout the several views.

The rollers A, arranged in the system and connected with the tongue and gear O E B H K, constitute the frame-work of the machine. The rollers are journaled in the frames E at their axles by means of a gudgeon provided with a head or collar, D, and are boxed or strapped in the draw-frames E. This gudgeon with its head is wrought or cast in one piece. Above and slightly in front of the axle of the pilot or front roller is raised vertically from the draw-frame E a rigid standard, H, extending to or near the top line of the roller A, and terminating in a hook pointing forward, as shown in Fig. 2. This hook-standard constitutes the draft-connection of the rear parts of the machine.

The platform-bar B extends parallel with, beyond either end of, and slightly above the front roller, and supports the driver's seat and draw-bar of the rear rollers. Affixed to the bar B and extending forward in line with the hook-standards H, are the arms K, which, by means of slotted eyes through their front ends, engage with the hooks and form the coupling of the front roller-frame and frame B K.

It is apparent that the raising up of the

tongue O, and consequent tipping backward of the hook-standards H sufficiently to hook or unhook parts H and K, will furnish a simple method of coupling or uncoupling the front and rear parts of the machine; and, further, that the leverage of the standard H, acted upon by the weight or draft of the rear rollers through the arms K, will, when the machine is in operation, materially relieve the weight of the tongue and front frame, O E, upon the neck-yoke of the team.

The driver's platform or seat is upon the bar B. The ends of this bar are coupled to the bails or frames of the rear rollers, respectively, by means of the ball-and-socket joint R L, bolted to the under side of the bar B and top end of the rear bail, E. This use of a ball-and-socket joint for coupling these parts allows of free play in any and every direction or position assumed by the rear rollers, by reason of inequalities, undulations, or impediments in the surface of the land passed over; but to equalize the weight of the driver and to guard against undue depressions of the ends of the bar B, we provide the ends of the bar B with shoes or plates M, extending rearward far enough to clear the coupling R L, and bearing upon the caster I, which is a small wheel turning on an arbor mounted upon the joined end of the rear roller bails or frames, E.

Having thus described the construction and operation of our improvements, we claim as our joint invention and desire to secure by Letters Patent—

1. In a land-roller, the standard H, hooked at the top, in combination with the arm K, provided with slotted eye, the roller frame or bail E, the tongue O, and platform or draft bar B, substantially as and for the purposes described.

2. The shoe-plate M and its wheeled bearing or caster I, in combination with the bar B, coupling R L, and rear roller, bail, or frame, E, substantially as and for the purposes set forth.

3. In a land-roller, the combination of the rollers A A A, bails E E E, hooked standards H H, tongue O, slotted arms K K, platform-bar B, ball-and-socket-joint coupling R L, shoe M, and caster I, all arranged as and for the purposes described.

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Witnesses:

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