(Model.)

A. J. STEVENS.

LAND ROLLER.

No. 273,909. Patented Mar. 13, 1883.

Fig. 1.

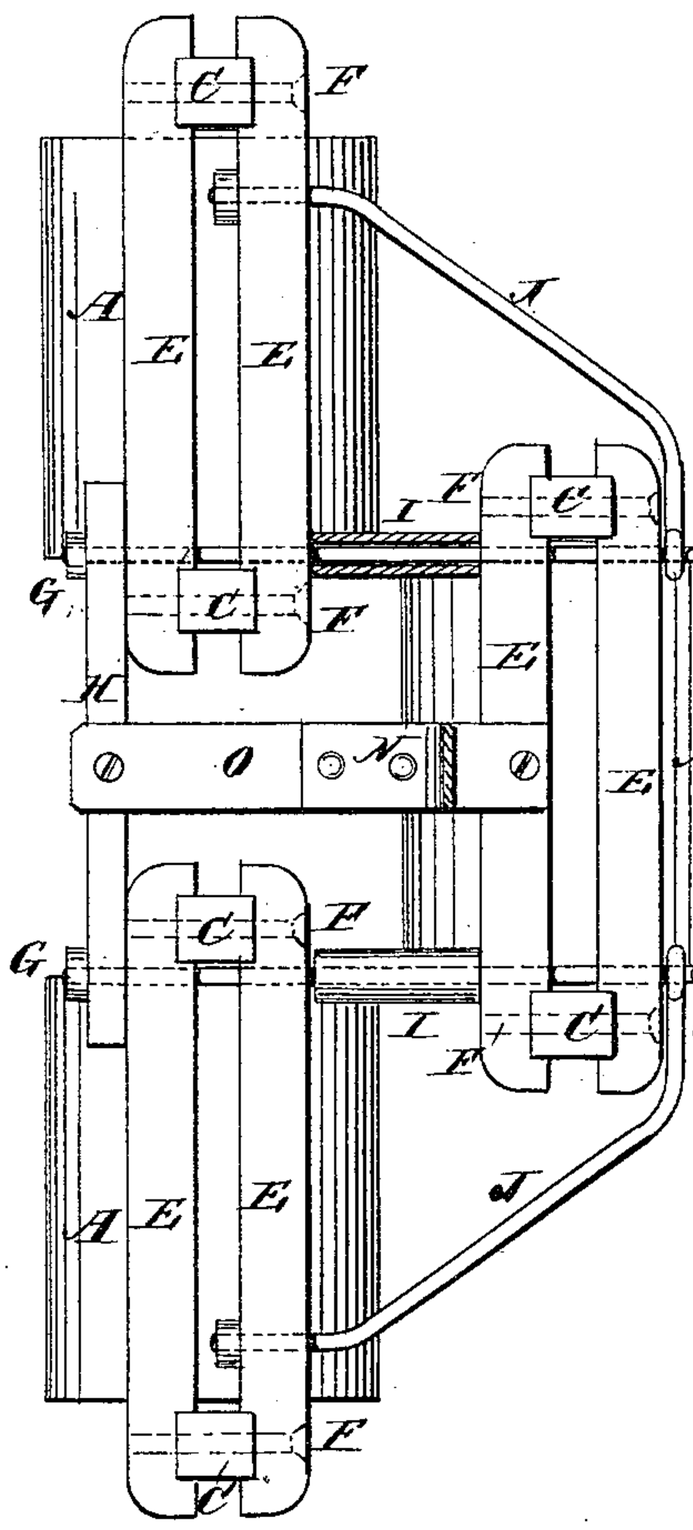


Fig. 3.

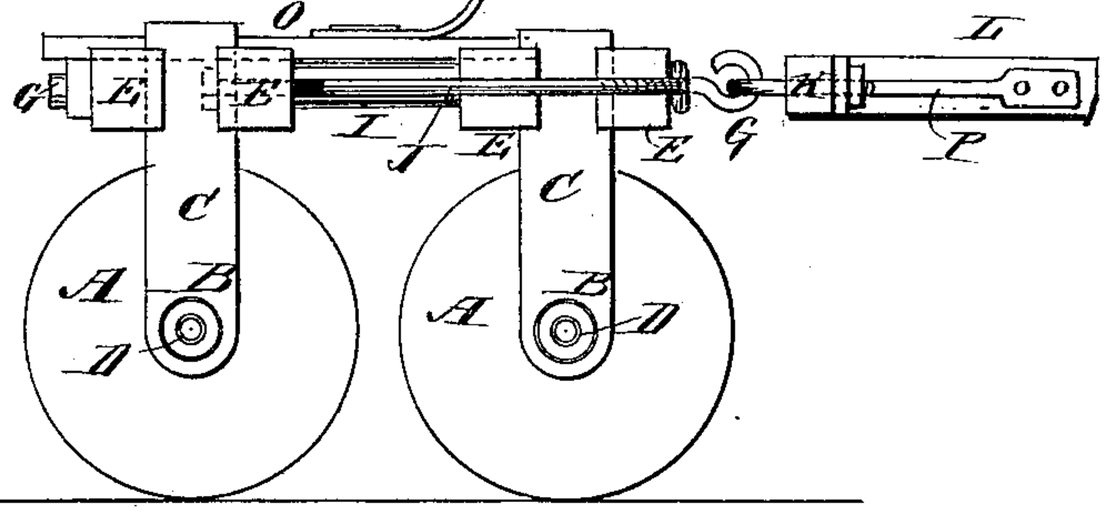
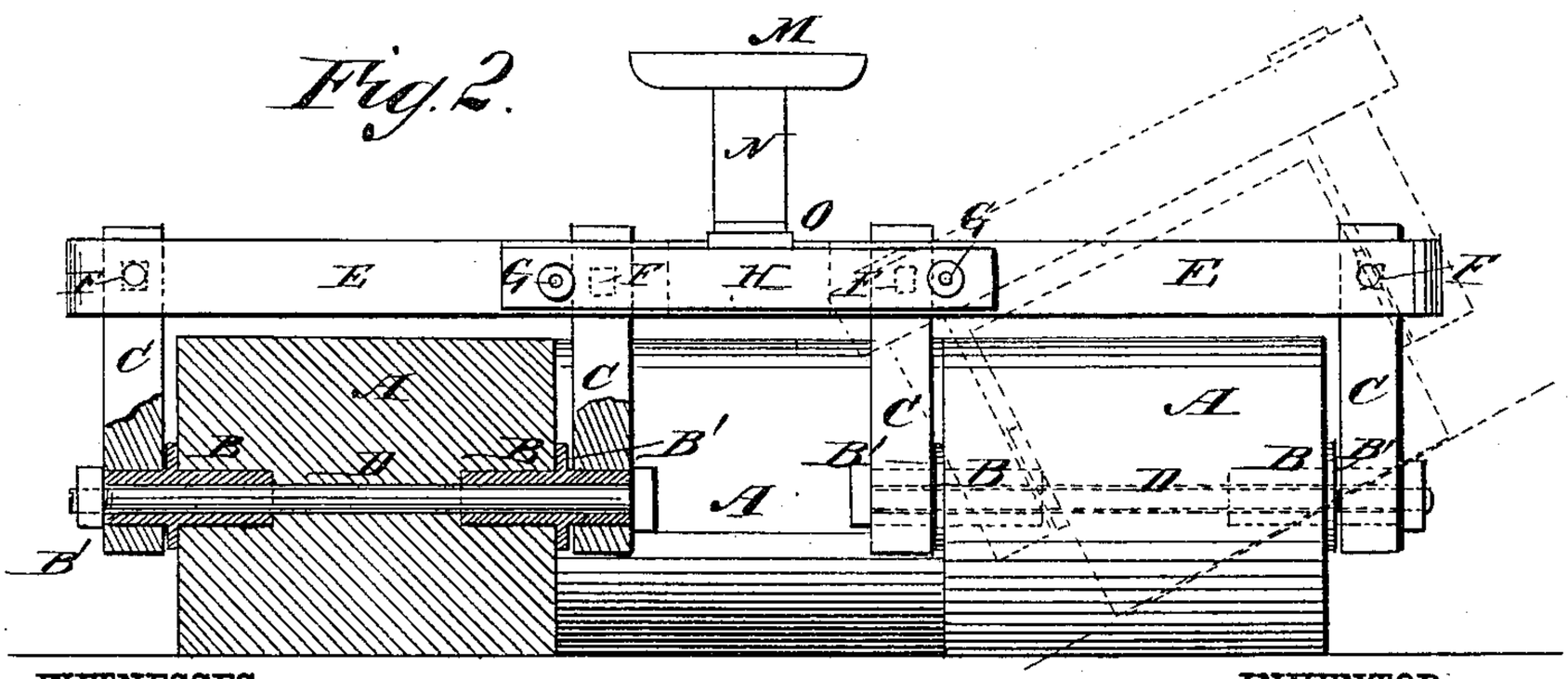


Fig. 2.



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UNITED STATES PATENT OFFICE.

ABRAHAM J. STEVENS, OF OWANECO, ILLINOIS.

LAND-ROLLER.

SPECIFICATION forming part of Letters Patent No. 273,909, dated March 13, 1883.

Application filed June 23, 1882. (Model.)

To all whom it may concern:

Be it known that I, ABRAHAM J. STEVENS, of Owaneco, in the county of Christian and State of Illinois, have invented a new and useful Improvement in Land-Rollers, 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 corresponding parts in all the figures.

Figure 1 is a plan view of my improvement, partly in section. Fig. 2 is a rear elevation of the same, partly in section. Fig. 3 is a side elevation of the same.

The object of this invention is to promote convenience and lessen the expense in the construction of land-rollers.

The invention consists in the peculiar construction and arrangement of parts, as hereinafter more fully described, and pointed out in the claims.

A are the section cylinders or rollers, three of which are used, the middle cylinder being placed in front of the space between the two end cylinders. In the central line of each cylinder A is formed a perforation, in the end parts of which are placed the inner ends of hollow gudgeons B, the outer ends of which revolve in bearings in the lower ends of hanging bars C. The gudgeons B have flanges B′ around their middle parts, which come between the ends of the cylinders A and the hangers C, and serve as washers to prevent friction between the said cylinders and hangers. The flanges B′ also prevent the gudgeons from having any longitudinal movement. The gudgeons B can be further secured in place by a rod, D, passing through the cylinder A and its two gudgeons B, and secured in place by a nut screwed upon its end, so that shrinkage or looseness can be taken up by tightening the said nut. The upper ends of the hangers C are inserted between the ends of two bars, E, where they are secured in place by bolts or screws F. The upper ends of the hangers C have shallow notches formed in their front and rear sides, and are inserted in corresponding notches in the adjacent sides of the ends of the bars E. With this construction the hangers C will be securely held from lateral movement upon the bolts F. With this construction, also, the frame of each cylinder will be formed of four bars.

G are rods which pass through the ends of the forward pair of bars E and through the inner ends of the rear pairs of bars E, and have nuts screwed upon their rear ends. The rear ends of the rods G also pass through the ends of the connecting-bar H, by which the rear pairs of bars E are connected and held in their proper relative positions. The forward bars E are kept at the proper distance from the rear pair of bars E by tubular washers I, placed upon the rods G, as shown in Figs. 1 and 3.

J are rods which have eyes formed upon their forward ends to receive the forward parts of the rods G. The rods J are bent to the rearward, pass around the ends of the forward pair of bars E, and pass through the forward bar of the rear pairs of bars E, and have nuts screwed upon their rear ends. The rods J may pass through both bars of the rear pairs, if desired. With this construction the rear cylinders can adjust themselves to the uneven or inclined surface of the land being rolled.

Upon the forward end of the rods G are formed hooks or eyes to engage with the corresponding eyes of eyebolts Q, which pass through the ends of the cross-bar K of the tongue L and through the ends of the braces P of the tongue, and have nuts screwed upon their forward ends to hinge the said tongue to the frame of the roller, and thus allow the roller to adjust itself to uneven land.

M is the driver's seat, the standard N of which is attached to a bar, O, secured at its forward end to the forward bars E and at its rear end to the connecting-bar H.

The seat-standard N can be secured adjustably to the bar O, so that the driver's weight can be made to properly balance the machine.

When one side of the hangers C becomes worn, the rods G can be detached and reversed, bringing the tongue L to the other side of the machine, so that the machine will be drawn with the two rollers forward, and the wear will be upon the other side of the hangers, thus making the machine much more durable.

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

1. In a land-roller, the combination, with the

cylinders A and the hangers C, of the hollow gudgeons B, having central flanges, B′, and the rods D, substantially as herein shown and described, whereby the said cylinders can be readily pivoted to the said hangers, as set forth.

2. In a land-roller, the combination, with the cylinder-frames C E, of the connecting-bars H, the connecting-rods G, tubular washers I, the bent rods J, and the tongue L, substantially as shown and described, whereby the rollers can adjust themselves to the surface of the ground and provision made for drawing the machine in either direction, as and for the purpose set forth.

3. In a land-roller, the combination, with the cylinder-frames C E and the connecting-bars H, of the tubular washers I, the connecting-rods G, having eyes on their forward ends, the tongue provided with the eyebolts Q, and the bent rods J, having their rear ends secured to the cylinder-frames, and provided with eyes on their forward ends to receive the connecting-rods G, substantially as and for the purpose set forth.

ABRAHAM JOHN STEVENS.

Witnesses:
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A. DEPEW.