

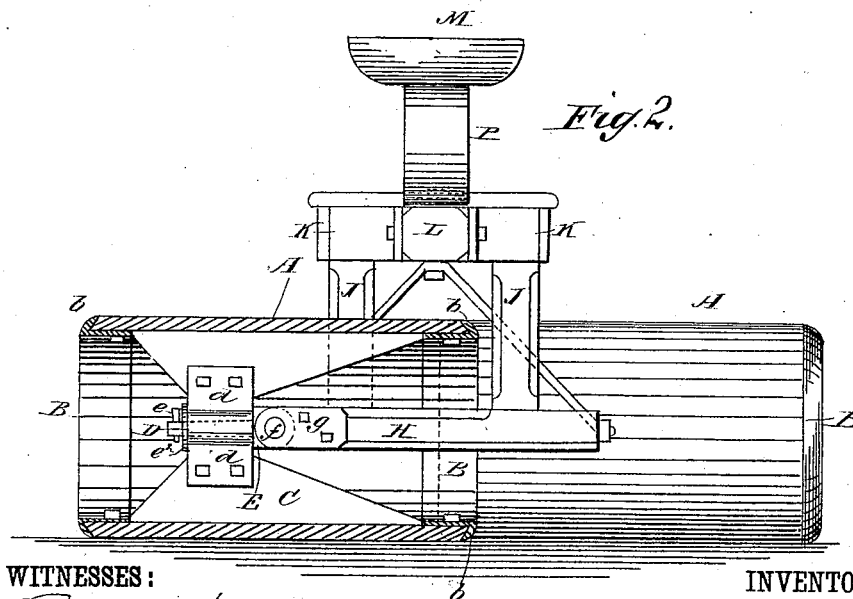
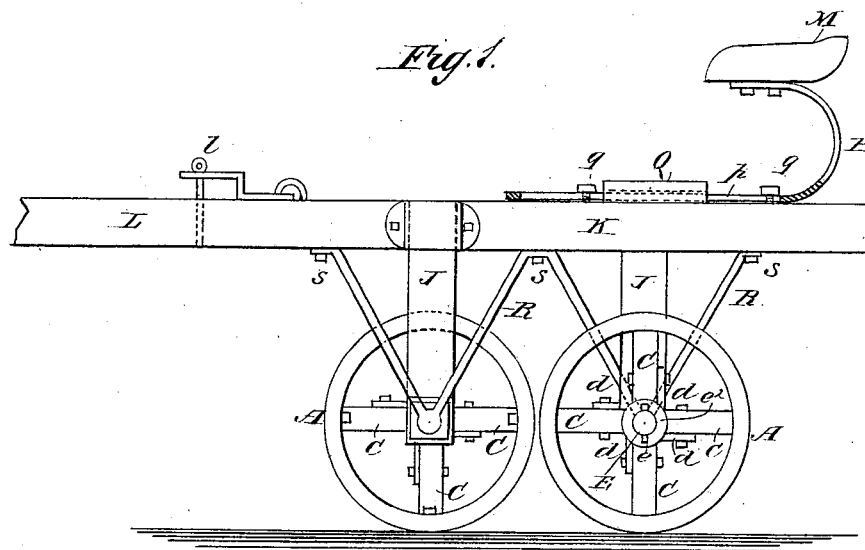
(No Model.)

2 Sheets—Sheet 1.

R. A. HORNING.
LAND ROLLER.

No. 266,155.

Patented Oct. 17, 1882.



WITNESSES:

Francis McArdle
C. Sedgwick

INVENTOR:

R. A. Horning
BY *Munn & Co*
ATTORNEYS.

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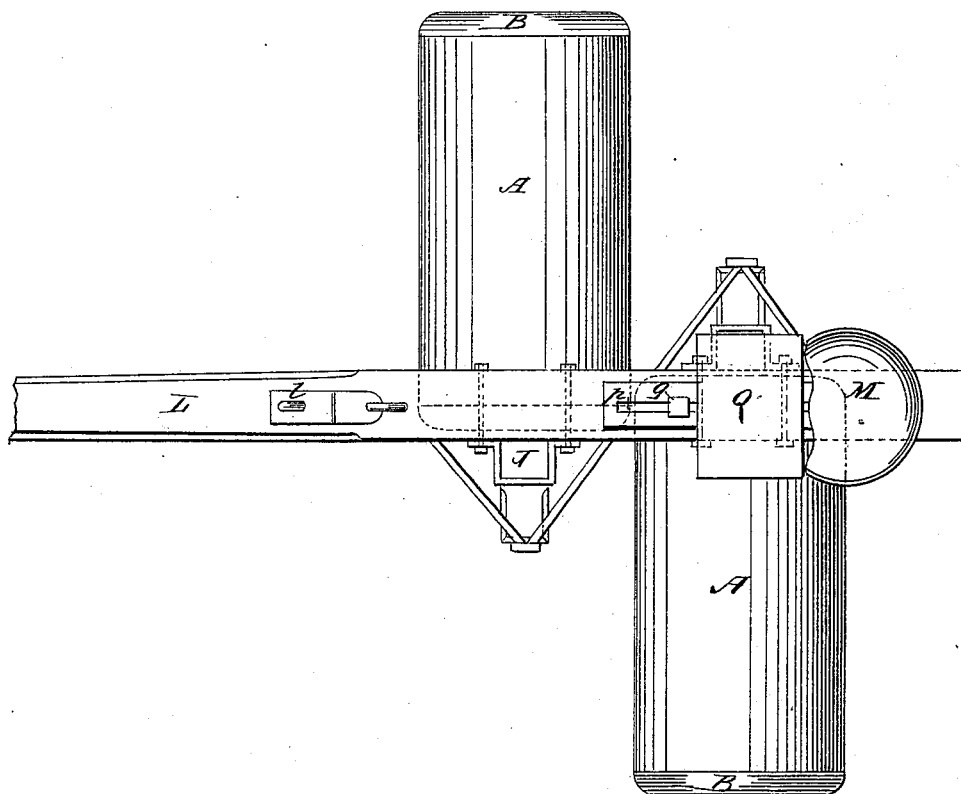
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Fig. 3.



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UNITED STATES PATENT OFFICE.

ROBERT A. HORNING, OF BROOKVILLE, ASSIGNOR OF ONE-HALF TO GEORGE D. AND JOHN L. REYNOLDS, OF LANARK, ILLINOIS.

LAND-ROLLER.

SPECIFICATION forming part of Letters Patent No. 266,155, dated October 17, 1882.

Application filed March 30, 1882. (No model.)

To all whom it may concern:

Be it known that I, ROBERT ALLEN HORNING, of Brookville, in the county of Ogle 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.

My invention consists in a novel construction and arrangement and combination of two cylinders, one working diagonally in advance of the other, a frame-work to which said cylinders are connected, and certain details of construction and arrangement of the hubs, axles, braces, and an adjustable seat, as hereinafter more particularly described.

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

Figure 1 is a side view of an apparatus embodying my improvements. Fig. 2 is a back view, partly in section. Fig. 3 is a plan view.

A represents a cylinder composed of staves having their ends beveled, and fitting into a head consisting of a band, B, having its outer edge turned outward and backward into a flange, *b*, the outer surface of which is rounded and the inner surface forms a V-shaped peripheral groove. Each cylinder has two of these heads, the grooves of which embrace the beveled ends of the staves, and thus support them in every direction, the bands being bolted at intervals to several of the staves. From four or more equidistant points on the interior of the cylinder four radial braces, C, extend toward the center, where they are attached to a hub, D, provided with radial wings *d*, which are bolted to said braces C. In the hub D works an axle, E, the outer end of which is provided with a pin, *e*, and washer *e*², and the inner end with a transverse pivot, *f*, which is engaged by the outer ends of two clamping-plates, *g*, having their inner ends bolted to one end of a horizontal beam, H, carried by the lower end of a hanger, J, the upper end of which is attached to a horizontal rail, K. Two of these rails are arranged side by side, and connected at front and rear by cross-beams, to the forward one of which is attached the pole or tongue L, provided with a bolt, *l*, for con-

necting a whiffletree. The two cylinders A are arranged with one diagonally in advance of the other, with one of the hangers J depending from the outer side of one of the rails K and the other hanger depending from the outer side of the other rail. The rails K, hangers J, beams H, and axles E are connected and braced by a brace consisting of an iron bar, R, bent in the shape of the letter W, with one end bolted to one rail, the other end bolted to the other rail, and the intermediate upper angle bolted to the tongue L or other suitable part of the frame, at about the center thereof, while the lower angles are formed into bearings, which engage with the outer ends of the axles E. The seat M is carried by the upper end of a curved elastic bar, P, the lower end of which passes under a foot-board, Q, and rests upon the top of the tongue L or the frame formed by the rails and their connecting cross-bars. In the bar P is a longitudinal slot, *p*, through which bolts *q* pass into the tongue or frame, by which means the seat is held in place and provision is made for adjusting it forward or backward in order to accommodate it to the weight of the driver.

The advantages of my invention are: The rollers being diagonally one in advance of the other, provision is made for allowing their inner ends to pass beyond a line drawn through the longitudinal center of the frame, and thus avoid the break in the work which would occur if the two rollers were in the same axial line. By means of the rounded ends the machine is enabled to turn more easily, and by means of the pivots *f* each roller is enabled to automatically adjust itself to inequalities of the ground independently of the other.

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

1. A roller consisting of end-beveled staves, two bands, B B, turned backward to form a flange, *b*, rounded on the outside and V-shaped on the inside, radial braces, and a hub having radial wings bolted to said braces, as shown and described.

2. In a land-roller, the combination of the cylinders A, the radial braces C, and the hubs

D, provided with the radial wings *d*, substantially as and for the purposes herein described.

3. In a land-roller, the combination, with the hub D, beam H, and clamping plates *g*, of the
5 axles E, provided with the horizontal transverse pivots *f*, substantially as and for the purpose herein described.

4. The combination, with the axles, rails, and

tongue, of the W-braces R, having a bearing at each angle, a connection with one of the rails
at each free end, and attached in the middle to
the tongue, as shown and described. 10

ROBERT ALLEN HORNING.

Witnesses:

C. J. DOWNING,

D. W. DAME.