J. W. DILLEY.

Land Roller.

No. 110,554. Patented Dec. 27, 1870.

Fig. 1

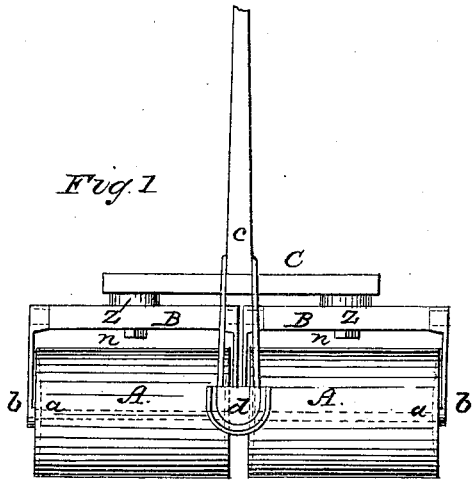


Fig. 2

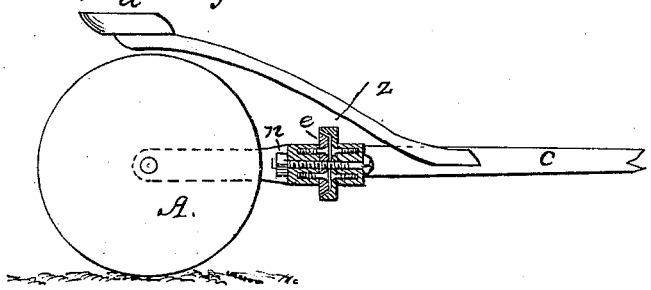


Fig. 3

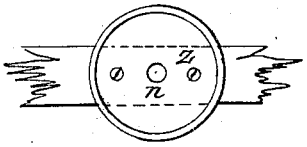
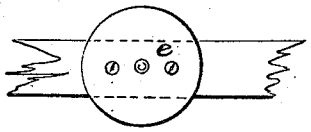


Fig. 4



Witnesses

Chas Kenyon.
Edwd P Kain

Inventor

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attys

United States Patent Office.

JOHN W. DILLEY, OF MACOMB, ILLINOIS.

Letters Patent No. 110,554, dated December 27, 1870.

IMPROVEMENT IN LAND-ROLLERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN W. DILLEY, of Macomb, in the county of McDonough and State of Illinois, have invented a new and valuable Improvement in Land-Rollers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a top view of my invention.

Figure 2 is a vertical longitudinal section thereof, taken through the joint.

Figures 3 and 4 are details.

My invention has relation to an improvement in land-rollers; and

It consists in the construction and novel arrangement thereof, whereby the axes of the rollers are caused to lie always in the same vertical plane notwithstanding the unevenness of the land, and thereby to a great extent lessening the draft.

The letters A A of the drawing designate the rollers, whose journals, *a a*, bear in the ends of the metal arms *b b*, which are secured by mortise and tenon-joint to the ends of the transverse bars B B.

C represents the main cross-beam, which connects the rollers, and to which the pole *c* and seat *d* are attached.

The bars B B are thus attached to the beam C. At about the center of the front face of each bar B a thick circular plate, *e*, with a beveled edge, giving it the form of a frustum of a cone, is attached by means of screws or bolts. This plate has a central opening corresponding with an aperture extending entirely through the bar B to the rear thereof.

z z represent circular plates, attached one at each end of the beam C, on the rear surface thereof. Each of these plates is provided with a flanch around its edge, the inner wall of which is beveled to correspond with the beveled edge of the plate *e*.

A screw-bolt, *n*, extends through the beam C at each end, and through the center of each plate *z*.

The bars B are fastened to the beam C by inserting the screw-bolt *n* of each bar through the aperture in the center of each plate *e*, and securing the same by a nut screwed on from the rear of the bar.

The plate *e* will play in its metal seat *n* freely, allowing rotation in the vertical plane; but, on account of the breadth and construction of these plates, lateral deviation will be almost entirely prevented.

Therefore, the plane in which the axes of the rollers move will always be perpendicular to the line of draft, and the traction will be less than when lateral deviation in the joint is allowed.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the coupling *z* with the bars B and C, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

J. W. DILLEY.

Witnesses:

B. F. PINCKLY,

J. N. PEARSON.