

W. WILLIAMS.
Land-Rollers.

No. 144,489.

Patented Nov. 11, 1873.

Figure 3.

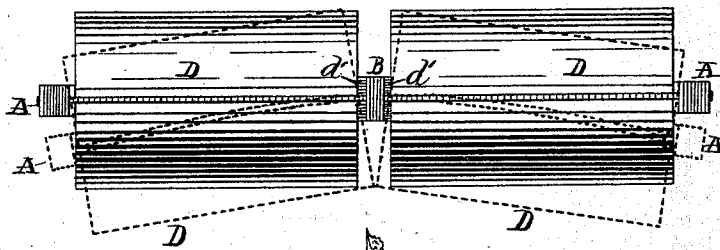


Figure 2.

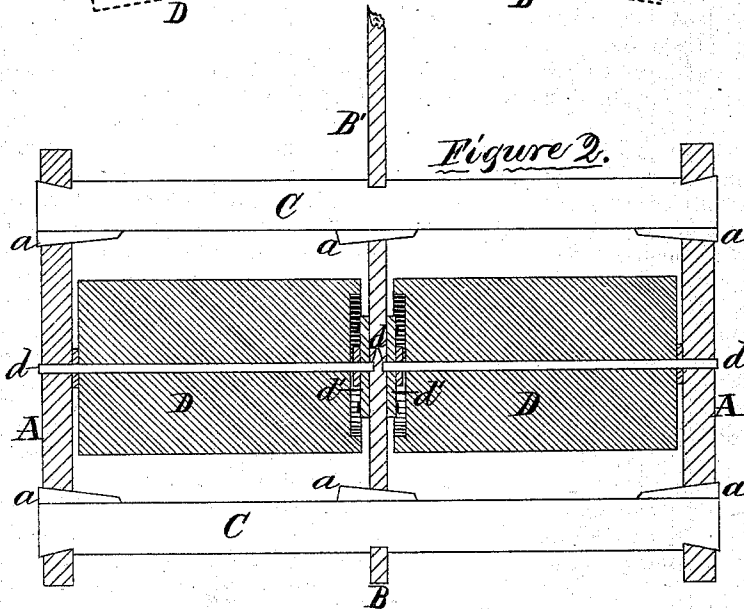
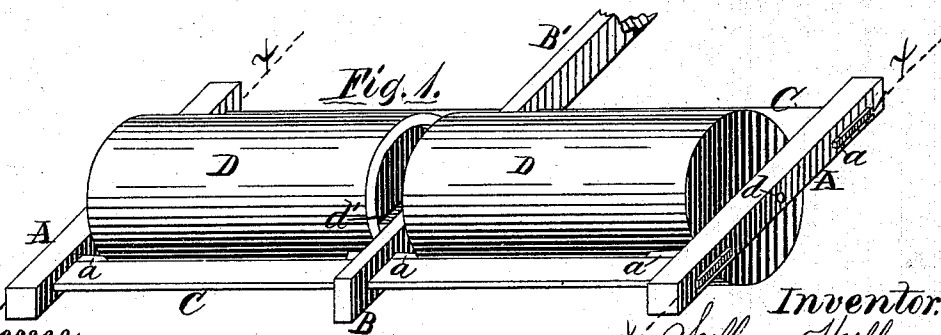


Fig. 1.



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM WILLIAMS, OF NEW BERLIN, ILLINOIS.

IMPROVEMENT IN LAND-ROLLERS.

Specification forming part of Letters Patent No. **144,489**, dated November 11, 1873; application filed September 2, 1873.

To all whom it may concern:

Be it known that I, WILLIAM WILLIAMS, of New Berlin, county of Sangamon and State of Illinois, have invented certain Improvements in Land-Rollers, of which the following is a specification:

The nature of my invention relates to improvements in that class of land-rollers in which two or more rollers are used, and which are constructed so that the rollers may adapt themselves to inequalities and irregularities of the surface of the soil; and the invention consists in suspending the rollers by suitable journals in a rectangular frame, the transverse bars of which are made thin so as to render them flexible, and thereby allow the rollers to adapt themselves to irregularities of the surface of the soil, all as hereinafter fully described.

In the accompanying drawings, Figure 1 is a perspective view of a machine embodying my invention. Fig. 2 is a horizontal sectional view of Fig. 1 on the line *x x*, and Fig. 3 is a rear view.

Referring to the parts by letters, letters A, A, B, and C C represent the parts of a rectangular frame, of which A A are the side bars; B, a central bar, parallel with the side bars A A, and projecting forward to form the tongue

B'; and C C are the transverse bars, which are made thin enough to make them flexible vertically, and broad enough to give them the required strength. D D are the rollers, constructed in the usual manner of any suitable material, and suspended by journals *d d d* in the frame-pieces A A B. The adjacent ends of the rollers D D are concave, as shown at Fig. 2, so that blocks *d' d'* may be placed on the bar B to strengthen it and furnish better bearings for the journals. The transverse bars C C are secured in mortises in the bars A A B by wedges *a a a a a*, as plainly shown at Fig. 2.

The operation of my invention is simple, and is plainly shown at Fig. 3 by dotted lines, which show the manner in which the transverse bars C C may be bent archwise to allow the rollers D D to adapt themselves to inequalities of surface of the soil.

What I claim as my invention is—

The flexible bars C C, arranged to operate with the bars A A and B, and with the rollers D D and blocks *d' d'*, substantially as and for the purpose specified.

WILLIAM WILLIAMS.

Witnesses:

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