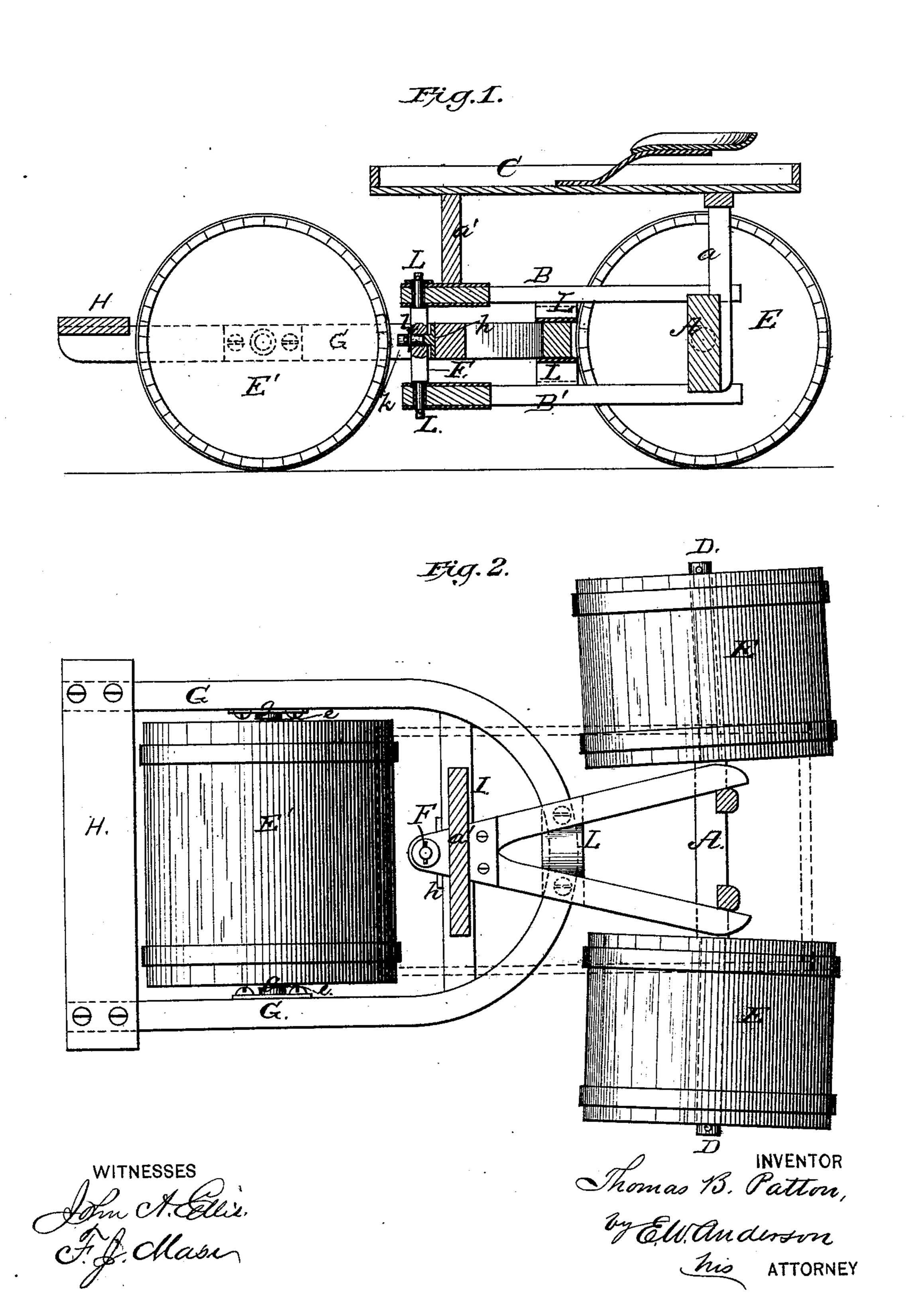
T. B. PATTON.
Land Roller.

No. 229,746.

Patented July 6, 1880.



## United States Patent Office.

THOMAS B. PATTON, OF SALTSBURG, PENNSYLVANIA.

## LAND-ROLLER.

SPECIFICATION forming part of Letters Patent No. 229,746, dated July 6, 1880. Application filed January 6, 1880.

To all whom it may concern:

Be it known that I, THOMAS B. PATTON, of Saltsburg, in the county of Indiana and State of Pennsylvania, have invented a new and 5 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 drawings, making a 10 part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal vertical section of my improved land-roller, and Fig. 2 is a top view of 15 the same.

This invention has relation to land-rollers; and it consists in the construction and novel arrangement of the axle-tree in the rear gearing, having forward-trending spindles for 20 the rear rollers; the double coupling extending forward from the axle-tree and provided with upper and lower rock-bearings; the bent frame carrying the front roller and extending by its bow between the rock-bearings of 25 the coupling and the front swivel-bar of the latter, to which the bent front frame or gear is pivoted, all as hereinafter shown and described.

In the accompanying drawings, the letter A 30 designates the axle-tree in the rear gearing, which is made somewhat broad vertically, in order to separate sufficiently the upper and lower branches, B and B', of the double coupling, which are attached thereto, and to pro-35 vide for the secure attachment of the standards a of the box C, which is usually designed to be carried at a sufficient height to allow the front roller to turn under its front portion. The spindles D of this axle-tree slope 4° or trend forward, so that the rollers will work from the ends of said spindles and will not wear out the linchpins.

E represents the rear rollers, which may be

made in any ordinary manner. The branches B and B' of the double coupling are angular in shape, having their bases attached to the broad middle portion of the axle-tree and their apices or forward ends provided with journal-seats for the pivotal ends 5° of the front swivel-bar, F, through the middle portion of which passes the pivotal connection of the front gearing. This front gearing is a

bent frame, G, which is made in U form, having its ends secured to a front transverse bar, H, and carrying between its branches the front 55 roller, E', which is pivoted by means of gudgeons e, which work in cups g, attached to the inside of said branches. Across the rear or bowed portion of this front gearing extends a transverse brace, I, to the front of which is 60 fastened a bearing-plate, h, having a forwardprojecting pivot-pin, k, which extends through the seat l in the middle portion of the swivelbar F, forming the connection therewith.

L Lindicate curved or arc-shaped rock-bear- 65 ings, which are attached, respectively, to the upper and lower branches of the double coupling, and extend transversely, with their convexities toward each other. Between these rock-bearings is located the curved or bowed 70 portion of the front gear, which is somewhat in rear of its pivotal connection, and serves to brace the frame between the roller in front and those in rear, and at the same time to allow said rollers to pass freely over any inequali-75 ties of the ground, as the bearings of the front gear and double coupling have free lateral play. There is, therefore, no strain on the frame in any portion in passing over the roughest ground.

The front portion of the box or bed is supported by a standard, a', on the front of the double coupling, and if the rollers are not found to be heavy enough for the work the box can be weighted according to requirement.

Having described this invention, what I claim, and desire to secure by Letters Patent, 18---

A land-roller having the rear axle-tree, A, and the double coupling BB', secured thereto, 90 the upper and lower rock-bearings, L, the bent front roller-frame, G, extending between said rock-bearings, the transverse brace I, and the front swivel-bar, F, to which the bent front gear is pivoted, all combined and arranged 95 substantially as shown and described.

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

THOMAS B. PATTON.

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Witnesses: W. Moore, FRANK ROBINSON.