

No. 642,327.

Patented Jan. 30, 1900.

J. B. HEFFNER.
LAND ROLLER.

(Application filed May 13, 1899.)

(No Model.)

Fig. 1.

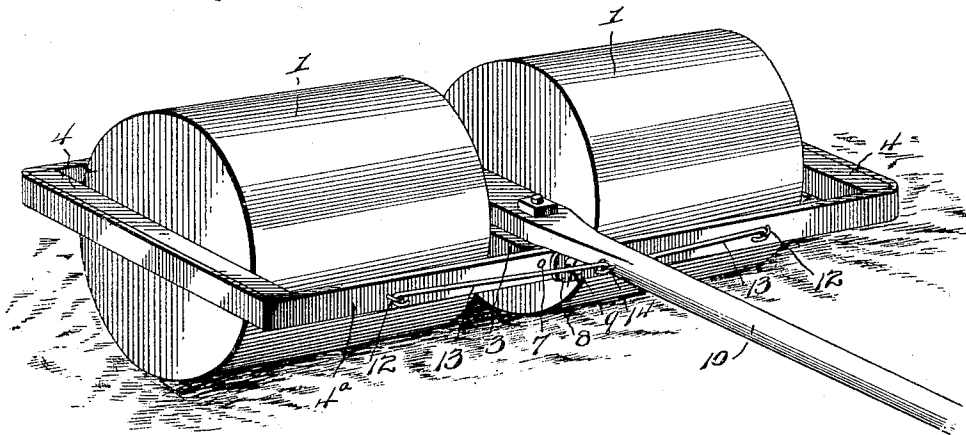


Fig. 2.

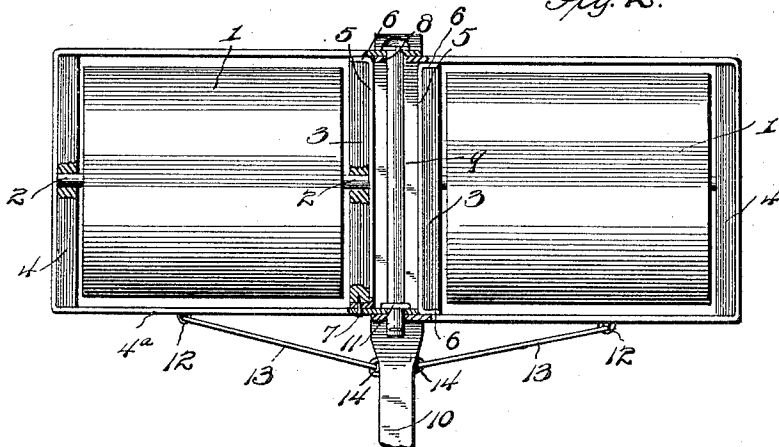
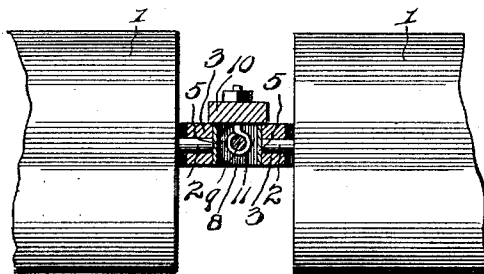


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

JAMES B. HEFFNER, OF BLOOMER, OHIO, ASSIGNOR OF ONE-HALF TO
W. W. SANDO, OF SAME PLACE.

LAND-ROLLER.

SPECIFICATION forming part of Letters Patent No. 642,327, dated January 30, 1900.

Application filed May 13, 1899. Serial No. 716,703. (No model.)

To all whom it may concern:

Be it known that I, JAMES B. HEFFNER, a citizen of the United States, residing at Bloomer, in the county of Miami and State of Ohio, have
5 invented a new and useful Land-Roller, of which the following is a specification.

The invention relates to improvements in land-rollers.

The object of the present invention is to improve the construction of that class of land-rollers in which a pair of rollers is employed and to increase the strength and durability of the hinge connection which permits the rollers to adjust themselves automatically to the
15 character of the surface of the ground.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed
20 out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a land-roller constructed in accordance with this invention. Fig. 2 is a reverse plan view of the same, partly in section. Fig.
25 3 is a detail sectional view taken transversely of the rear portion of the draft-beam and illustrating the construction of the hinge-joint.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 1 designate a pair of rollers provided at their ends with suitable journals 2, arranged in bearings of bars 3 and 4, located at the inner and outer ends of rectangular frames 4^a
35 and adapted to support the latter. Each rectangular frame is composed of front and rear sides and an outer end piece, all constructed of a single piece of metal, and the inner terminals of the front and rear sides of the rectangular frames are connected by a removable inner end bar 5, having its terminal 6 bent
40 at right angles and arranged against the inner faces of the said front and rear sides.

The angularly-bent terminals of the inner end bar 5 are perforated for the reception of fastening devices 7, which extend through registering perforations of the sides of the rectangular frame. The outer bearing-bar 4, which strengthens and supports the rectangular frame, is bolted or otherwise secured to the
50 outer end of the same, and the inner bearing-

bar 3 is similarly secured to the inner end piece 5. By withdrawing the fastening devices 7 of the inner end piece the roller may be readily removed, and this construction
55 greatly facilitates the assembling of the parts of the device.

The inner ends of the sides of the rectangular frames project beyond the inner end bars and form ears 8, which are perforated for the
60 reception of a pintle-rod 9, and the latter, which extends longitudinally of a draft-beam 10, has its terminals arranged in depending eyes 11 thereof. The draft-beam, which is centrally arranged, carries the longitudinal
65 pintle which hinges the frames directly to the said draft-beam, and the hinged joint, while possessing great strength and durability, permits the roller to yield readily to the uneven surface of the ground. The pintle-rod is provided
70 at one end with a head, and its other end is designed to have any suitable form of fastening device for retaining it in the eyes of the central beam or tongue.

The front sides of the rectangular roller-receiving frames are provided at points between
75 their ends with eyes 12, which are engaged by the outer ends of braces 13, extending from said eyes to the draft-beam or tongue and adapted to support the frames of the rollers. 80 The draft-beam or tongue is provided at opposite sides with eyes 14, and the bracing-rods have their terminals bent to form open eyes or hooks which are linked into the eyes
85 12 and 14.

The invention has the following advantages: The land-roller, which is simple and comparatively inexpensive in construction, possesses great strength and durability, and the roller-receiving frames are hinged directly
90 together and also to the draft-beam or tongue. The roller-receiving frames are provided at their inner and outer ends with bearing-bars for the journals of the rollers, and they are supported by the same, and the inner end bars,
95 which carry the inner bearing-bars, are detachably secured to the inner terminals of the front and rear sides of the rectangular frames and enable the rollers to be readily removed when desired.

Changes in the form, proportion, size, and the minor details of construction within the
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scope of the appended claims may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What is claimed is—

- 5 1. A device of the class described comprising a draft-beam provided with eyes, a pintle arranged in the eyes, the rectangular frames composed of front and rear sides and outer ends, the inner terminals of the sides being
10 extended and perforated to form ears for the reception of the pintle, the inner end pieces having their terminals secured to the sides of the frames, the inner and outer bearing-bars mounted on the ends of the frames and sup-
15 porting the same, and rollers journaled on the bearing-bars, substantially as described.
2. A device of the class described comprising a draft-beam provided at its lower face

with depending eyes, a longitudinal pintle located beneath the beam and supported in the 20 said eyes, the rectangular frames arranged at opposite sides of the rear portion of the draft-beam and provided with perforated ears receiving the said pintle, the inner and outer bearing-bars mounted on the rectangular 25 frames, one of the bearing-bars of each frame being removable, and the rollers journaled in the bearings of said bars, substantially as described.

In testimony that I claim the foregoing as 30 my own I have hereto affixed my signature in the presence of two witnesses.

JAMES B. HEFFNER.

Witnesses:

E. G. FRANKMAN,
D. W. CHRISTIAN.