

No. 680,267.

Patented Aug. 13, 1901.

R. NEWTON.
LAND ROLLER AND PULVERIZER.

(Application filed May 13, 1901.)

(No Model.)

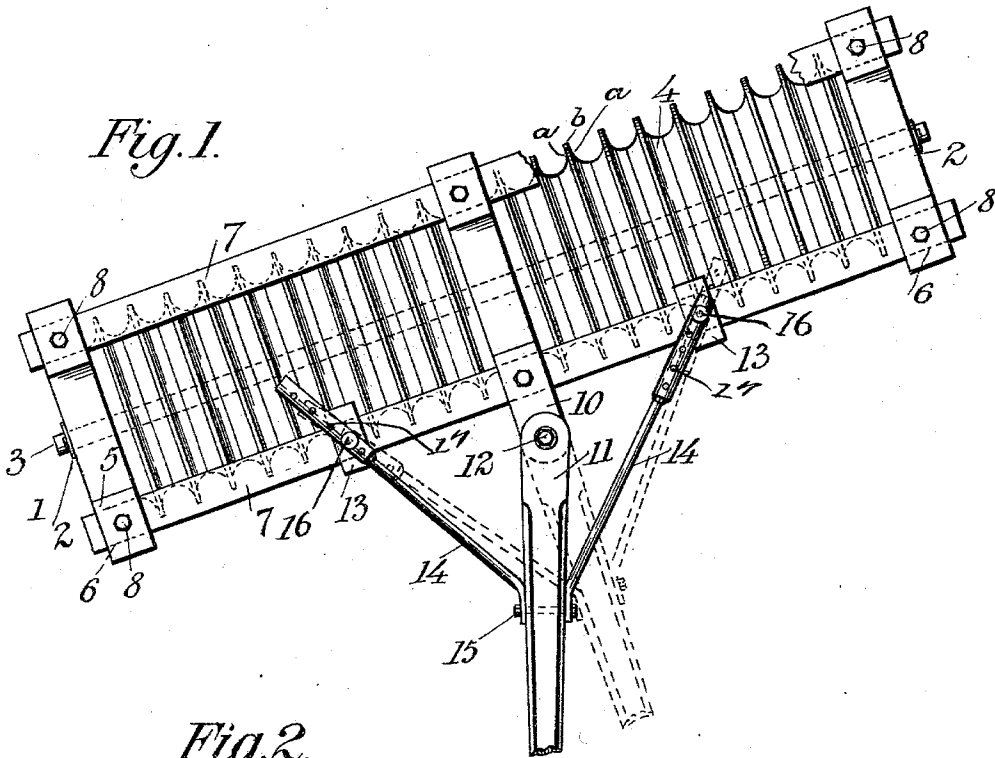


Fig. 1.

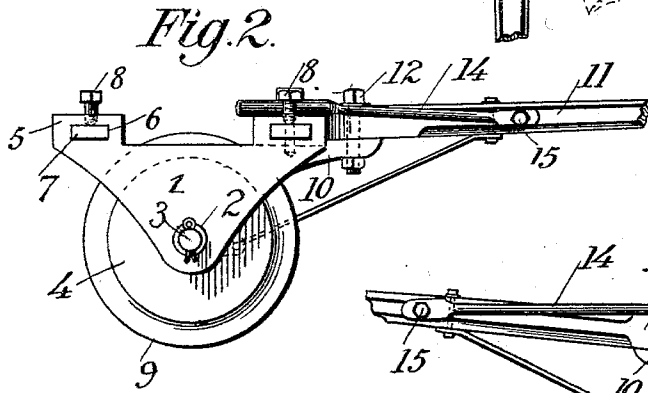


Fig. 2.

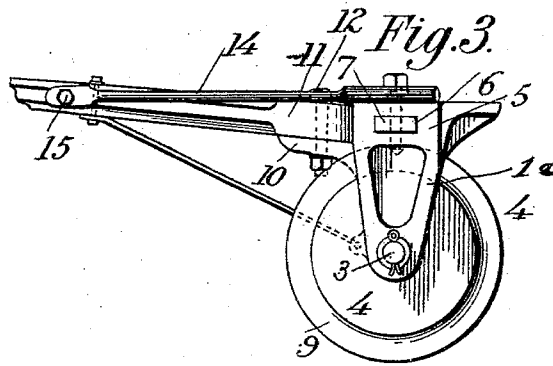


Fig. 3.

Witnesses:
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UNITED STATES PATENT OFFICE.

ROBERT NEWTON, OF JERSEYVILLE, ILLINOIS.

LAND ROLLER AND PULVERIZER.

SPECIFICATION forming part of Letters Patent No. 680,267, dated August 13, 1901.

Application filed May 13, 1901. Serial No. 60,109. (No model.)

To all whom it may concern:

Be it known that I, ROBERT NEWTON, a citizen of the United States, residing at Jerseyville, in the county of Jersey and State of Illinois, have invented a new and useful Land Roller and Pulverizer, of which the following is a specification.

My invention is an improved land roller and pulverizer; and it consists in the peculiar construction and combination of devices herein-after fully set forth and claimed.

One object of my invention is to effect improvements in the construction of the frame.

A further object of my invention is to provide means whereby the frame and the roller-disks may be disposed obliquely with relation to the line of draft to cause the said roller-disks to smooth and level the ground.

In the accompanying drawings, Figure 1 is a top plan view of a land roller and pulverizer embodying my improvements. Fig. 2 is a side elevation of the same. Fig. 3 is a similar view of a modified form of my invention.

In the construction of the frame of my improved land roller and pulverizer I provide a suitable number (usually three) of hangers 1, which are preferably of the form shown and have bearings 2 near their lower ends or sides for the shaft 3 of the roller-disks 4, and said hangers on their upper sides are provided with keepers 5, formed, preferably, integrally therewith, which keepers have slots 6, in which are fitted the bars 7, that connect said hangers together. The hangers are laterally adjustable on the said bars 7 and on the shaft 3, so that any desired number of the roller-disks 4 may be employed. The keepers 5 are provided with set-screws 8, the latter serving to clamp the hangers to the bars 7 at any desired adjustment. In practice the hangers are so adjusted on the shaft 3 and bars 7 that the roller-disks are clamped closely together to prevent earth from getting between the opposing sides of the roller-disks. The latter are provided with the double-beveled peripheries 9, which enable the roller-disks to cut into the soil and pulverize the same, the roller-disks also serving to roll the soil, as will be understood. The central hanger 1 is provided on its front side with an extended arm 10, which forms a seat for the heel or rear end of the tongue 11, the latter being pivotally con-

nected thereto by a bolt 12. By thus pivotally connecting the tongue to the central hanger, and hence to the frame, of which the central hanger is one element, the frame and the disk thereon may be disposed obliquely to the line of draft, as is shown in full lines in Fig. 1, and hence the roller-disks may be so set as to obliterate and fill in the furrows cut by the peripheries thereof, and thus smooth and level the ground as well as pulverize the same.

On the front bar 7 are clips 13, which are adjustable laterally thereon, said clips being disposed on opposite sides of the center hanger 1, and rods 14 connect the said tongue to the said clips 13, said rods being bolted to the tongue, as at 15, and being secured to said clips by set-screws 16, which also clamp said clips to the bar 7, the said rods being provided at their rear ends with adjusting-openings 17 for the said set-screws.

In the modified form of my invention shown in Fig. 3 I employ only one bar 7 to connect the hangers 1 together, and each of the hangers is correspondingly provided with only one of the keepers 5. In this modified form of my invention the frame of the land roller and pulverizer is simplified to the maximum extent. The periphery of each disk is beveled on opposite sides, as before stated. These bevels are hollowed and form reëntrant curves *a*, between which is the integral annular peripheral web *b*. In operation the web *b* of the disk forms grooves or depressions in the ground, which are only partially filled with loose earth by the action of the other disks. These grooves or depressions serve to drain the soil between them and prevent the soil from baking.

Having thus described my invention, I claim—

1. In a land roller and pulverizer, the combination of a frame; hangers secured thereto and adjustable thereon, toward and from each other, a shaft journaled in said hangers, and a series of detachable roller-disks on said shaft, said hangers clamping said roller-disks together, substantially as described.

2. In a land roller and pulverizer, the combination of a bar, hangers secured thereto, and adjustable thereon toward and from each other, a shaft journaled in said hangers, and

a series of roller-disks on said shafts and detachable therefrom, said roller-disks being in contact with each other and clamped together by said adjustable hangers, substantially as described.

3. In a land roller and pulverizer, the combination of a bar, hangers secured thereto, a shaft journaled in said hangers, roller-disks on said shaft, a tongue pivotally connected to one of said hangers, clips adjustable on said bars, means to secure said clips to said bar

when adjusted, and connections between said tongue and said adjustable clips, substantially as described.

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

ROBERT NEWTON.

Witnesses:

THOMAS A. KRAUS,
FRED J. LAURENT.