J. M. DA VIER.

CONCRETE LAND ROLLER.

APPLICATION FILED AUG. 10, 1911.

1,012,612.

Patented Dec. 26, 1911.

2 SHEETS—SHEET 1.

Fig. 1.

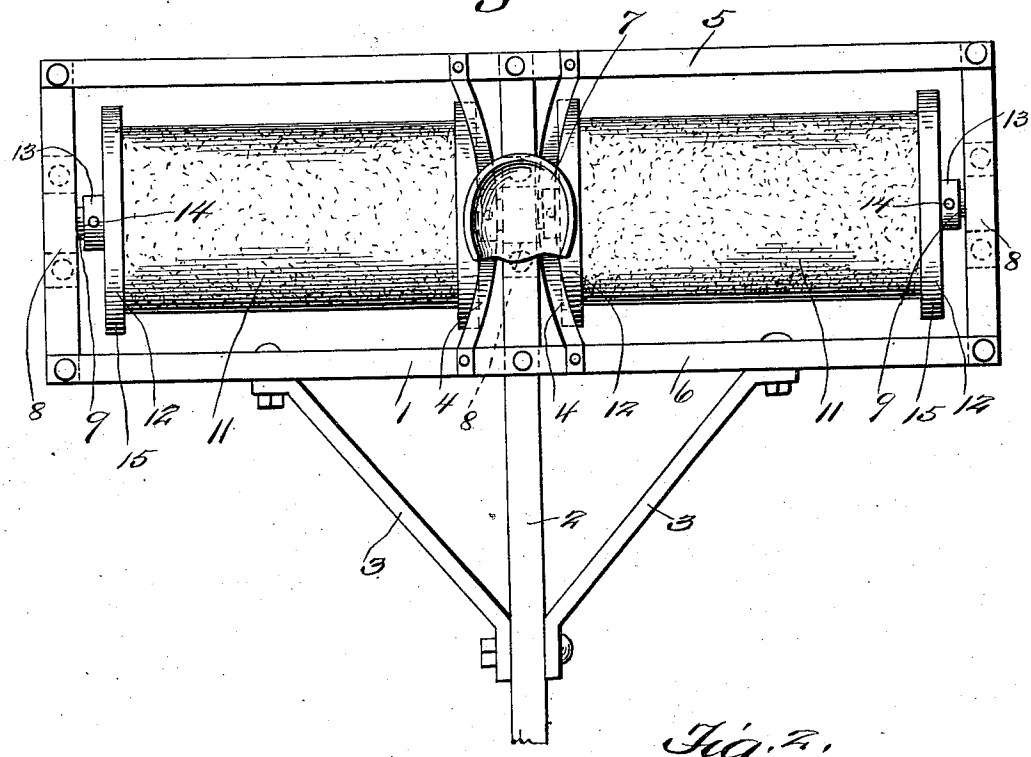
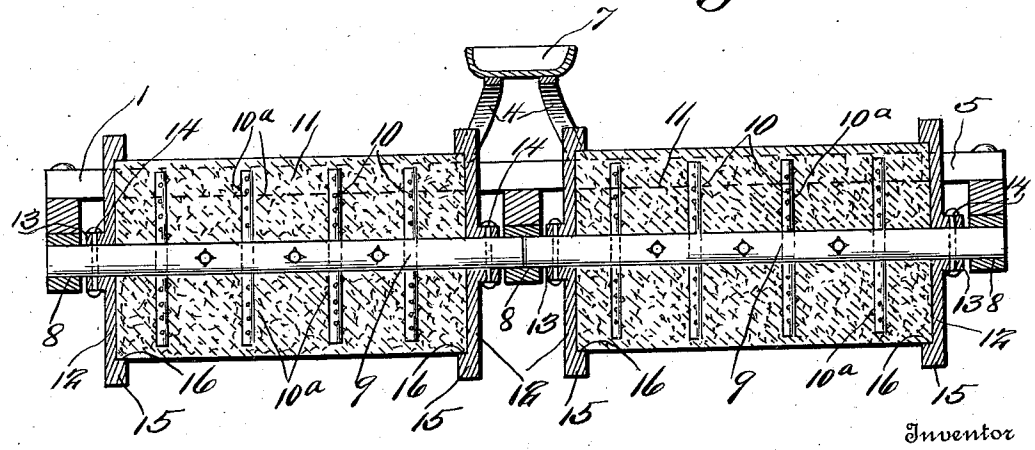


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

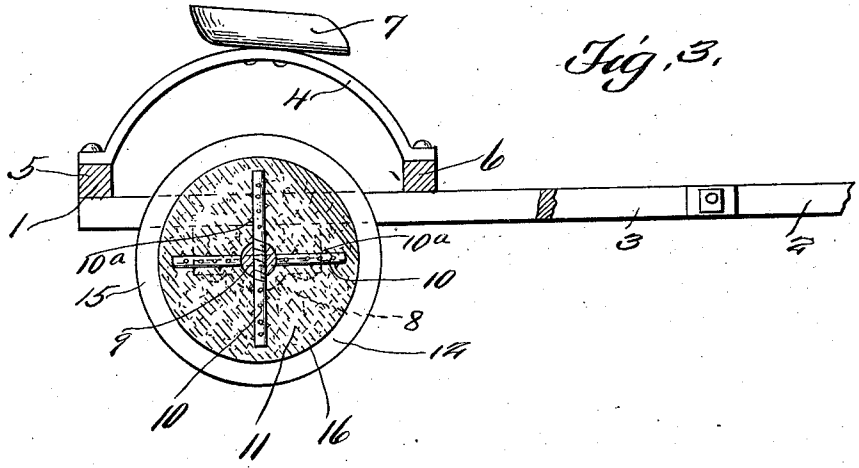
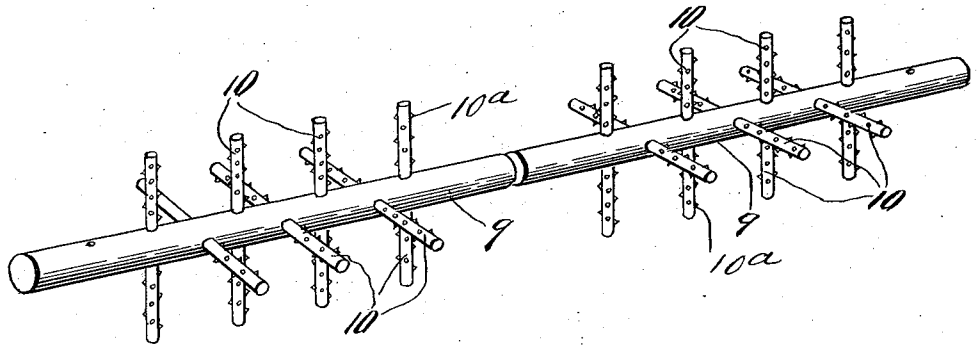


Fig. 4.



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UNITED STATES PATENT OFFICE.

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CONCRETE LAND-ROLLER.

1,012,612. Specification of Letters Patent. Patented Dec. 26, 1911.

Application filed August 10, 1911. Serial No. 643,407.

To all whom it may concern:

Be it known that I, JOSEPH M. DA VIER, a citizen of the United States, residing at Disco, in the county of Hancock and State of Illinois, have invented a new and useful Concrete Land-Roller; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to that class of agricultural implement called "land-rollers," for use in crushing clods, to level land after seeding, and for other purposes.

The main object of the invention is to provide a land roller of this nature, comprising two rollers, each of which is constructed of a cylindrical body of cement or the like having a metallic core provided with radiating arms, which tend to hold the cement compactly together, and end plates secured to the core, and provided with annular extension flanges, which act to prevent the peripheral corners of the rollers from chipping or crumbling.

The further object of the invention is to improve and simplify the construction of such devices, and to provide an apparatus of this nature, which will perform its work in an effective manner, and which may be constructed and placed upon the market at small cost.

The invention comprises further features and combination of parts, as hereinafter set forth, shown in the drawings and claimed.

In the drawings:—Figure 1 is a plan view of a land-roller constructed in accordance with the invention. Fig. 2 is a sectional view longitudinally through the rollers. Fig. 3 is a sectional view transversely through one of the rollers. Fig. 4 is a detail view of the core, showing its radiating arms.

Referring more especially to the drawings 1 designates a frame, having a tongue 2, which is braced relatively to the frame by the braces 3. Leaf spring members 4, curved on the arc of a circle, connect the forward and rear beams 5 and 6 of the frame. These members 4 support the operator's seat 7.

Journaled in suitable bearings 8 of the frame are the shafts or cores 9, which are provided with radiating arms 10. Cast or molded about the shaft or cores 9 are cylindrical bodies 11 of cement, which constitute the rollers. The arms 10 are designed for the purpose of holding the cement solidly together. These arms 10 extend at right angles to one another as shown in Fig. 4. The arms 10 are provided with spurs 10^a, which tend to cause the cement to adhere to said arms.

Secured on the shafts or cores 9 at the ends of each cylindrical body are annular plates 12. These plates 12 are supplied with integral collars 13, through which and the shafts or cores the securing bolts 14 extend. The annular plates extend beyond the circumference of the cylindrical bodies, as shown, thus providing the annular extension flanges 15, which act to prevent the entire weight of the cement bodies from resting on the ground. Adjoining the annular flanges 15 are annular shoulders 16, which engage slightly over the circumferences of the cylindrical cement bodies, so as, together with annular flanges, to prevent the peripheral corners of the cement bodies from chipping and crumbling. As shown in the drawings it will be noted that the two rollers are spaced apart longitudinally.

From the foregoing in conjunction with the annexed drawings it will be observed that there has been produced a novel, simple, efficient and inexpensively constructed cement land-roller, and one which has been found to be practical, whereby its work may be performed in an effective manner.

The invention having been set forth, what is claimed as new and useful is:—

1. In combination, a frame, cement rollers journaled in bearings thereof, the rollers having metallic cores having radiating arms embedded in the cement rollers, and annular plates secured to the cores and arranged closely in contact with the ends of the cement rollers, the annular plates being radially extended, to form annular extension flanges.

2. In combination, a frame, shafts journaled in bearings thereof and provided with radiating arms extending at right angles to one another, cement bodies molded about the shafts, the shafts constituting cores for the cement bodies, while the arms act as means for holding the particles of the cement adheringly together, annular plates on the shafts, means for securing the plates

thereon, the plates being radially extended beyond the cement bodies to form annular flanges, the annular flanges having adjoining annular shoulders to overlap the cement bodies, to prevent chipping and crumbling of the cement.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH M. DA VIER.

Witnesses:
JOSEPH R. BOOTH,
JOHN T. CLARK.