

F. H. STONER.
LAND ROLLER.
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1,056,851.

Patented Mar. 25, 1913.

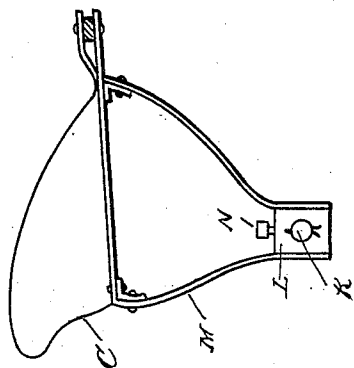


Fig. 3.

Fig. 1.

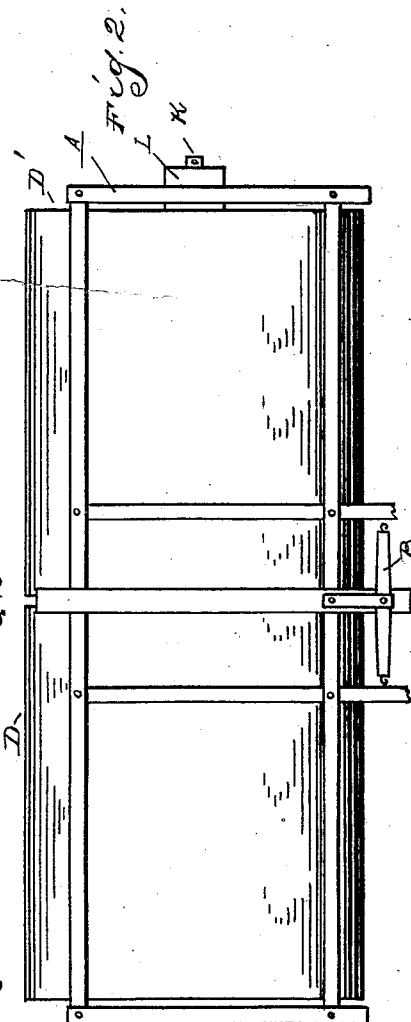
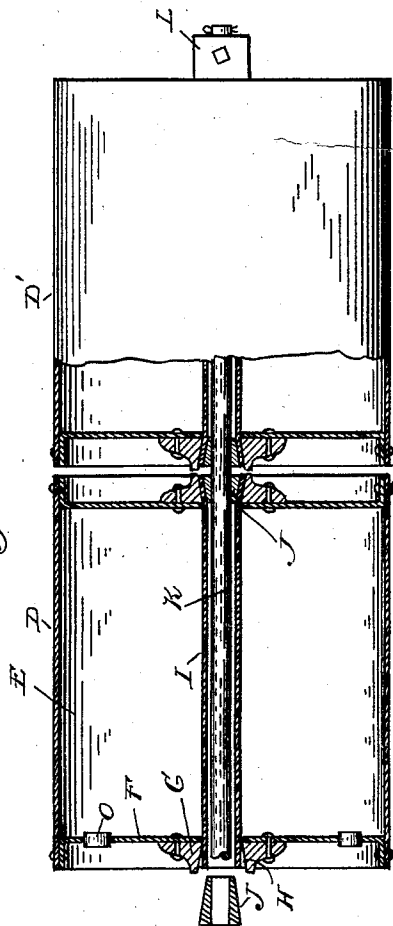


Fig. 2.

Witnesses
W. K. Ford.
James P. Barry

By

Inventor
Frank H. Stoner
[Signature]
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UNITED STATES PATENT OFFICE.

FRANK H. STONER, OF MONROE, MICHIGAN, ASSIGNOR TO WILDER-STRONG IMPLEMENT COMPANY, OF MONROE, MICHIGAN, A CORPORATION OF MICHIGAN.

LAND-ROLLER.

1,056,851.

Specification of Letters Patent.

Patented Mar. 25, 1913.

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To all whom it may concern:

Be it known that I, FRANK H. STONER, a citizen of the United States of America, residing at Monroe, in the county of Monroe and State of Michigan, have invented certain new and useful Improvements in Land-Rollers, of which the following is a specification, reference being had therein to the accompanying drawings.

10 The invention relates to land rollers and more particularly to that type in which water ballast is employed.

The invention consists in various features of construction as hereinafter set forth.

15 In the drawings,—Figure 1 is a sectional elevation of the roller; Fig. 2 is a plan view thereof; Fig. 3 is an end elevation.

A is a suitable frame work provided with a draft rigging B and a driver's seat C. The roller is preferably formed in two sections D and D' upon opposite sides of the center of the frame, each being of the following construction: E is a shell having flanged sheet metal heads F at opposite ends thereof and which are riveted or otherwise secured to the shell so as to form a liquid-tight joint, G are reinforcements at the center of each head F preferably formed of cast metal and riveted or otherwise secured in position. 30 These reinforcements G are provided with tapering bores H, and I is a tube which passes centrally through the roll, the heads and tapering bores of the reinforcements. To secure the tubes I in position and also to form a water tight joint with the heads F, tapering bushings J are driven into the ends of the tubes, thereby expanding the same to fit the tapering bores H and clamping them thereagainst. K is a shaft or axle which 40 passes through the tubes I of both rolls D and D' and engages bearings L at opposite ends thereof which are secured to depending brackets M on the frame. The shaft K is

secured in position and held from rotation by set-screws N in said bearings L while the bushings J form journal bearings for the rotation of the roll sections on the shaft. 45

In operation, the roll is ballasted by introducing a suitable quantity of water into the drum through a suitable fill opening normally closed by a plug O, after which it is in condition for use. By reason of the construction described, all leakage of the water is prevented and at the same time the bushings which clamp the tubes I in position form journals and prevent the binding of the shaft K in the tubes. 55

What I claim as my invention is:

1. A land roller comprising a shell, flanged heads engaging the opposite ends of said shell and provided with axially apertured hubs, a tube passing through said shell and apertured hubs, and a bushing in the end of said tube clamping the same to said apertured hub and forming a liquid tight joint. 65

2. A land roller comprising a cylindrical shell, heads at the opposite ends of said shell provided with axially apertured hubs, a tube passing through said shell and apertured hubs, an axle within said tube, and a bushing within the end of said tube clamping the same to said apertured hub and forming a journal for said axle. 70

3. A land roller comprising a cylindrical shell, a head at the end of said shell having a central hub provided with a tapering bore, a tube passing through said shell and said tapering bore, and a tapering bushing driven in to said tube and expanding the latter into conformity to said tapering bore. 80

In testimony whereof I affix my signature in presence of two witnesses.

FRANK H. STONER.

Witnesses:

JAMES P. BARRY,
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