F. C. WARNE.

HEAD FOR LAND ROLLER DRUMS.

APPLICATION FILED OCT. 31, 1913.

1,108,038.

Patented Aug. 18, 1914.

Fig. 1.

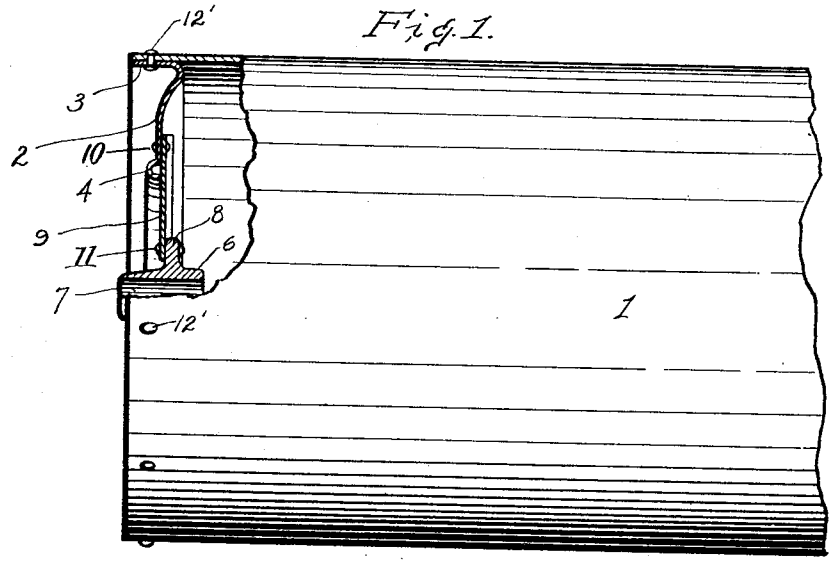


Fig. 2.

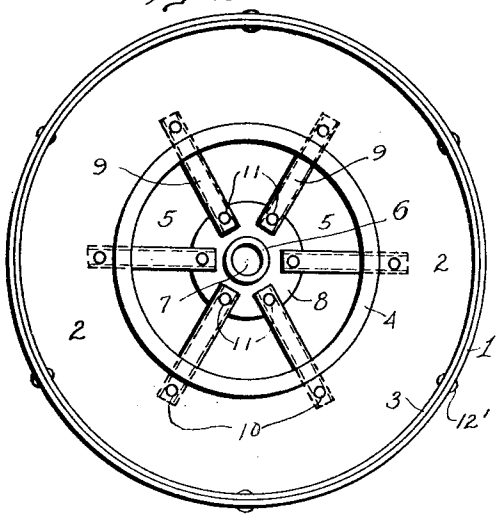
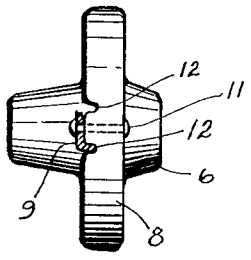


Fig. 3.



Inventor

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THE MORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FREDERICK C. WARNE, OF MANSFIELD, OHIO, ASSIGNOR TO RODERICK LEAN MANUFACTURING COMPANY, OF MANSFIELD, OHIO, A CORPORATION OF NEW JERSEY.

HEAD FOR LAND-ROLLER DRUMS.

1,108,038. Specification of Letters Patent. **Patented Aug. 18, 1914.**

Application filed October 31, 1913. Serial No. 798,402.

To all whom it may concern:

Be it known that I, FREDERICK C. WARNE, citizen of the United States of America, residing at Mansfield, in the county of Richland and State of Ohio, have invented certain new and useful Improvements in Heads for Land-Roller Drums, of which the following is a specification.

This invention relates to heads for land roller drums.

The object of this invention is to construct a head for land rollers which will provide means of preventing debris from entering the drum of the roller and at the same time afford facilities for painting or repairing both sides of the head, as well as the inside of the drum and to permit a free circulation of air through the drum to obviate dampness which results in corroding the parts comprising the land roller; to construct a substantially semi-open head for land rollers with means of supporting a hub-bearing in the center of the opening; to construct a durable, rigid and simple head for land rollers comprising a novel disk having a central opening in combination with means to support a hub-bearing in the center of said opening; to provided means of connecting and securely fastening the head to the drum of the land roller.

A further object of this invention is to provide a simple construction of a head that will permit all of the parts comprising the head to be made of pressed steel or the like.

Having these and other objects in view the invention is illustrated in the accompanying drawing, in which:—

Figure 1 is a front elevation of part of a land roller drum showing a part of the drum broken away to show a vertical section of the head and its application to the drum. Fig. 2 is an outside or end view of the head, drum and connecting parts. Fig. 3 is a side elevation of the hub-bearing showing a fragment of one of the radial supporting bars fitted to the hub.

In the drawing reference numeral 1 indicates a drum of a land roller of a well known type to which the improved head is applied.

In the construction of the head I use a disk 2 which is provided with a peripheral flange 3 and a bead 4 which surrounds and forms the margin of the central opening 5. The flat portion of the disk is preferably made of such dimensions as to substantially close one half of the opening in the end of the drum leaving the opening 5 which permits the free circulation of air into the drum and affords facilities for repainting and repairing both sides of the head and inside of the drum. To mount the drum upon a suitable axle (not shown) a hub 6 having a bearing 7 and an annular collar 8, is provided. Radial bars 9 are securely fastened to the disk 2 on one end by the rivets 10. The opposite ends project radially across the opening 5 and are securely fastened to the collar 8 of the hub-bearing by the rivets 11. I have shown the bars made channel shape with one end fitted to grooves 12 formed in the collar 8. It will be understood, however, that any form or size of bars can be used without departing from the spirit of the invention. The disk 2 is fastened to the periphery of the drum by rivets 12′ which pass through the drum and the peripheral flange 3.

It will be apparent that a head for a land roller constructed as hereinbefore described will permit of easy access to the inside of the drum for any purpose, whatever, and permit the free circulation of air therethrough, which would be prevented if the drum was made solid and it will, also, be noted that efficient strength, rigidity and durability of the head are secured and preserved by means of its novel construction.

What I claim:—

1. In a pressed steel head for land rollers comprising a disk with an open central portion having a bead formed thereon adjacent to and surrounding said open central portion and a flange extending outwardly from the periphery of said disk, a hub, means to connect said hub to said disk and support it in a central position with reference to the opening in said disk as described and set forth.

2. A head for a land roller drum made of pressed steel comprising a disk having a peripheral flange formed integral therewith to provide means for fastening it to the drum and also provided with a central opening and a bead formed on said disk adjacent to said opening, a hub and means to maintain and support said hub in a central position with reference to said disk as described and set forth.

3. A head for the drum of land rollers

comprising a disk made of pressed steel and formed with an outer peripheral flange and an inner peripheral bead, a hub, and means to support said hub centrally of said disk as described and set forth.

4. A head for the drum of a land roller comprising a disk provided with a central opening substantially half the diameter of the disk, and an outer peripheral flange, a hub, radial bars to support said hub in said opening, and means to strengthen the disk on the margin surrounding said opening as described and set forth.

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

FREDERICK C. WARNE.

Witnesses:
JOHN H. COX,
LELA RITCHIE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."