

A. LINDELOF.

Road-Rollers.

No. 135,825.

Patented Feb. 11, 1873.

Fig. 1

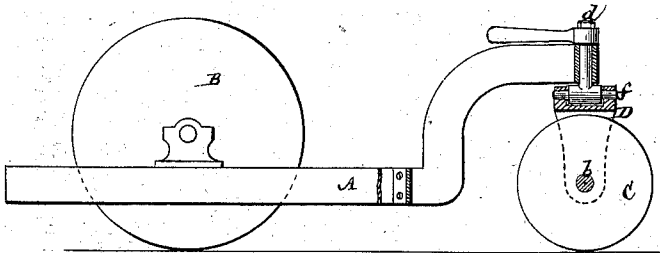
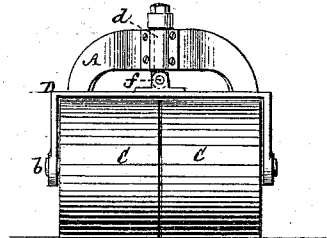


Fig. 2



Witnesses:
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UNITED STATES PATENT OFFICE.

ANDERS LINDELOF, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN ROAD-ROLLERS.

Specification forming part of Letters Patent No. 135,825, dated February 11, 1873.

To all whom it may concern:

Be it known that I, ANDERS LINDELOF, of the city of Brooklyn, in the county of Kings and State of New York, have invented certain Improvements in Road-Rollers, of which the following is a specification:

This invention consists in a novel means of supporting the steering-roller or rollers and of providing for its or their adjustment to varying grades or inequalities of ground surface, whereby, while every facility is afforded for steering, said rollers are made to accommodate themselves to changing irregularities of surface, with a full or extended bearing of the same on the ground and without undue strain; also, whereby, when the roller is divided, both rollers may be arranged in close proximity to each other, end to end, and with outside bearings, subject to the control of the steering device from a central position over the rollers.

In the accompanying drawing, which forms part of this specification, Figure 1 represents a partially-sectional side view of a steam road-roller in part having my invention applied, and Fig. 2 a front view thereof, omitting the main roller.

Similar letters of reference indicate corresponding parts.

A is the frame of the machine; B, its main roller; and C C, its steering-roller or rollers, having my invention applied, and here shown as arranged in front, but it is equally applicable to a rear roller or rollers. The steering-roller may be of single construction, but it is preferred to build it in sections of two rollers, C C, arranged end to end to provide for its rotative movement when varying the direction of the machine and traveling over changing surfaces or curvatures in the road, as provided for in other road-rolling machines. The axle *b*, on which the rollers C C are arranged to independently rotate, has bearings at its two ends in a yoke or saddle, D, constructed to straddle the two rollers and situated over them. This saddle is connected midway of its length with the adjacent portion of the

main frame A, or rather with the king-bolt *d*, by which the steering is effected, in a jointed manner, by or through a joint-pin or swiveling connection, *f*, the axial line of which is transversely to that of the rollers and of the king-bolt, whereby, while every provision is made for steering, just the same as if the king-bolt were rigidly connected with the rollers, the latter work on a universal joint, as it were, and are free to adjust themselves to changing irregularities of surface being traveled over with a full or extended bearing of the same on the ground, and without exercising any undue strain on the frame or on the parts connecting them with the frame.

Although this universal-joint-like attachment of the rollers C C might be made directly with the center of the axle by arranging said rollers at a suitable distance apart, as they are usually done in other road-rollers, to provide for a rigid central bearing, yet it is preferred to dispense with any central bearing, and to arrange the rollers in as close proximity as possible, so as to avoid the formation of ridges in the road. To this end I use the yoke or saddle D, forming bearings to the axle at its ends, and this without subjecting the yoke to any excessive or damaging strain by reason of the universal-joint attachment of said yoke with the main frame.

What is here claimed, and desired to be secured by Letters Patent, is—

1. The steering roller or rollers connected with the main frame by a cross-joint or pin, in connection with the king-bolt, by which they are steered, to provide for a free or universal adjustment of said rollers, substantially as specified.

2. The yoke or saddle D constructed to form outside end bearings to the steering-roller or its axle, in combination with the cross-joint or pin *f* and the king-bolt *d*, connecting the steering-roller or rollers with the main frame, essentially as herein described.

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