(No Model.) 2 Sheets—Sheet 1.

H. A. PEDRICK.

MECHANISM FOR GRINDING CAR WHEELS.

No. 573,694. Patented Dec. 22, 1896.

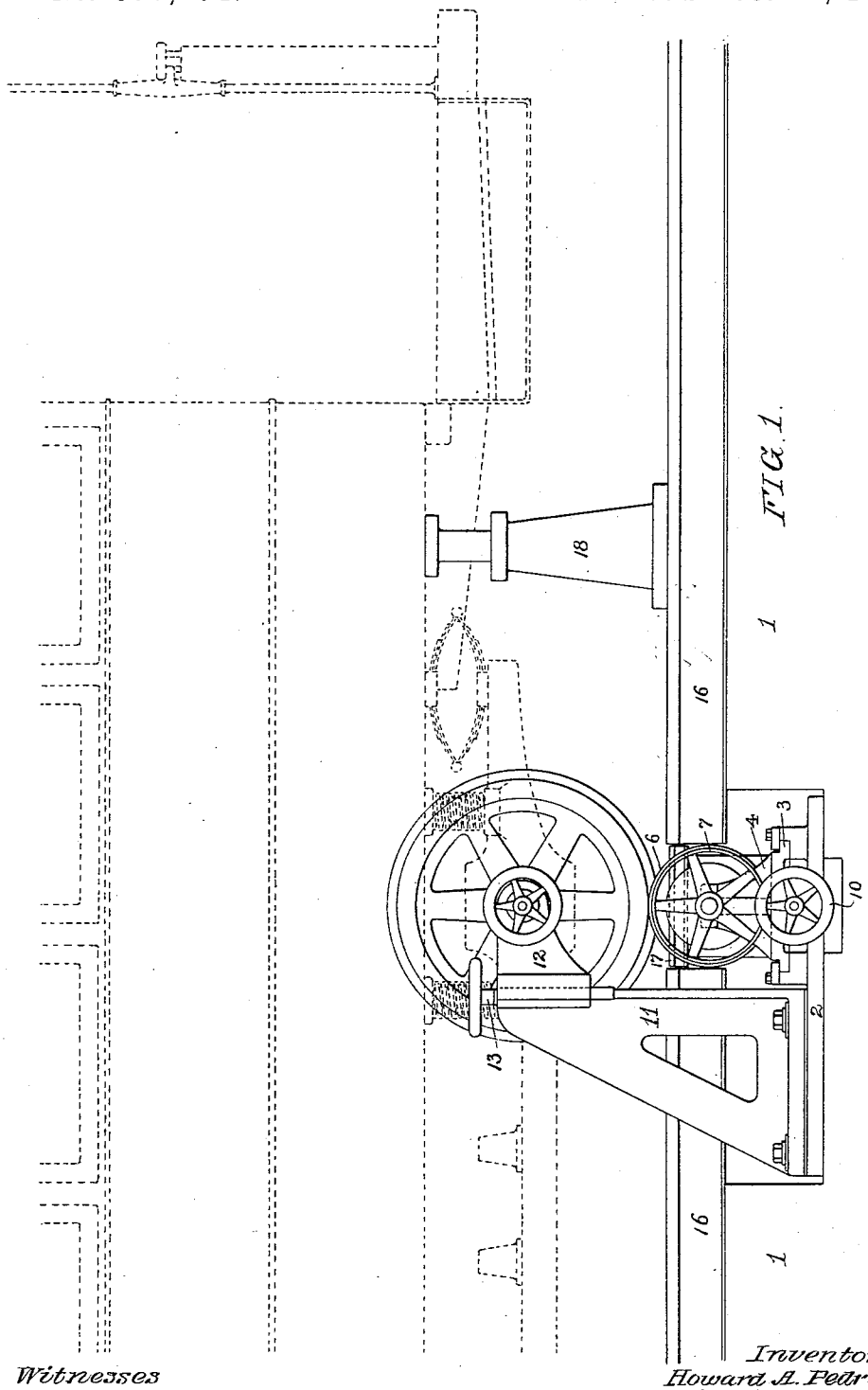

FIG. 1.

Witnesses
Hamilton D. Turner
Frank E. Bechtold

Inventor:
Howard A. Pedrick
by his Attorneys
Howson & Howson

(No Model.) 2 Sheets—Sheet 2.

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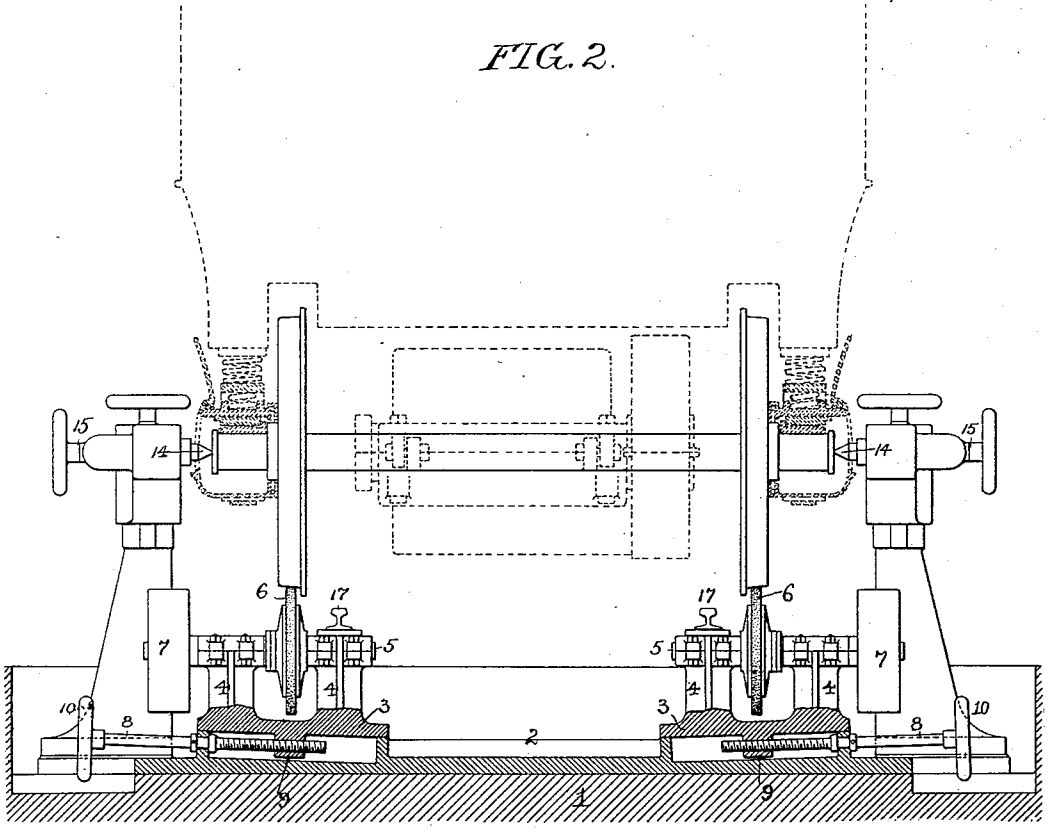
FIG. 2.



Witnesses:
Hamilton D. Turner
Frank E. Beckfold

Inventor:
Howard A. Pedrick
by his Attorneys
Howson & Howson

UNITED STATES PATENT OFFICE.

HOWARD A. PEDRICK, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO WESTON J. HIBBS, OF SAME PLACE.

MECHANISM FOR GRINDING CAR-WHEELS.

SPECIFICATION forming part of Letters Patent No. 573,694, dated December 22, 1896.

Application filed March 1, 1895. Serial No. 540,177. (No model.)

To all whom it may concern:

Be it known that I, HOWARD A. PEDRICK, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Mechanism for Grinding Car-Wheels, of which the following is a specification.

The object of my invention is to provide for the truing of the flat wheels of railway-cars by regrinding without the necessity of removing the wheels and axles from the car, my invention consisting of certain combinations of parts fully described and specifically claimed hereinafter, whereby this object is attained.

In the accompanying drawings, Figure 1 is a side view of a car-wheel-grinding device made in accordance with my invention; and Fig. 2 is a transverse section of the same, partly in elevation.

The modern high-power brakes used on steam-railway cars and the powerful hand-brakes employed upon electrically-driven cars have a tendency to lock the wheels and cause "skidding" or sliding of the wheels on the rails, especially when the latter are wet or slippery, the consequence being that flat faces are soon worn on the chilled treads of the wheels, and a disagreeable and destructive jarring or pounding of the wheel on the rail results.

The object of my invention is to provide for grinding the treads of the wheels without removing the same from the car, and this object I accomplish in the following manner.

On a suitable foundation or bed-1 is mounted a base-plate 2, having at each end bearings for the support of a grinder-slide 3, said slide in the present instance consisting of a base-plate with upwardly-projecting posts 4, having at their upper ends the bearing-boxes for the shaft 5, which carries any suitable form of grinding wheel or disk 6, and has at one end a pulley 7 for the reception of a driving-belt, the slide being capable of being traversed to and fro on the base-plate 2 by means of a feed-screw 8, longitudinally confined to a bearing on said base-plate and engaging with a nut 9, depending from the base-plate of the slide, a hand-wheel 10 at the outer end of said feed-screw serving as a convenient means of manipulating the same. Secured to the base-plate 2, outwardly beyond and somewhat in the rear of each grinder-slide, is a vertical standard 11, upon the upper end of which is mounted a vertically-adjustable sliding head 12, which can be raised and lowered by means of a suitable adjusting-screw 13, and this sliding head 12 carries in its projecting portion a center pin 14, adjustable to and fro by means of a screw 15. Mounted on the foundation 1 are rails 16, the continuity of which is interrupted for the reception of the grinder-slides and their wheels or disks, and on the inner bearing-post of each grinder-slide is a short rail-section 17, which, when said grinder-slides are retracted, occupies the gap between the rail-sections 16.

Both grinder-slides are originally retracted, and the car whose wheels are to be reground is run in on the rails 16 until said wheels rest upon the short rail-sections 17 with the axis of the axle directly above that of the shaft 5. The lids or covers of the journal-boxes are then raised, as shown by dotted lines in Fig. 2, so that the center pins 14 can be adjusted to the usual center holes in the ends of the journals, and the body of the car is then raised slightly by any suitable means, as, for instance, by the employment of a jack 18, the sliding heads 12 being likewise raised, so as to follow this movement and keep the center pins in engagement with the ends of the axle. The axle is then turned by means of its motor, if the car is a motor-driven one, or by other means in case of a steam-railway car or other car not provided with a motor, and the grinder-slides 3 are fed inward by manipulating the feed-screws 8, so as to bring the grinding-disks 6 to bear upon the treads of the wheels, rapid rotation being also imparted to the grinding-disks, so that the flattened treads of the wheels will soon be ground down to proper truth.

The seats formed on the base-plate 2 for the reception of the grinder-slides 3 are inclined, as shown in Fig. 2, so as to accord with the bevel of the wheel-tread, and the axes of the feed-screws 8 are likewise inclined.

When the wheels have been properly reground, the grinder-slides are retracted, the

car and sliding heads 12 are lowered until the wheels rest upon the rail-sections 17, the center pins 14 are then withdrawn, and the car run off onto the tracks 16.

Having thus described my invention, I claim and desire to secure by Letters Patent—

In apparatus for grinding car-wheels without removing them from the car, the combination of means for supporting the axle of the car when the support of the wheels is removed, grinding-disks for acting on the treads of the wheels, and laterally-adjustable grinder-slides having thereon short sections of rail onto which the wheels can be run from the main rails, the movement of the grinder-slides carrying said short-rail sections laterally from under the wheels, substantially as specified.

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

HOWARD A. PEDRICK.

Witnesses:

JOSEPH H. KLEIN,

FRANK E. BECHTOLT.