

No. 841,541.

PATENTED JAN. 15, 1907.

A. H. KRAMER.
GRINDING DEVICE.
APPLICATION FILED JUNE 2, 1906.

Fig. 1.

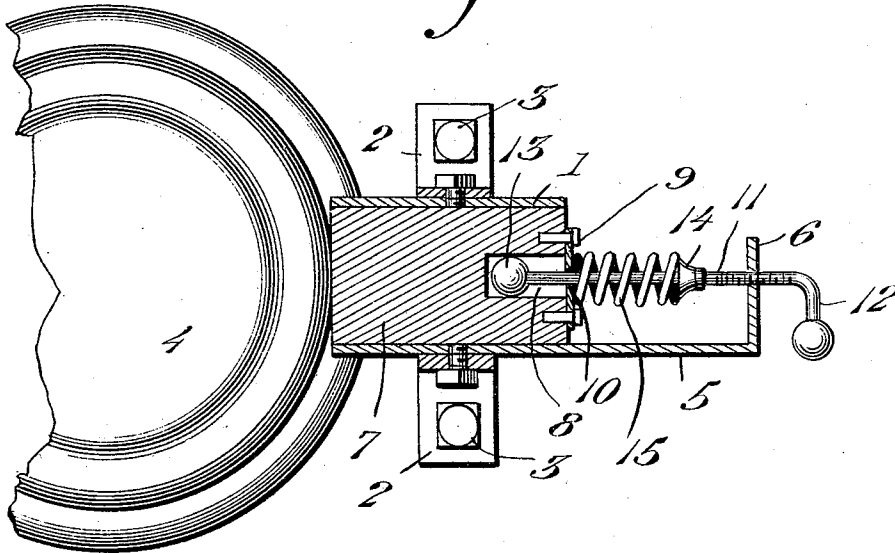
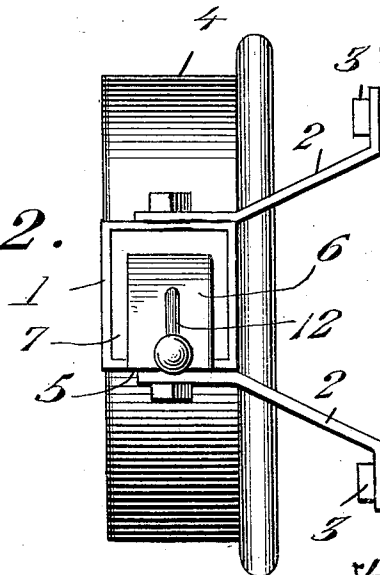


Fig 2.



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ALLINGTON H. KRAMER, OF MONTE VISTA, COLORADO.

GRINDING DEVICE.

No. 841,541.

Specification of Letters Patent.

Patented Jan. 15, 1907.

Application filed June 2, 1906. Serial No. 319,889.

To all whom it may concern:

Be it known that I, ALLINGTON H. KRAMER, a citizen of the United States, residing at Monte Vista, in the county of Rio Grande and State of Colorado, have invented new and useful Improvements in Grinding Devices, of which the following is a specification.

This invention relates to grinding devices, being especially applicable to railway rolling-stock for truing the wheels thereof, and has for its objects to produce a comparatively simple inexpensive device of this character which may be readily installed for use, one whereby the wheels will be accurately ground and trued during travel of the railway-vehicle, and one wherein the grinding member may be properly set and will thereafter act to automatically grind away a predetermined portion of the wheel-tread.

With these and other objects in view the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a side view, partly in section, showing the device applied for action on a car-wheel. Fig. 2 is an end view of the device.

Referring to the drawings, 1 designates an open-ended box or casing supported by bracket-arms 2, adapted for attachment by fastening members or bolts 3 to the body of the car, locomotive, or other vehicle having a transporting-wheel 4 to be ground and trued, there being formed on the lower wall of the box 1 a rearwardly-extending portion or plate 5, having an upturned bearing-piece or flange 6.

Slidably disposed in the casing 1 is a grinding member or block 7, preferably composed of emery or other abrasive material and provided at its rear end with a central longitudinal socket 8, having its rear end closed by means of a plate 9, attached to the body 7 and provided with a central guide-opening 10.

Threaded through the bearing-piece 6 is a setting member or rod 11, provided at its outer end with a crank portion 12 and at its inner end with a ball-head 13, arranged in the socket 8, the rod being slidably disposed between its ends in the guide-opening 10, there being formed on the rod 11 a bearing-piece or collar 14, between which and the body 7 there is disposed an expansible spring 15, coiled around the rod 11, which, it will be noted, is, owing to provision of the socket 8,

susceptible of a certain amount of longitudinal movement or play relative to the body 7.

In practice the device is mounted upon a car, locomotive, or other railway-vehicle by attaching the bracket-arms 2 to the vehicle with the device positioned for the grinding member 7 to bear on the tread of the wheel. The member 11 is then adjusted for setting the device to grind away a requisite amount of the wheel for the purpose of truing the same, the setting-rod being in this operation moved inward a distance equaling the depth of the desired cut to be made, thus to space the head 13 the appropriate distance from the plate 9 for permitting requisite movement of the grinding-head 7 under the action of the spring 15, it being understood that after the wheel has been properly reduced the movement of the grinding member 7 will, owing to contact of the plate 9 with head 13, be checked, thereby stopping the grinding action. For example, if the wheel is to be reduced a quarter of an inch the member 11 is screwed inward until the head 13 is spaced a corresponding distance from the outer wall 9 of the socket and with the forward end of block 7 bearing upon the wheel-tread. As the wheel rotates during travel of the vehicle the member 7 will perform the grinding action and be pressed to its work by the spring 15, which is partly compressed when the setting member 11 is screwed inward, and as soon as the head 13 comes in contact with the wall 9 the movement of block 7 will cease, the wheel in the meantime having been properly ground. It will be noted that under this arrangement the device may be set to effect the desired cut and will without further attention properly perform the grinding operation and be automatically thrown out of action as soon as the predetermined amount of work has been completed.

Having thus described my invention, what I claim is—

1. A wheel-truing device comprising a movable grinding member, means for moving the member automatically to its work, and means for setting the member for and stopping the same upon completion of a predetermined movement.

2. A wheel-truing device comprising a movable grinding member, a spring for pressing the member to its work, and means for setting the member for and stopping the same upon completion of a predetermined movement.

3. A wheel-truing device comprising a movable grinding member, means for moving the member automatically to its work, and a setting element connected with and for axial movement relative to the grinding member, said element and member being provided with coöperative devices for checking the movement of the member.

4. A wheel-truing device comprising a rectilineally-movable grinding member, a support for the member provided with a bearing portion, a setting-rod threaded through

said portion and having slidable engagement with the member, means on the rod and member for limiting relative movement of the latter, and a spring arranged for pressing the member to its work.

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

ALLINGTON H. KRAMER.

Witnesses:

JAMES P. VEERKAMP,
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