

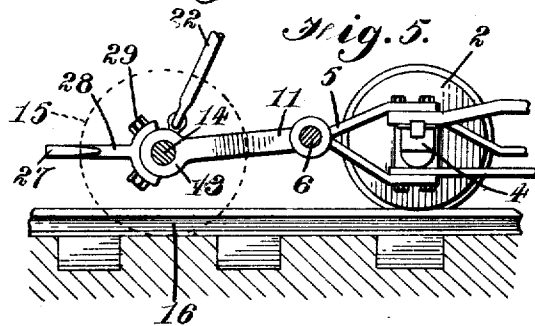
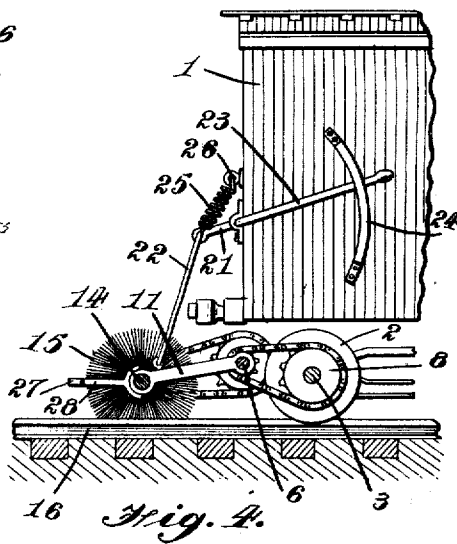
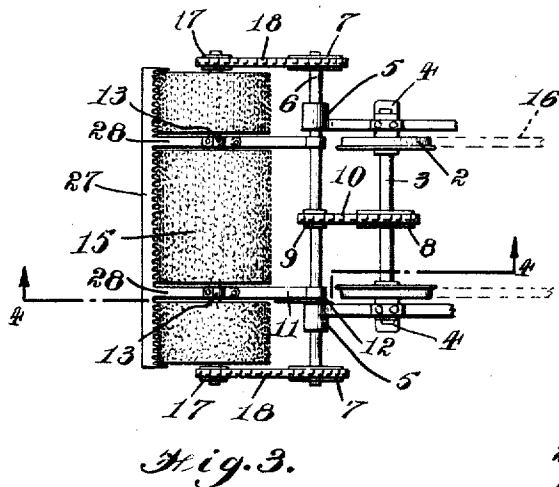
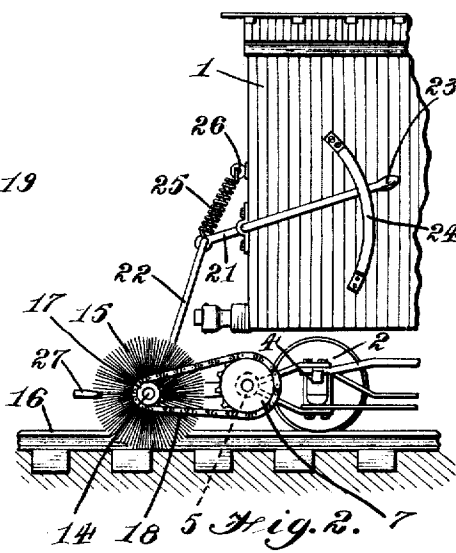
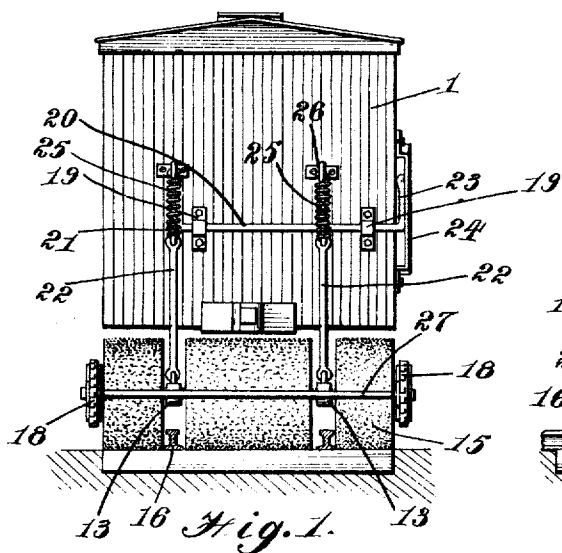
May 20, 1924.

1,495,095

W. B. MORRIS

DEVICE FOR CUTTING WEEDS FROM RAILWAY TRACKS

Filed Nov. 9, 1923



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DEVICE FOR CUTTING WEEDS FROM RAILWAY TRACKS.

Application filed November 9, 1923. Serial No. 673,717.

To all whom it may concern:

Be it known that I, WILLIAM BRUCE MORRIS, a subject of the King of Great Britain, residing at Kipling, Province of Saskatchewan, Canada, have invented certain new and useful Improvements in Devices for Cutting Weeds from Railway Tracks; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention pertains to a novel attachment for railway cars which is designed to cut weeds from the tracks.

The principal object of the invention is the provision of a device of this character in which the cutting instrument consists of a revolving brush having stiff wire bristles. To this end, there is supported at an end of a railway car a revolving brush which is driven from one of the axles. Suitable means may also be provided for regulating the elevation of the brush as desired or to bring it entirely out of contact with the road bed.

The invention is fully disclosed in the following description and in the accompanying drawings in which:

Figure 1 is an end elevation of a box car having the device applied thereto;

Figure 2 is a fragmentary side view;

Figure 3 is a plan view of the device;

Figure 4 is a fragmentary side view of the car corresponding to Figure 2, and showing the attachment in section on the line 4-4 of Figure 3; and,

Figure 5 is a detail side elevation.

Reference will now be had to these views by means of like characters which are employed to designate corresponding parts throughout.

The numeral 1 indicates a box car of usual construction provided with wheels 2 carried by an axle 3. To the journal boxes 4 are fixed a pair of bearing members 5. A shaft 6 extending in substantially parallel relation with the axle 3 is mounted in these bearings and carries sprocket wheels 7 at its ends. Sprocket wheels 8 and 9 are mounted at the centers of the axle and shaft respectively, and are operatively connected by means of a sprocket chain 10. In this manner the shaft 6 is driven from the axle 3 upon movement of the car.

A pair of arms 11 extend outwardly from

the shaft 6 and are loosely mounted on the latter by means of the rings 12. The outer extremities of these arms are formed with similar rings 13 in which is rotatably supported the shaft 14 of the brush 15. The latter consists of wire bristles of sufficient stiffness to remove any vegetation along the tracks with which they come in contact. It will be seen from Figures 1 and 3 that blank spaces are retained on the shaft at the rings 13 which are in vertical alinement with the rails 16. As a result of this construction, the rails are not interfered with during the operation of the device. The brush shaft 14 carries sprocket wheels 17 at its ends, these wheels being connected to the members 7 on the shaft 6 by means of sprocket chains 18.

A pair of straps 19 are secured to the end of the car and support a rotatable rod 20. Crank arms 21 extend outwardly from this rod and are joined to the outer ends of the arms 11 by means of links 22. One end of the rod is formed with a handle 23 extending alongside of the car and received in a guide 24. Suitable means may be provided for locking the handle at the lower end of the guide. It will be obvious that movement of the handle causes a change in the inclination of the arms 21 whereby the elevation of the brush with respect to the road bed is adjusted.

When the wheels 2 are travelling on curved rails, the brush being disposed rearwardly of the wheels will be displaced slightly laterally with reference to the track. This displacement must be compensated by a downward shift of the links 22 in order that the brush shall remain in engagement with the road bed. If the handle 23 were locked in the guide, this downward shift would not be possible. On the other hand, if the handle were entirely free in the guide, the brush would bear with all its weight upon the road bed, which is not desired. In order to provide a satisfactory means of compensating the lateral shifting of the brush without introducing the above mentioned difficulty, the brush is yieldingly supported with reference to the road bed by means of springs. The latter are indicated by the numeral 25 and are attached to the upper ends of the links 22 and to the end of the car at the eye 26.

With this construction, the handle need not be locked within the guide, and the

entire weight of the brush does not bear upon the road bed. When the wheels 2 are rounding a curve, the brush is offset laterally as above described, but is permitted to remain in engagement with the road bed through the expansion of the spring 25. Obviously, when the car returns to a straight track, the alinement of the brush with the axis of the car permits contraction of the springs to their original position.

A brush cleaner comprising a comb 27 is supported in engagement with the brushes by means of branches 28 which are clamped to the outer ends of the arms 11 as at 29.

While a specific embodiment of the invention has been illustrated and described, it is to be understood that various alterations in the details of construction may be made without departing from the spirit of the invention as indicated by the appended claims.

Having thus fully described the invention, what I claim as new and desire to protect by Letters Patent is:—

1. A device for cutting weeds from rail-

way tracks comprising in combination with a car, a frame pivotally connected to the journal boxes thereof, a brush supported in said frame, and an operative connection between the car wheels and the brush.

2. A device for cutting weeds from railway tracks comprising in combination with a railway car a frame secured to the journal boxes of the car, a shaft mounted in said frame, a brush carried by the shaft, and a yielding connection between the car and said shaft.

3. A device for cutting weeds from railway tracks comprising in combination with a railway car, a frame secured to the journal boxes of the car, a shaft mounted in said frame, a spring carried by the shaft, a rod rotatably supported by the car, crank arms extending from said rod, links connecting said arms to the shaft, and spring connections between said links and the body of the car.

In witness whereof I have hereunto set my hand.

WILLIAM BRUCE MORRIS.