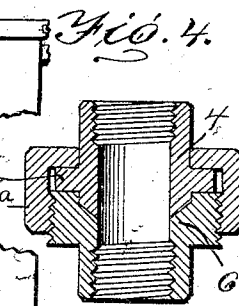
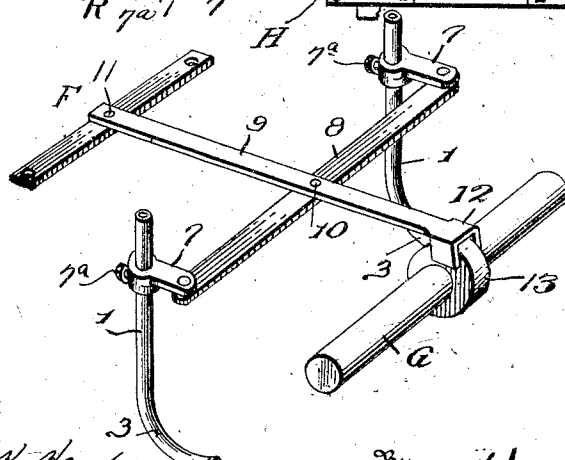
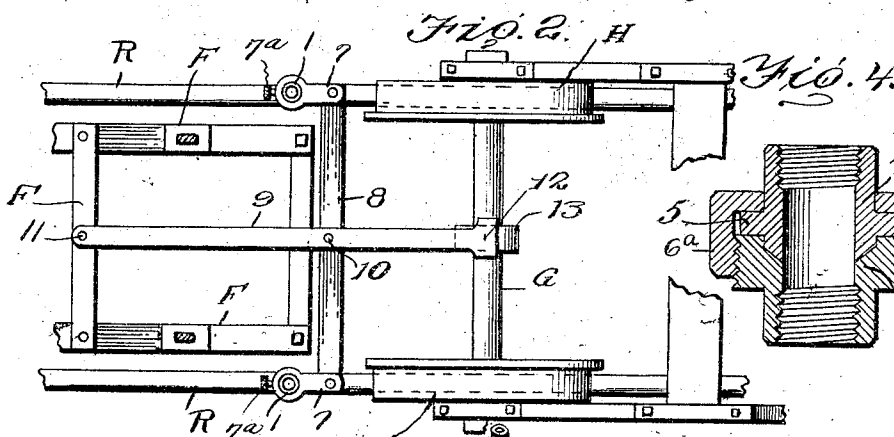
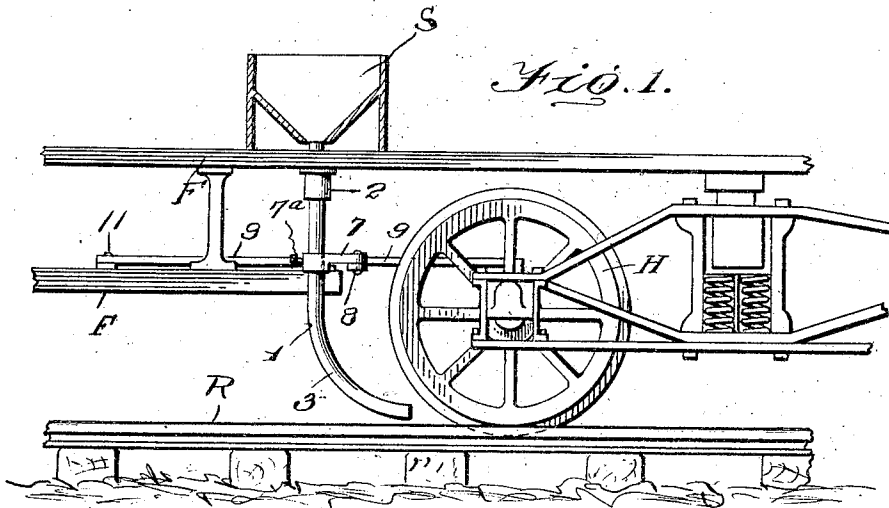


W. A. MOONEY.
 TRACK SANDING DEVICE.
 APPLICATION FILED SEPT. 12, 1911.

1,060,931.

Patented May 6, 1913.



Witnesses

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WILLIAM A. MOONEY, OF NASHVILLE, TENNESSEE.

TRACK-SANDING DEVICE.

1,060,931.

Specification of Letters Patent.

Patented May 6, 1913.

Application filed September 12, 1911. Serial No. 648,936.

To all whom it may concern:

Be it known that I, WILLIAM A. MOONEY, citizen of the United States, residing at Nashville, in the county of Davidson and State of Tennessee, have invented certain new and usual Improvements in Track-Sanding Devices, of which the following is a specification.

This invention relates to track sanding devices.

Heretofore the sand conductors of track sanding devices have not been at all times carried directly over the rails, with the result that when traveling around curves, where the sand is most needed, the conductors leave the rails and the sand is deposited by the side thereof, thus involving waste and defeating the purpose of the device.

The primary object of the present invention is to overcome this fault and provide a track sanding device which will follow the track at all times and deposit sand in advance of the vehicle wheels.

Another object is to provide automatically controlled sand conductors which, when in operation, will always deposit the sand where it will be of use, thus promoting economy in sand consumption.

A further object is to provide a track sanding device which is so constructed that it is applicable both to old and new vehicles without necessitating changes in the structural arrangement thereof.

Further objects and advantages will appear in the following description, it being understood, that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

For a full understanding of the invention reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a side elevation of the device attached to a vehicle frame; Fig. 2 is a plan view thereof; Fig. 3 is a perspective view of the device in conjunction with a car axle; and Fig. 4 shows the swivel union.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawing by the same reference characters.

In the drawing, the reference character "F" indicates a frame which is fixed with relation to the body of the vehicle to which the sanding device is applied and with re-

spect to which the truck frame is relatively movable.

The reference character G designates the axle and H the wheels which are mounted thereon and the letter S indicates a sand hopper which is mounted upon the frame F.

Depending from the frame F are spaced coacting sand conductors 1, the upper ends of which communicate with the hopper S and are mounted in swivel unions 2, the lower ends 3 being disposed laterally above the track rails R. The union 2 embodies a nipple 4, provided with a flange 5, and secured to the frame F below the hopper S. The union is further comprised of an externally threaded socket 6 secured to the upper end of the conductor 1 and joined to the nipple 4 by a nut 6^a which grips the flange 5 and engages the external threads of the socket 6. It will be readily seen that this swivel union permits the conductors 1 embodying the curved portion 3 to swing laterally and also allows ready detachment of the conductors should they become injured or inoperative from any cause.

As a means of controlling the lateral movement of the curved terminals 3, there are provided arms 7 detachably secured to each conductor by the screws 7^a or similar means, said arms being extended horizontally therefrom and capable of vertical adjustment for adaptation to vehicles of varying heights. The arms 7 are pivotally connected to the opposite ends of a preferably single, transverse bar or rod 8.

In order to provide a means of operation for the bar 8, a second bar 9 crosses the bar 8 approximately at right angles thereto and said bars are pivotally connected at the point 10 which is intermediate the ends of each bar. The forward end of the bar 9 is pivotally mounted on the frame F at the point 11 and its other end is bifurcated as at 12 as a means of engagement with a collar 13 on the axle G which is swiveled so that it may turn independently of the frame F. It is of course to be understood that the point 11 is well in advance of the sand conductors 1, as shown in the drawing.

It will be readily seen that when the wheels H of the vehicle round a curve, the axle G is swung and through the medium of the collar 13 the bifurcated rod 9 is tilted on its pivoted axis 11 as the frame F to which said rod is pivoted does not swing with the axle. Since the transverse bar 8

is secured to the bar 9 it is moved longitudinally and causes the arms 7 to swing the sand conductors 1 in the swivels 2 simultaneously and in the same direction, thus maintaining their discharge orifices directly over the track rails R in advance of the wheels. This insures the placing of the sand on the rail curve, thereby assisting the vehicle wheels in negotiating said curve.

While the foregoing description explains the preferred embodiment of the invention, it need not be restricted to this form, as the conductors could be arranged either singly or in pairs, and in some cases it might be desirable to place them in the rear of the vehicle wheels. Furthermore the conductors 1 could be made flexible by the use of hose or other like material thus obviating necessity for the union 2, simplifying the construction and lowering the cost of manufacture of the device.

Although the device is primarily intended to be used for track sanding purposes it is not necessarily limited to this use, for without departing from the spirit of the invention, slight modifications in its construction could be made to permit the employment of the device for oiling the track or for any like purpose demanding the use of automatically adjustable conductors.

Having thus described the invention, what is claimed as new is:

1. The combination with a vehicle frame and sand hopper, of a sand conductor mounted to turn on the vehicle frame and communicating with the hopper, and means operatively connected with the vehicle axle for swinging the conductor with the vehicle wheels.

2. The combination with a vehicle frame and sand hopper, of swiveled sand conductors mounted on the frame and communicating with the hopper, vertically adjustable arms mounted on the conductors and extending horizontally therefrom, a pivoted connection between the arms, and means op-

eratively connected with the arms and actuated by contact with the vehicle axle for moving said arms simultaneously and in the same direction.

3. The combination with a vehicle frame and sand hopper, of spaced swiveled sand conductors attached to the frame and communicating with the hopper, a connection between said conductors, an actuating member connected thereto, and a collar mounted on the vehicle axle and bearing against the actuating member.

4. The combination with a vehicle frame and a sand hopper, of spaced swiveled sand conductors attached to the frame and communicating with the hopper, a pivoted connection between the conductors, and a rod having one end thereof pivoted to the vehicle frame and the other end bifurcated for engagement with the vehicle axle, said rod being pivotally attached to the connecting means of the conductors.

5. The combination with a vehicle frame and sand hopper, of spaced swiveled sand conductors secured to the frame and communicating with the hopper, arms detachably mounted on the conductors and capable of vertical adjustment thereon, a rod pivotally attached at each end to the detachable arms, and means for actuating the rod from the vehicle axle to cause said conductors to move simultaneously with the wheels and in the same direction.

6. The combination with a vehicle frame and a sand hopper, of sand conductors depending from the hopper and communicating therewith, said conductors having their lower ends bent laterally, and means operatively connected with the vehicle axle for simultaneously swinging the conductors with the vehicle wheels.

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

WILLIAM A. MOONEY. [L. s.]

Witnesses:

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