

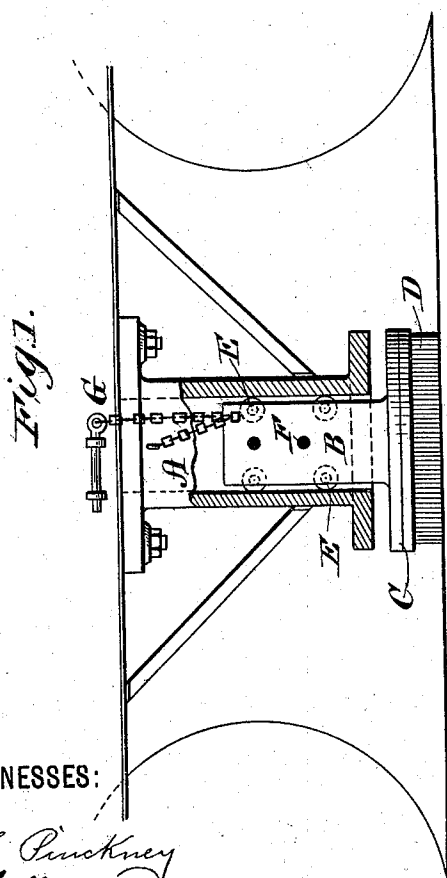
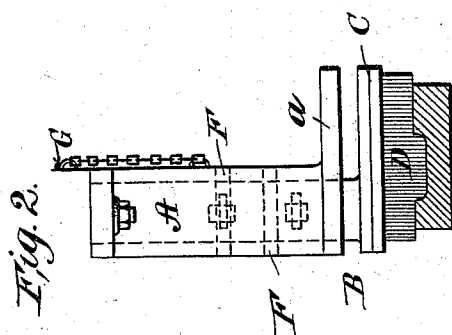
(No Model.)

A. FLAHAUX.

AUTOMATIC CLEANER FOR RAILS OF TRAMWAYS, &c.

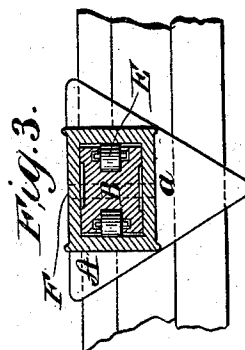
No. 552,637.

Patented Jan. 7, 1896.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ARTHUR FLAHAUX, OF LAEKEN, BELGIUM.

AUTOMATIC CLEANER FOR RAILS OF TRAMWAYS, &c.

SPECIFICATION forming part of Letters Patent No. 552,637, dated January 7, 1896.

Application filed May 9, 1895. Serial No. 548,653. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR FLAHAUX, a subject of the King of the Belgians, residing at Laeken, near Brussels, Kingdom of Belgium, have invented certain new and useful Improvements in Automatic Cleaners for the Rails of Tramways and other Railroads, of which the following is a full, clear, and exact description.

My invention relates to automatic cleaning devices for the rails of railroads, and particularly of tramways operated by draft-animals, or by mechanical or electrical means.

In the accompanying drawings, which form a part of this description, Figure 1 is a view in elevation of my apparatus with the box A in section. Fig. 2 is a side view, and Fig. 3 a horizontal sectional view.

Like letters of reference indicate like parts in the several views.

My cleaning apparatus, as shown in the annexed drawings, comprises an oblong box with solid walls placed vertically upon each longitudinal girder of the carriage-frame between the two wheels, so as to be in line with the transverse axis of said carriage. Said box A, Figs. 1, 2 and 3, terminates at its lower end in a triangular platform *a*. Within the space in said box a block B is so placed as to be capable of playing up and down therein freely. This block at its lower end terminates in a platform C, which is also triangular, and which is made to carry a brush D of the same shape.

As will be readily understood from an examination of the drawings, the block B, when brush D encounters uneven obstructions upon the rail which it is designed to clean, will rise while sliding in box A. To facilitate such movement the block B is provided with friction-rollers E, which travel upon the inner sides of the walls of said box.

A tramway-carriage provided with appliances of the character described above will, while employed in the usual way, clean the rails as may become necessary.

The platform C of block B may be weighted with weights more or less heavy to increase the friction upon the rail. Thus, under ordinary conditions, when it is only desired to remove the dry dust from the depression in the rail, a weight of four to five kilos will be sufficient, while in cases of snow-storms double that

weight should be applied. Such application of weights can be accomplished in various ways—for instance, by providing depressions in platform C within which the weights may be placed, if desired. Care must be taken that the play allowed between A and C be not interfered with.

I do not wish to limit myself to the particular means described for obtaining the necessary friction upon the rail. Thus, a suitable spring might be employed instead for obtaining such necessary frictional contact.

When the apparatus is to be placed out of action, the block B is elevated and a pin G is placed in the openings F which pass through the box A and the block.

I am aware that attempts have been made heretofore to automatically clean the rails of railroads, and that various devices have been employed, from the simple brush placed in front of the carriage to the rotary brushes propelled from the axle; but all these systems are objectionable, the former because the brushes, being placed in front of the carriages, when they pass over curves and switches do not operate properly, as owing to the swinging movement of the carriage it frequently happens that they do not properly take hold, and the latter because their complicated construction is apt to cause their stoppage when their operation is particularly required, the mud lodging between its parts and rapidly clogging the same up. These disadvantages do not occur in connection with my appliances, as the platform which carries the brush prevents the mud from entering box A, owing to its being placed in the line of the transverse axis of the carriage. Further, the triangular form given to the brush insures the throwing in uniform manner of dust and mud toward the outside of the track and without splashing.

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

1. The combination with a car, of a box attached to the under part of the car and a block substantially filling, transversely, said box, and thereby guided by it, adapted to operate vertically within said box and to be weighted down, and provided with a platform, to the under side of which is attached a triangular shaped brush, the apex of said brush point-

ing in a direction at right angles to the rails to be cleaned, substantially as set forth.

2. The combination with a car, of a box attached to the under part of the car and a block
5 substantially filling, transversely, said box, and thereby guided by it, sliding vertically within said box and adapted to be weighted down and provided with friction rollers and
10 attached a triangular shaped brush, the apex of said brush pointing in a direction at right angles to the rails to be cleaned, substantially as set forth.

3. The combination with a car, of a box having solid walls, attached to the under part of
15 the car on each side, said box adapted to re-

ceive a block, provided with a triangular platform to the under side of which is attached a brush of substantially similar shape, the apex of said triangular shaped platform and brush
20 pointing in a direction at right angles to the rails to be cleaned, the said block capable of vertical movement within said box and of being weighted down to give any desired degree of pressure to the brush, substantially as set
25 forth.

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

ARTHUR FLAHAUX.

Witnesses:

LÉONCE TANMART DE BROUILLOT,
ACHILLE MOREL.