(No Model.) 3 Sheets—Sheet 1.

C. MAHON.

TRACK CLEARER.

No. 490,772. Patented Jan. 31, 1893.

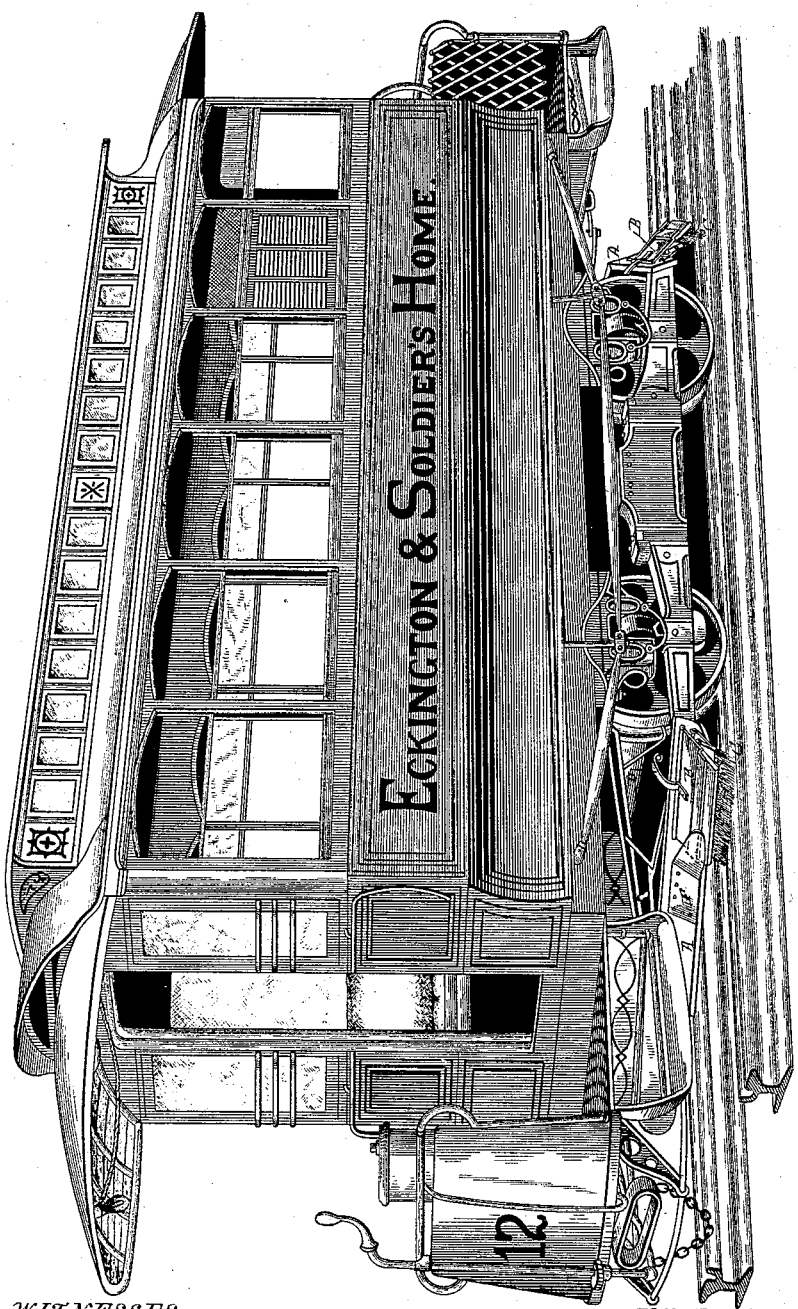

Fig. 1.

WITNESSES
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INVENTOR
Chas. Mahon

(No Model.)

3 Sheets—Sheet 2.

C. MAHON.

TRACK CLEARER.

No. 490,772. Patented Jan. 31, 1893.

Fig. 1.

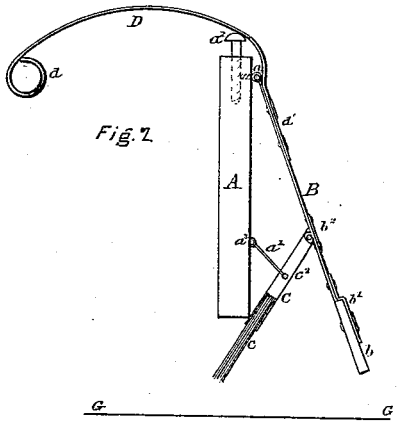


Fig. 3.

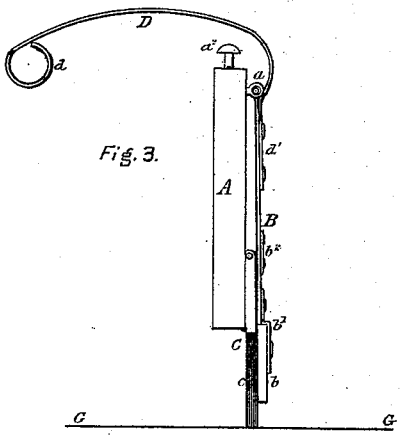


Fig. 4.

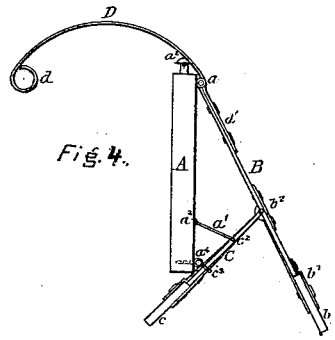


Fig. 5.

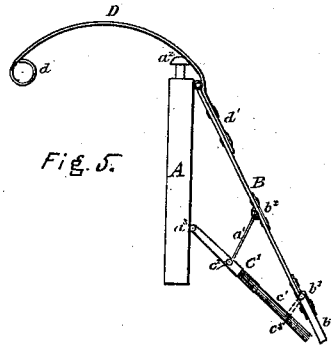
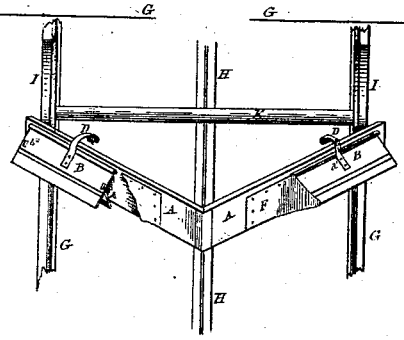


Fig. 6.



Witnesses
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Frank Pegan

Chas. Mahon
Inventor

(No Model.)

3 Sheets—Sheet 3.

C. MAHON.

TRACK CLEARER.

No. 490,772. Patented Jan. 31, 1893.

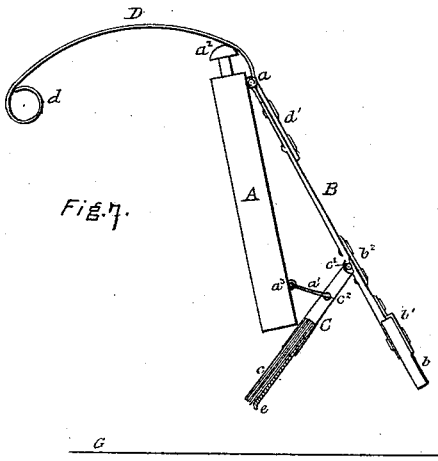

Fig. 7.

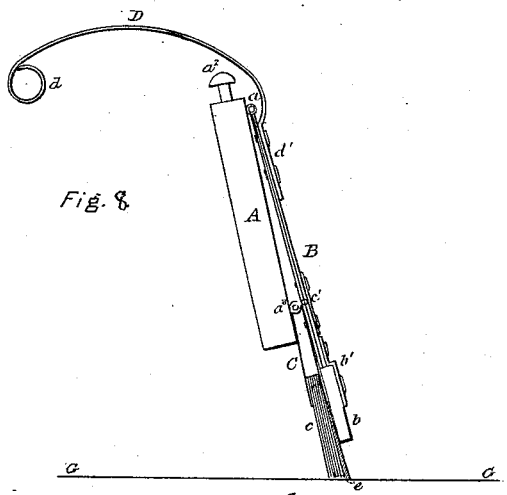

Fig. 8.

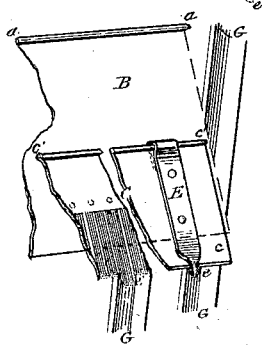

Fig. 9.

Witnesses
James F. Keenan
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Chas. Mahon
Inventor

UNITED STATES PATENT OFFICE.

CHARLES MAHON, OF WASHINGTON, DISTRICT OF COLUMBIA.

TRACK-CLEARER.

SPECIFICATION forming part of Letters Patent No. 490,772, dated January 31, 1893.

Application filed January 12, 1892. Serial No. 417,846. (No model.)

To all whom it may concern:

Be it known that I, CHARLES MAHON, of Washington, in the District of Columbia, have invented new and useful Improvements in Track-Clearers, of which the following is a full and exact description, reference being had to the accompanying drawings, making part of this specification.

My invention relates to that class of apparatus for removing obstructions from car tracks or preventing accidents thereon and is particularly adapted for use with cable or electric cars wherein guard planks are employed and:—

My invention consists in a novel construction of main and auxiliary fenders acting automatically and conjointly to close the space between the edge of the guard plank and track, and operating in such manner that the main fender shall, in being depressed, act to depress the auxiliary fender, and return to its normal position.

It further consists in providing the auxiliary fender with a flexible engaging surface whereby the same may accommodate itself to inequalities or fixed projecting portions of the track system and to certain details in the construction and arrangement of parts all as hereinafter explained.

In the accompanying drawings; Figure 1 is a perspective view of an electric car showing my improvement applied thereto, in which case the guard plank is shown arranged in an inclined position. Fig. 2 is an end view of one form of the device wherein the auxiliary fender is pivoted at its upper end to the inner side of the main fender and with a link in turn connecting it with the guard plank with the device in its extended position. Fig. 3 is an end view of the same with the device closed. Fig. 4 is an end view of a construction similar to Figs. 1 and 2 except that a guide bail is arranged near the lower edge of the guard plank to support and guide the auxiliary fender. Fig. 5 is a similar view wherein the auxiliary fender is pivoted to the guard plank and the link connected to the main fender and the guide and support secured to and depending from the main fender. Fig. 6 is a plan or top view of a section of car truck showing the arrangement of the devices on a guard plank. Fig. 7 is a side view of the device showing the same applied to an inclined guard plank with the device extended. Fig. 8 is a similar view with the device closed. Fig. 9 is a perspective view of the device, partly broken away, showing the brush of the auxiliary fender made longer at a point in line with the groove of the rail so as to extend into the same when depressed.

The guard plank A may be of any usual or preferred construction such as now in general use on cable and electric cars.

B represents the main fender which is preferably composed of heavy galvanized sheet iron and which is provided at its upper edge with pivot bearings preferably formed by bending sheet iron around a former and then back upon itself and riveted as shown at d'. The fender has connected to its front face near its lower edge a strip b' made in angle form which in connection with the lower edge of the fender forms a recess for the reception of a flexible strip, b, which acts as a feeler and "shove off" for the main fender. Connected to the main fender B. and preferably about centrally thereof, is an arm D. which curves backward and lies in a plane about at right angle to the plane of fender, forming a counterbalance or weight to hold the main and auxiliary fenders raised or extended, but of such weight that while serving to hold the fenders extended permits them to be readily forced into their closed position when meeting an obstruction, and returns them to their normal position when the object has been removed. An eye d, is formed at the free end of the arm to permit the attachment thereto of additional weight if found desirable. The main fender thus constructed is connected to the guard plank, by means of a rod or pivot pin passing through the pivot bearings, the rod or pin being supported by means of eye bolts or screws a, connected to the plank and by means of which screws or bolts the position of the fender relative to the plank may be changed at pleasure as occasion shall require to bring it in proper relation to the ground as hereinafter explained. An adjust-

able stop pin a^2 is connected to the guard plank at a point under the arm, and by the engagement of the arm therewith serves to fix the distance of the fenders above the track surface and permit the changing of the distance as occasion shall require.

C is an auxiliary fender which may be either pivoted to the main fender as shown in Figs. 1. 2, 3, 6, and 7 and connected to the guard plank through a link, or pivoted to the plank and connected to the main fender through a link as shown in Fig. 4, the action of the device under either arrangement being the same. This auxiliary fender is also composed preferably of sheet iron formed in a similar manner to the main fender and having a recess formed in its lower edge to receive a flexible strip or brush *c*.

In Figs. 3 and 4 is shown a guide or support for the lower part of the auxilary fender, in one case being shown connected to the guard plank and in the other to the main fender, to depend therefrom.

The device is connected to the guard plank or other part of the car frame or truck, and the parts to each other so that the lower edge of the main fender will be about from two to four inches above the track G. G. when the device is in its closed position, while the auxiliary fender will be brought into direct engagement therewith and when closed will lie parallel and closely against the plank as shown in Figs. 2 and 7.

A shield F, is secured to the guard plank with its lower corner adjacent to the fender left free and extending over the inner edge of said fenders and made of yielding or spring material, which shield acts to close the space between the fenders and guard plank when the same are extended, and also as a guide to carry an obstruction past the edge and over onto the fender and into such position as to act thereon to close or depress said fenders, being adapted to close into the same plane with the fenders and to return to its normal position when released from the object.

By the construction as above described it will be seen, that by the use of a main and auxiliary fender, while the entire space between the guard plank and track will be closed when the car comes in contact with an obstruction, at the same time the device when elevated or extended will not project far enough out from the car to render its use objectionable, or to be rendered liable to ringing when not in use.

The operation of the device is as follows;—as the car is being drawn or propelled over the track, should any object of sufficient size need removal, or such as will not pass under the edge of the main fender, and more particularly the body or limb of a human being, such object will, by coming in contact with the main fender, act to force the same backward or depress the same, and through its connection with the auxiliary fender cause the same to be also depressed—and close the entire space between the edge of the guard plank and track in time to prevent the object wedging or passing under the guard plank to the wheels. Attached near the outer edge of the auxiliary fender is a toe piece E made to extend a sufficient distance below the lower edge of the fender and in such position thereon that when the fenders are depressed the toe piece will be forced into the groove of the rail at *e*, to prevent any article—such as the clothing of a person—under any possibility passing under the fenders. In some cases, instead of forming the toe piece of a separate piece, the bristles of the brush at the point which moves over the groove may be made of sufficient length to fill the groove, while the main bristles rest on the tread of the track as shown at e' in Fig. 8.

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

1. In a device for removing obstructions from car tracks, a vertically arranged main fender adapted to be pivoted to the frame or truck of a car, and a vertically arranged auxiliary fender connected to the main fender and also adapted to be connected to the guard plank, the two arranged to be brought together substantially as described whereby the fenders act conjointly to close the space between the guard plank and track when applied to the car as set forth.

2. In a device for removing obstructions from car tracks, a vertically arranged main fender adapted to be connected to the car frame or truck, a vertically arranged auxiliary fender connected thereto and adapted to be actuated thereby the two arranged to be brought together to close the space between the guard plank and track and a counterbalance substantially as described, whereby the fenders are automatically returned and held in their normal position after being released from an obstruction as set forth.

3. In a device for removing obstructions from car tracks, a main fender adapted to be pivoted to the car frame or truck, an auxiliary fender pivoted to the rear face of the main fender, a link to connect the auxiliary fender with the car frame or truck, and a counterbalance weight to act on the fenders substantially in the manner and for the purpose set forth.

4. In a device for removing obstructions from car tracks, a main fender adapted to be pivoted to the car frame or truck, having its lower edge made of yielding or flexible material, and an auxiliary fender secured in rear thereof and adapted to be actuated thereby, substantially as set forth.

5. In a device for removing obstructions from car tracks, a main fender adapted to be pivoted to the car frame or truck, and an auxiliary fender connected to and actuated thereby made in brush form, said fenders acting

conjointly to close the space between their support and the track, substantially as and for the purpose set forth.

6. In a device for removing obstructions from car tracks, a main and auxiliary fender connected to the guard plank and to each other substantially as described, and a spring shield having one portion secured to the guard plank and its free portion to extend over the inner edges of the fenders, as and for the purpose set forth.

In testimony whereof I have hereunto set my hand this 12th day of January, A. D. 1892.

CHAS. MAHON.

Witnesses:
S. D. BAILEY,
H. M. STERLING.