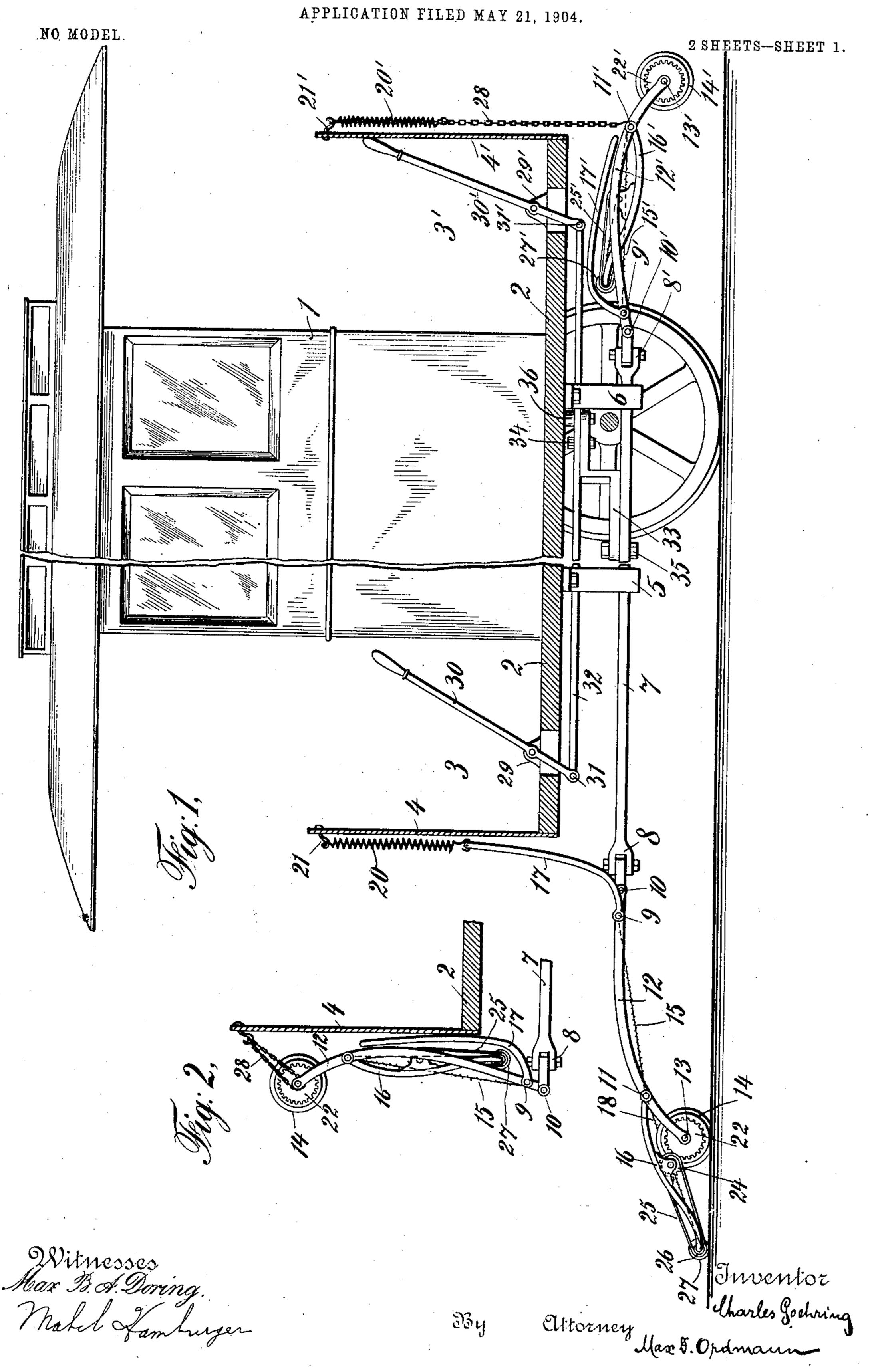
C. GOEHRING.
CAR FENDER.



C. GOEHRING. CAR FENDER.

APPLICATION FILED MAY 21, 1904. NO MODEL. Witnesses Max Box Doring. Mubel Hamburger

United States Patent Office.

CHARLES GOEHRING, OF BROOKLYN, NEW YORK.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 774,983, dated November 15, 1904.

Application filed May 21, 1904. Serial No. 209,007. (No model.)

To all whom it may concern:

Be it known that I, Charles Goehring, a citizen of the United States, residing at Brooklyn, in the county of Kings. State of New York, have invented certain new and useful Improvements in Car-Fenders, of which the following is a specification.

This invention relates to street-railway cars, and more particularly to fenders therefor, and has for its object to provide a fender which may be folded to occupy little space and adjusted beneath the car when not in use.

A further object is to provide a fender which may be quickly placed in operative position and which may be adjusted to bring its forward edge to the desired distance from the ground.

Another object is to provide a fender which will turn with the car as the latter passes around a curve, so that the fender will not project beyond the outer rail of the curve, thus removing the liability of the fender striking persons standing near the car or coming in engagement with the car traveling in the opposite direction on the other track.

In order to make my invention more clear, the same is illustrated in the accompanying drawings, in which corresponding reference-letters denote corresponding parts, and in which—

Figure 1 is a side elevation of a car, partly in section, the central portion of which is broken away in order to show the two ends thereof, the fender being shown at one end in 35 operative and at the opposite end in a folded position beneath the platform of the car. Fig. 2 shows a similar view of one end of the car at which the fender is folded not beneath the platform of the car, but turned upward against 4° the dashboard thereof and is held in this position by means of chains. Fig. 3 is a top plan view of the fender, the same being shown at one end in operative position and at the other end in a folded position, corresponding 45 with Fig. 1; and Fig. 4 is an enlarged elevational view of the forward end of the fender when in operative position.

With reference to the drawings, numeral 1 indicates the body of the car, 2 its bottom, 3 3 5° its platforms, and 4 4 its dashboards. De-

pending from the floor 2 of the car are brackets 5 6, in which the rod 7 is slidably engaged. The extremity 8 of the rod 7 is bifurcated and a framework 12, having a vertically-swinging arm pivoted at 10 to its rear edge, is con- 55 nected to said bifurcated end by means of said arm, so as to permit the frame 12 to swing also in a horizontal plane. The framework 12 extends forwardly and downwardly in the direction of the tracks and has at its forward 60 edge an axle 13. Revolubly mounted upon the said axle 13 adjacent to its ends are flanged guide-wheels 14, which are arranged for engagement of their flanges in the grooves of the rails. The frame is thus caused to follow 65 the curves of the track, the joint at 8 permitting a free horizontal and the joint at 10 permitting a free vertical movement thereof with respect to the rod 7.

The frame 12 is provided with suitable net- 70 ting, as seen from Fig. 3, and hinged to the frame 12, adjacent to the forward and rearward ends thereof, respectively, are supplemental frames 16 and 17, which are pivoted at 11 and 9, respectively, to the frame 12 for 75 movement to lie thereupon or to extend outwardly at an angle thereto, these frames also being provided with nettings 18 and 19, Fig. 3. When the supplemental frames extend outwardly from the frame 12, the free end of 8c the frame 17 is supported by means of springs 20, which are secured thereto and which are engaged with hooks 21, applied to the dashboard 4 of the car, the free end of the frame 16 extending toward the tracks and 85 being provided with a roller 27, mounted upon an axle extending transversely between the side boards of the frame 16. This roller 27 may be of elastic material, preferably of rubber or the like, and may be adapted to 90 prevent wear of the frame and arranged so as to rotate in an opposite direction of that of the wheels 14. For this purpose the guidewheels 4 may be provided with gears 22, which are in a meshing connection with correspond- 95 ing pinions 24, borne in brackets depending from the side bars of the frame 16. Upon the axle of the pinions 24 small sprocketwheels 23 are mounted, corresponding sprocket-wheels 26 being mounted at the ends 100

of the axle bearing the rubber roller 27. Chains 25, guided over the sprocket-wheels 23 and 26, transmit rotation from the axle of the gears 24 to the rubber roller 27 in the op-5 posite direction of that of the guide-wheels 14. Owing to this arrangement a body lying on the tracks while the car is approaching it will be drawn onto the fender by the roller 27.

Pivoted in a bracket 29, mounted upon the 10 floor of the platform of the car, is a hand-lever 30, which extends through an opening in the floor and has pivotally connected to its lower end 31 the forward end of the rod 32. Said rod is pivoted to an arm 33 at 34, which 15 arm is at 35 pivoted to the rod 7 and at 36 to the bottom surface of the floor 2. The arm 33 is at the points 34 and 35 provided with slots in which the pivots connecting the rods 32 and 7 with said arm are guided, so as to 20 allow the said arm 33 to move in the arc of a circle around the pivot 36, as shown in Fig. 3. It will thus be seen that through the medium of the lever 30 and the rod 32 the arm 33 is moved pivotally to move the rod 7

25 in the brackets 5 and 6.

In use the rod 7 is moved to cause its forward end to project beyond the dashboard 4 of the car, and the frames 16 and 17 are unfolded to form, in connection with the frame 30 12, the complete fender, the two supplemental frames being held in the desired position, as described above. It will of course be understood that a car is provided with one of these fenders at each end and that when the 35 car has reached the end of its route the fender, which is in inoperative position, is folded and by means of the lever 30 is retracted beneath the floor of the car, the outer end of the fender being supported by means of 40 chains 28, which are then engaged therewith and with the hooks 21, as shown at the righthand side of Figs. 1 and 2, in which the corresponding parts of the fender are marked by corresponding numerals having the ex-45 ponent 1. The fender at the opposite end of the car is then projected and unfolded, as will be readily understood.

In Fig. 2 there is shown a modified arrangement, the means for retracting the fender be-50 neath the floor of the car being assumed to be omitted. In this arrangement the fender is turned upwardly against the dashboard 4 of the car and is held in this position by means of the chains 28, engaged therewith and with 55 the hooks 21. In this form the turning-joint at 8 is provided with a removable pivot-pin which permits of removal of the fender when

desired, and in the use of this form one fender may be used upon each car and may be changed from end to end thereof, as will be readily 60 understood.

In practice modifications of the specific construction shown may be made, and any suitable material and proportions may be used for the various parts without departing from 65 the spirit of my invention.

What I desire to secure by Letters Patent

and what I claim is—

1. In a car-fender, the combination with hangers, of a rod slidably mounted therein, a 7° frame connected with the forward end of the rod for lateral and vertical movement with respect thereto, a hand-lever connected with the rod for movement of the latter in the hangers, guide-wheels carried by the frame, 75 supplemental frames hinged to the first-named frame and movable to lie thereupon or to extend outwardly therefrom, and means for holding one of the supplemental frames in its upward position, substantially and for the pur- 80 pose as specified.

2. A car-fender comprising a frame arranged for vertical and lateral pivotal movement, supplemental frames hinged to the firstnamed frame for movement to lie thereupon 85 or to extend outwardly therefrom, guidewheels carried by the first-named frame, means for holding one of the supplemental frames in its unfolded position, a roller borne upon an axle extending transversely between 9° the side boards of the lower supplemental frame, said roller being adapted to revolve in an opposite direction of that of the guidewheels, and means for transmitting rotation to said roller from the guide-wheels, substan- 95 tially and for the purpose as specified.

3. A fender for cars comprising a frame, supplemental frames hinged to the first-named frame for movement to lie thereupon or to extend outwardly therefrom, the upper supple- 100 mental frame being in its unfolded position supported by springs attached to hooks projecting from the dashboard, the frames being all provided with netting, and means for retracting the folded fender beneath the floor 105 of the car, substantially and for the purpose as specified.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 20th day of May, 1904. 110

CHARLES GOEHRING.

Witnesses:

MABEL HANBURGER, J. Homer Hildreth.