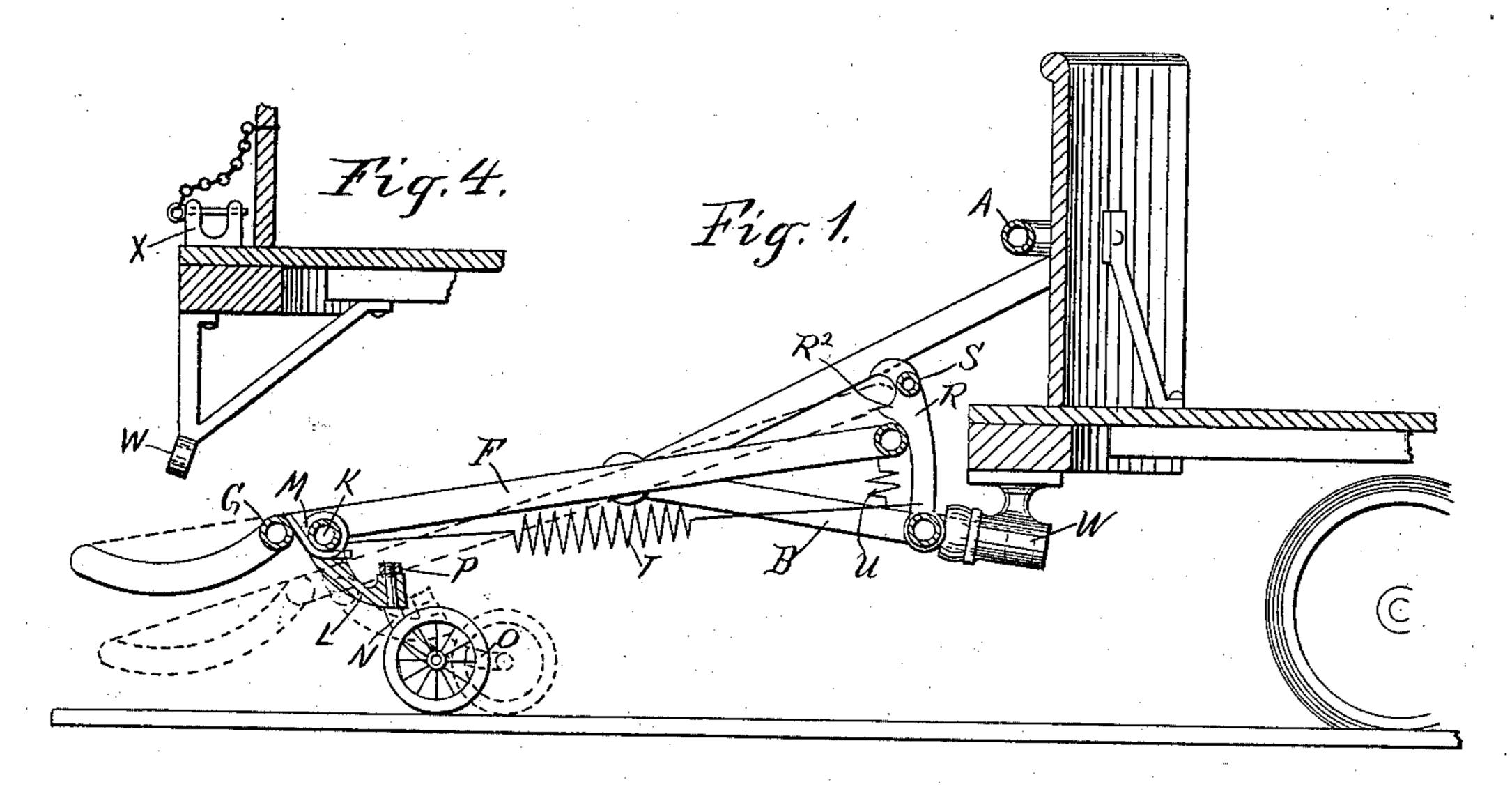
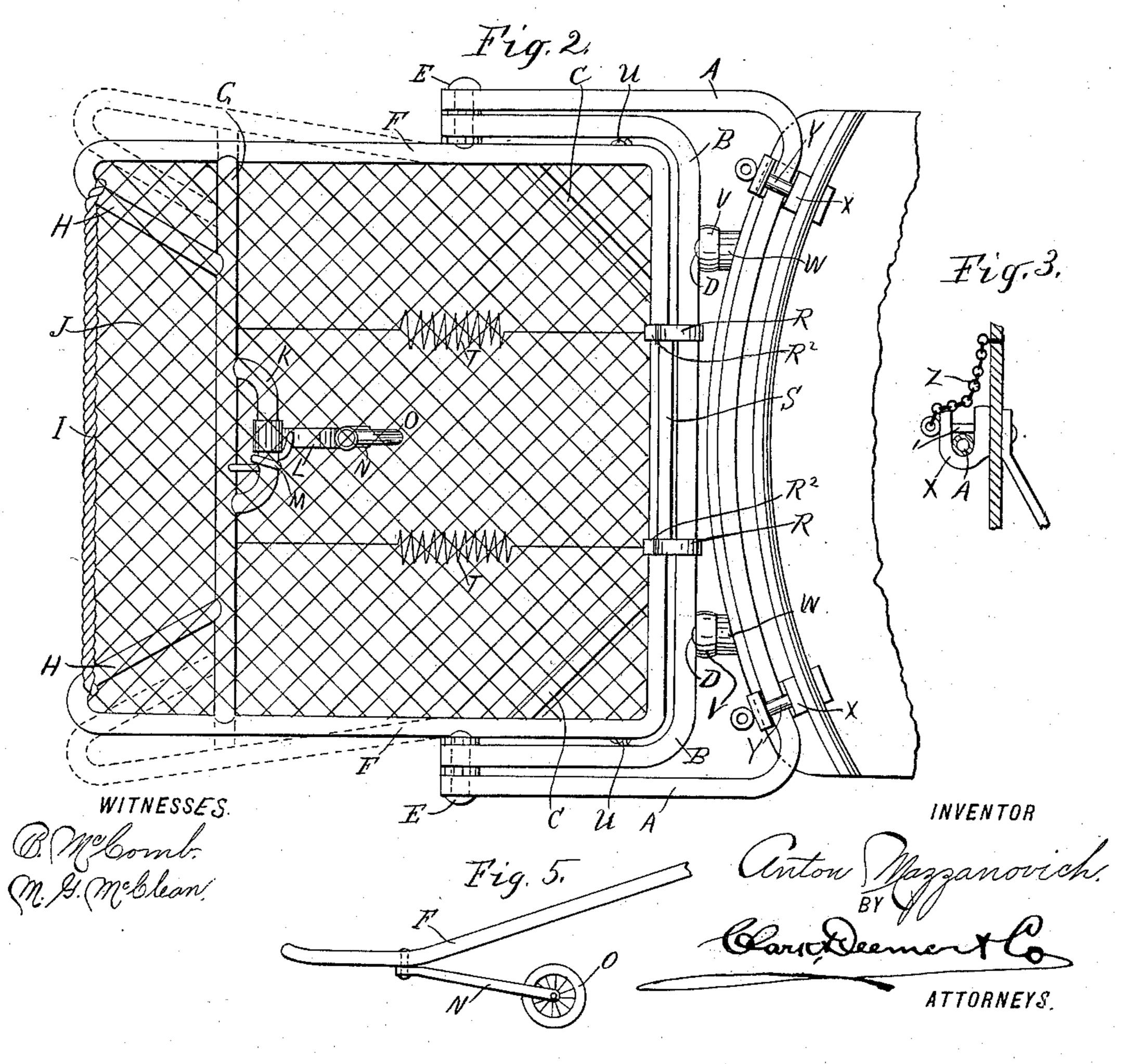
A. MAZZANOVICH. CAR FENDER.

(Application filed Dec. 8, 1897.)

(No Model.)





United States Patent Office.

ANTON MAZZANOVICH, OF NEW YORK, N. Y.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 609,206, dated August 16, 1898.

Application filed December 8, 1897. Serial No. 661,161. (No model.)

To all whom it may concern:

Be it known that I, ANTON MAZZANOVICH, a citizen of the United States, and a resident of New York city, county of New York, and 5 State of New York, have invented certain new and useful Improvements in Car-Fenders, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letto ters and figures of reference indicate corresponding parts.

This invention relates to improvements in street-car fenders of the class designed to prevent the car from running over persons acci-

15 dentally struck by said car.

The object of this invention is to provide a simple and efficient device to obviate the imperfections of all this class of fenders heretofore constructed.

The chief objection to this class of fenders after having struck an obstruction and throw said obstruction out of the net again. Relieved of this weight the fender flies up and 25 passes over the obstruction, thus defeating the object for which it was designed.

Another drawback to the old-style fender is that when the car runs at high speed the fender is tossed up and down by the pitching 30 of the car and is liable to be thrown up in the air at the moment safety lies in its proximity to the ground.

The invention will be hereinafter fully described, and specifically set forth in the an-

35 nexed claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a longitudinal sectional elevation of my improved car-fender, showing the same attached to a 40 car-platform. Fig. 2 is a plan view of the fender. Fig. 3 is a side elevation of one of the hooks attached to the car-dashboard and in which the frame of the fender hangs. Fig. 4 shows another method of fastening the 45 frame-supporting hooks and sockets to the car-platform. Fig. 5 illustrates another form of tilting fender, with another method of pivoting trailing wheel to the same.

In constructing my invention I provide a 50 detachable frame, preferably metallic and tubular, comprising the upper or hanging bar A, the lower bar B, the braces CC, and the spurs

D. Pivoted to said frame by means of the spurs or bolts E E is the fender proper, F, consisting of a rectangular frame of tubing 55 strengthened by the cross-bar G. The side tubes of said fender-frame F project forward of the cross-bar G and are turned inward and backward and brazed or otherwise fastened to said cross-bar, forming the braces 60 HH. Between the elbows of said braces HH is stretched the rope I. In the rectangular space formed by the sides of the tubular frame of the fender and the rope is attached a netting J of wire or other suitable material. 65 The side tubes of said fender forward of the pivots E E may be bent outward more or less in order to project slightly over the rails on either side, as shown in the dotted lines in Fig. 2.

Brazed to or otherwise fastened to the crossbar G at a point near the center is the yoke heretofore has been their liability to rebound | or arch K, upon which is pivoted the arm L. This arm L, free to move up and down, is normally kept down by means of the coil- 75 spring M. Pivoted to said arm at its opposite end and adapted to move laterally is the fork N, supporting the wheel O, preferably a wooden-rimmed, wire-spoked, and rubbertired wheel. Said fork N is held in position 80 in the arm L by means of the nut P. The said wheel-fork may be pivoted to the crossbar G directly without the intervention of the arm L, as shown in Fig. 5.

> Pivoted to the frame B are the two latches 85 R R, connected by the cross-bar S and each provided on its upper forward part with a lip R² to engage the frame of the fender when depressed by an obstruction and lock it in that position. To insure positive action of 90 these latches, the springs T T are provided.

> The tilting fender, normally raised from the ground and running upon the wheel O, is balanced by means of the springs U U. These springs U U will allow for the oscilla- 95 tion of the car and take up all vibration.

On the frame B and brazed to or otherwise securely fastened thereto and projecting rearward are the two spurs D D, preferably tubular. Over these spurs D D are fitted the 100 buffers V V, preferably of rubber or like material. Projecting rearward through said buffers V V the said spurs D D enter the sockets W W, of any desired construction

and fastened by any approved means to and

underneath the car-platform.

Upon the dashboard are riveted or otherwise fastened the hooks X X, into which the 5 upper part of the frame A is hooked. Said frame A is held securely in said hooks X X by means of the pins YY. Said pins YY are fastened to the dashboard by means of the chain 2.

The hooks X X may be secured directly to the platform of the car, as shown in Fig. 4, in lieu of being fastened to the dashboard, and the socket supporting the lower members of the framework may be constructed as

15 shown in Fig. 4.

In operation the normal position of the device is shown by the full lines of Fig. 1, and it will be maintained in that position until some obstruction is met. When a person is 20 struck by the rope, which gives and reduces the force of the shock, he topples over into the net, depressing the forward end of the tilting frame and raising the rear end until it becomes locked in the latches R R'. It can-25 not spring back until released intentionally. The tilting frame is supported by the wheel O, which, controlled by the spring M, will allow it to become depressed enough to be locked by the latch, but not enough to allow 30 it to strike the ground. Its position when depressed and locked is shown by the dotted lines in Fig. 1. When relieved of its weight and after the latch has been sprung back, the tilting fender returns to its normal position.

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

Patent, is—

1. A detachable car-fender, comprising a frame adapted to be removably attached to 40 the car-platform, a tilting fender pivoted to

said frame, a latch pivoted upon the rear of said frame, said latch comprising side sections and cross-braces and being provided with lips upon the upper front portion thereof adapted for engagement with a rear cross- 45 piece of the tilting fender when depressed, a spiral spring connecting and maintaining in connection said latch and said tilting fender, and a guide-wheel pivotally attached to the center of the forward cross-bar of the tilting 50 fender, said wheel being adapted to support said tilting fender in its normal position, sub-

stantially as shown and described.

2. A detachable car-fender, comprising a frame adapted to be removably attached to 55 the platform or the dashboard and platform, a tilting fender pivoted to said frame, a latch pivoted upon the rear of said frame, said latch comprising side sections and cross-braces and being provided with lips upon the upper front 60 portion thereof adapted for engagement with the rear cross-piece of the tilting fender when depressed, a spiral spring connecting and maintaining in connection said latch and said tilting fender, and a guide-wheel pivotally at- 65 tached to the center of the forward cross-bar of the tilting fender and a coil-spring attached thereto to maintain it in its normal position, said wheel being adapted to support said tilting fender in its normal position, substan- 70 tially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 3d day of Decem-

ber, 1897.

ANTON MAZZANOVICH.

Witnesses: CHAS. DIEHL, WM. FOUST.