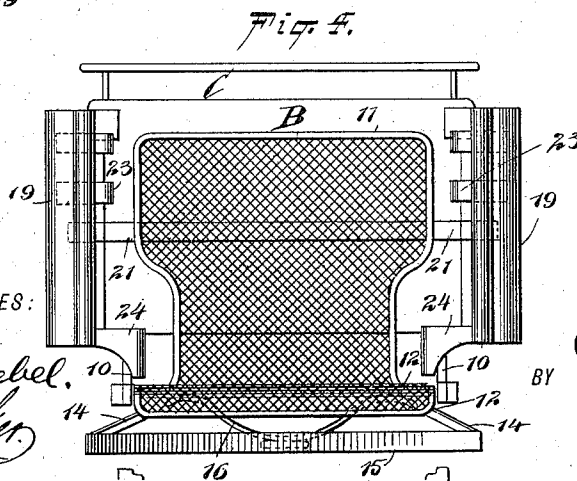
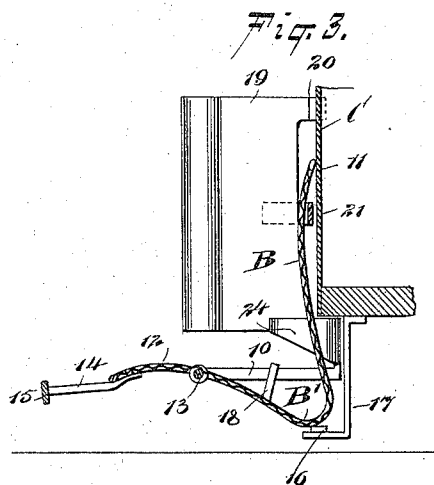
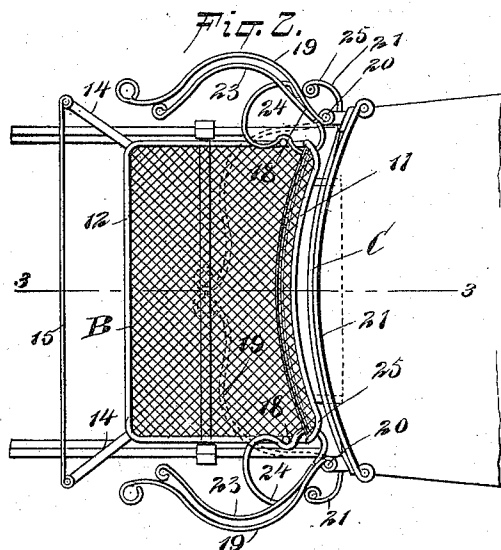
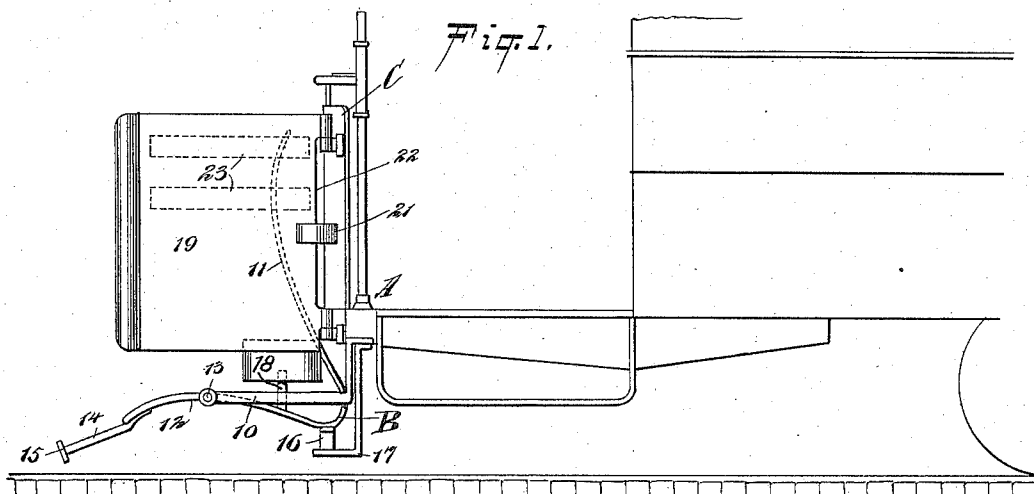


(No Model.)

E. WEST.
CAR FENDER.

No. 576,491.

Patented Feb. 2, 1897.



WITNESSES:

William P. Goebel,
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UNITED STATES PATENT OFFICE.

EDMUND WEST, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF ONE-
THIRD TO FREDERICK E. ROCKSTROH, OF SAME PLACE.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 576,491, dated February 2, 1897.

Application filed August 29, 1896. Serial No. 604,311. (No model.)

To all whom it may concern:

Be it known that I, EDMUND WEST, of San Francisco, in the county of San Francisco and State of California, have invented a new and
5 useful Improvement in Car-Fenders, of which the following is a full, clear, and exact description.

The object of this invention is to provide a simple and economic car-fender so constructed as to combine with a bed or fender
10 proper adapted to receive an object wings or gates so arranged that when the fender strikes an object or a person and said object or person is received thereon the gates or wings will
15 be automatically operated to close over the fender and prevent the object or person from falling off therefrom.

The invention consists in the novel construction and combination of the several
20 parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the front portion of the car having the improved fender applied thereto, the said fender being in side elevation. Fig. 2 is a plan view of the improved fender, the wings or gates being in their open position. Fig. 3 is a section taken
30 practically on the line 3 3 of Fig. 2 with the gates or wings closed; and Fig. 4 is a front elevation of the fender, the wings or gates
35 being open.

In carrying out the invention a bracket 10 is downwardly and forwardly projected from the platform A of the car, and between the horizontal arms of the brackets or hangers 10
40 a fender B is located. This fender comprises a back 11 and a bottom or bed 12. The back is adapted to extend upward a predetermined distance in front of the dashboard C of the car. The upper end of the back of the fender
45 is forwardly curved, presenting a convex front face, and the lower portion of the back is carried downward and rearward to a connection with the bed or bottom 12, which bed or bottom is convexed at its forward end
50 and is inclined downwardly and rearwardly at its rear end. In fact both the back and

the bottom members of the fender are shaped substantially on the lines of a compound curve.

The fender is pivoted to the outer ends of the hangers or brackets 10 through the medium of a pivot pin or bolt 13, which is passed through suitable bearings formed upon the bottom member of the fender at a predetermined point between the front and the rear
60 thereof.

Both members of the fender are preferably constructed, as shown in Figs 2, 3, and 4, of a skeleton frame covered by a network which may be of woven wire or of netting, as occasion may demand, and also, preferably, the back of the fender is reduced in width where it connects with the bottom of the bed, and the bottom or bed is made somewhat wider than the back, while the members of the fender are so connected as to form a pocket or depression B' in its upper surface where the two members unite, as is illustrated in Fig. 3, the said pocket or depression B' being adapted to receive the object thrown on the
75 bottom or bed of the fender, and thereby prevent the object from leaving the fender after having been received thereon.

Arms 14 are forwardly projected from the front corners of the bed or bottom member 80 of the fender, the arms being carried outwardly in opposite directions over the rails of the track, as shown in Fig. 2, and the outer ends of these arms are connected by a band or a belt 15 of a yielding material, such as
85 leather, for example, so that when the fender strikes an object the front belt or band 15 will be brought in contact with the object and will not unduly injure it.

A spring 16 has bearing against the under rear portion of the bottom member of the fender, and this spring, which rests upon a support 17, connected with the platform, serves to hold the forward end of the fender down quite close to the track, so that a person struck by the fender will receive the blow well down at the ankles. A pin 18 is projected upward from each side of the bottom of the fender for a purpose to be hereinafter described.

A wing or gate 19 is attached by means of hinges 20 at its top and at its bottom to the

dashboard C, one of the said wings or gates being at each side of the upright or back portion of the fender. These wings are transversely curved, their inner faces being concaved, and their free ends are preferably returned outwardly on the body of the wings, and the wings or gates when in their closed position will extend in front of the back of the fender, as shown in dotted lines in Fig. 2, their cylindrical inner ends being in engagement, and the said wings will serve when in their closed position to prevent persons thrown on the fender from being thrown off therefrom.

A spring 21 is secured to the dashboard C, and said spring extends outward beyond the ends of the dashboard and through openings 22, formed between the dashboard and the gates or wings, the terminals of the spring being forwardly curved and having such bearing upon the outer faces of the said wings or gates as to force the wings or gates to a closed position when not held in an open one.

In order that persons shall not be injured by the gates when closed, springs 23 are placed on the inner faces of the gates, whereby if the gates in closing contact with an object or person the springs of the gates or wings will thus engage and not the body portion thereof, thereby tempering the shock. A keeper 24 is secured to the bottom portion of the inner face of each wing or gate at the rear, and these keepers are preferably of an oblong form and of skeleton construction, and each keeper is provided upon its inner face with a recess or a depression 25, in which the pins 18 of the fender enter when the gates or wings are open, holding them in their open position.

In operation, the gates or wings being open, should a person be thrown on the fender, the moment that the person strikes the bottom portion of the fender near the back of the same the back of the fender will be carried rearward and the bottom at the back downward, removing the pins 18 from engagement with the keepers 24, whereupon the springs controlling the gates or wings will act to immediately close them.

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

1. The combination, with a spring-controlled rocking fender, comprising a back and a bottom member, of spring-controlled wings having a hinged connection with a support and located at each side of the back member of the fender, being arranged to fold over and in front of the said back member, a keeper carried by each of the wings, and extensions from the bottom portions of the fenders arranged for engagement with the said keepers, to hold the wings in an outer position, the projections from the fender being disconnected from the keepers when the back portion of the fender is depressed, as set forth.

2. A car-fender, comprising the body portion formed of the curved back and bottom members and pivotally connected with the car-platform, arms extending downwardly in opposite directions from the bottom members and connected at their ends by a flexible band, a spring bearing against the under rear portion of the bottom member, wings supported at each side of the back portion of the fender and provided with springs by which they are forced to closed position, keepers secured to the bottom of each wing, and pins extending upwardly from the body portion of the fender and into engagement with the keepers, whereby said wings are held open against the action of their springs, as and for the purpose set forth.

3. The combination with a rocking fender comprising a back and a bottom member, of spring-controlled vertical wings having a hinged connection with supports located in the rear and on each side of the back member of the fender, said wings being transversely curved and provided with keepers, pins on the bottom portions of the fenders, and a spring 16 normally holding said pins in engagement with the keepers, as set forth.

EDMUND WEST.

Witnesses:

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HIRAM REIMAR.