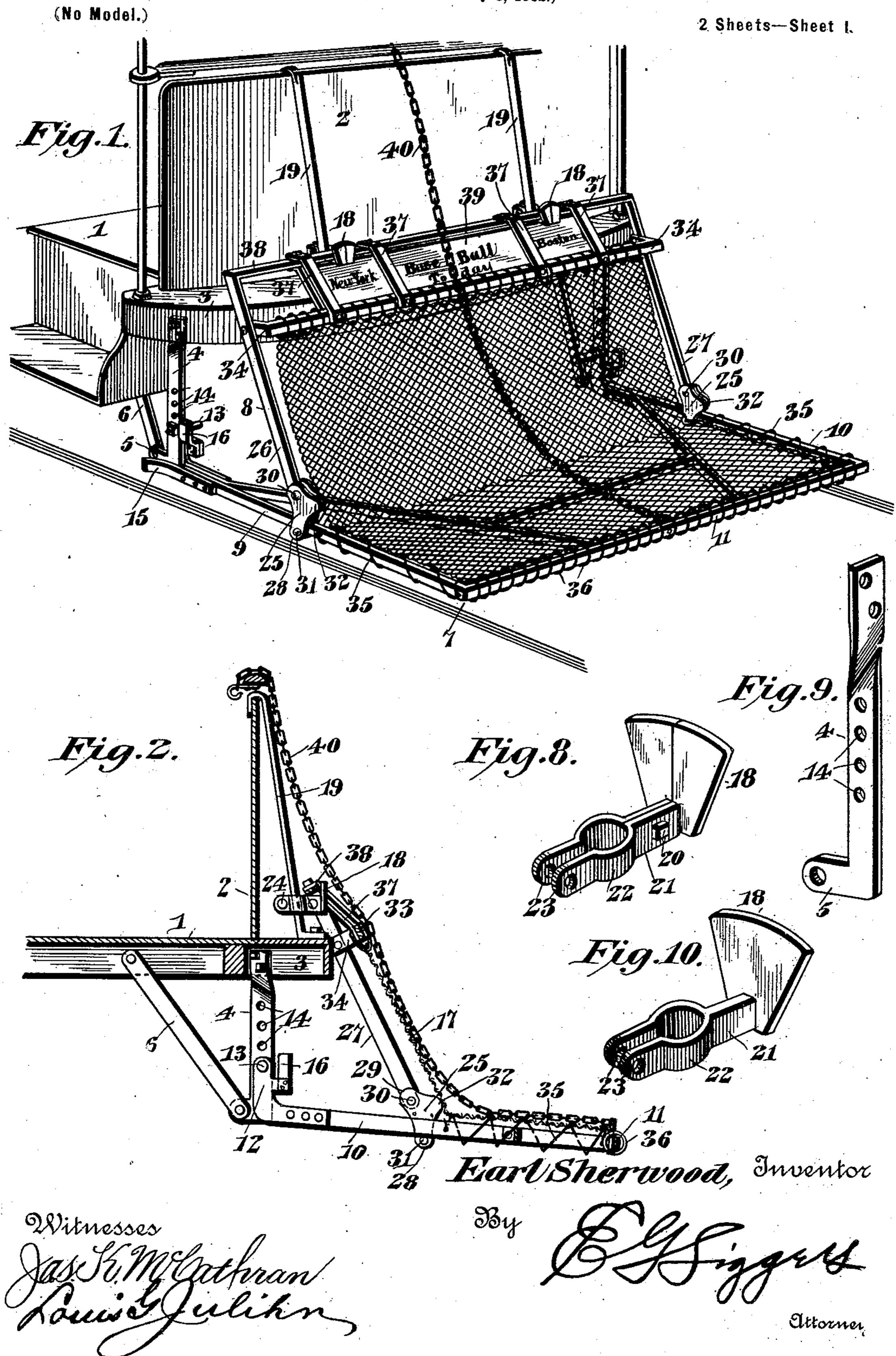
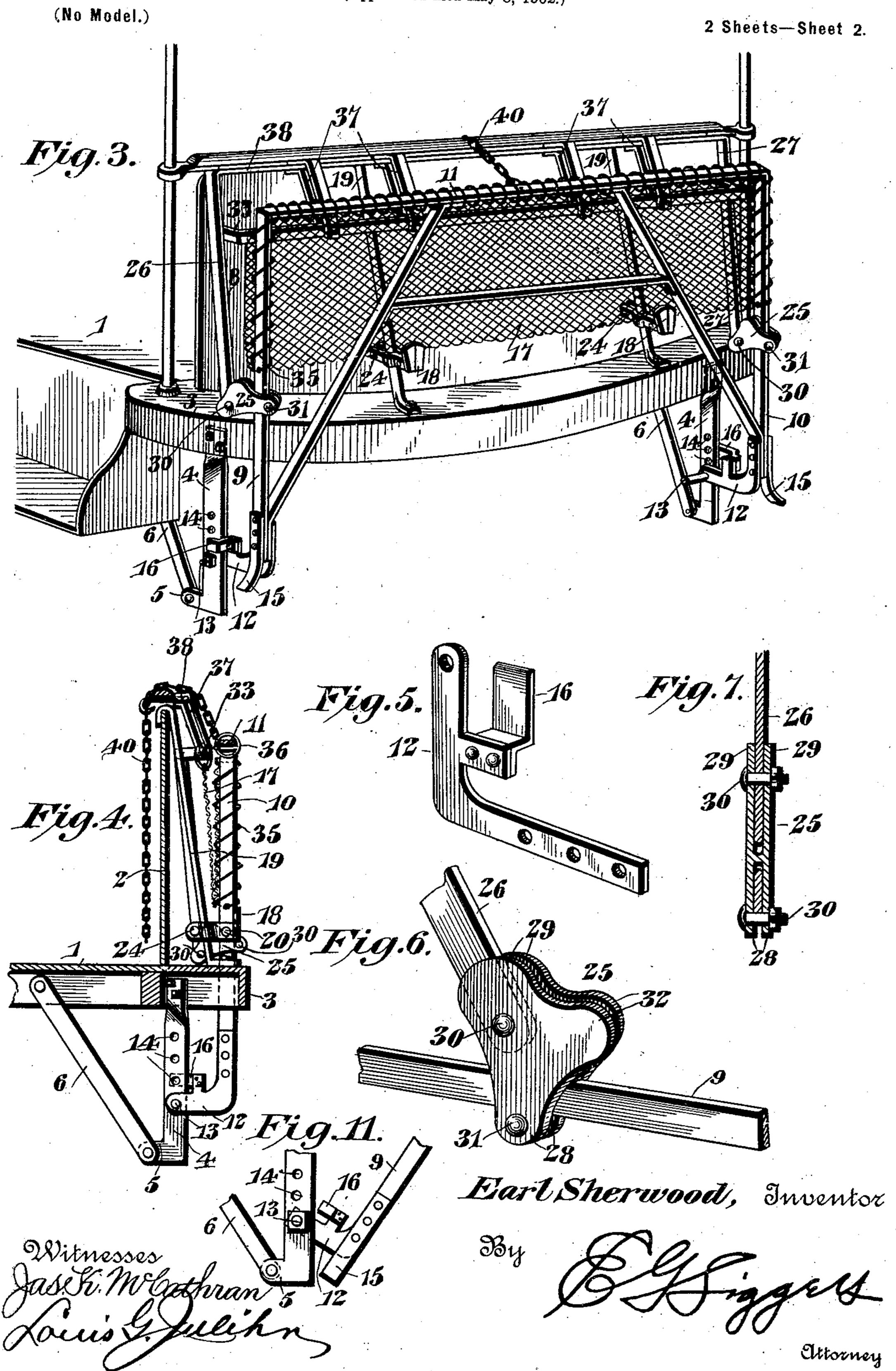
E. SHERWOOD. CAR FENDER.

(Application filed May 8, 1902.)



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United States Patent Office.

EARL SHERWOOD, OF BROOKLYN, NEW YORK.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 713,163, dated November 11,1902.

Application filed May 8, 1902. Serial No. 106,496. (No model.)

To all whom it may concern:

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

This invention relates to improvements in fenders for cars or other vehicles, and more particularly to fenders of that type exemplified in my Patents Nos. 594,434 and 650,491 and in my pending application for Letters Patent, Serial No. 60,215, filed May 14, 1901.

In my application aforesaid is shown a fender comprising a fender-frame pivotally mounted in a novel manner upon hangers depending from the car-body and having pivoted thereto intermediate of its ends a back frame, assisting in the support of the fender
20 frame by engagement with supporting-hooks

located above the bumper.

The primary object of the present invention is to greatly simplify the construction embodied in my earlier disclosures by so constructing the various metal parts that they may be shaped from cold metal bars and may be assembled and mounted quickly and conveniently without necessitating the employment of skilled labor.

of adjustment of certain of the parts in order that a fender of standard construction may be placed upon various cars having their decks located at different distances from the road-bed, the front buffer of the fender being maintained in all cases at the standard distance above the rails.

A further object of the invention is to automatically lock the fender against detachment when in either its completely-elevated or completely-depressed position and to effect the automatic unlocking of the fender when in an intermediate position to permit its ready detachment from the car.

A still further object is to so construct the back frame of the fender as to render it available for the display of advertisements and the like.

Various other objects of the invention and novel features of the illustrated embodiment thereof will appear during the course of the ubjoined description.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a car equipped with my improved fender. Fig. 2 is 55 a central vertical sectional view through the subject-matter of Fig. 1. Fig. 3 is a view similar to Fig. 1, but showing the fender in its completely-elevated position. Fig. 4 is a vertical section with the parts in the positions 60 shown in Fig. 3. Fig. 5 is a detail perspective view of one of the shoes with an upper locking-plate attached. Fig. 6 is a detail perspective view of one of the back-frame brackets. Fig. 7 is a sectional view of the same. Fig. 8 65 is a detail perspective view of one of the supporting-hooks. Fig. 9 is a similar view of one of the hangers. Fig. 10 is a detail perspective view of a modified form of hook, and Fig. 11 is a detail view showing both locking-plates 70 in released positions.

Like characters of reference are employed to designate corresponding parts throughout

the several views.

Referring more particularly to the first four 75 figures of the drawings, 1 indicates a car-plat-form protected by a dashboard 2, beyond which is disposed the bumper 3, having its front edge curved, as shown. Pendent from the platform of the car are a pair of hangers 80 4, having their upper ends slightly twisted and bolted to the inner face of the bumper, as shown, and provided at their lower ends with lugs or projections 5, to which are bolted or otherwise secured the braces 6, inclined 85 rearwardly and bolted at their upper ends to the side sills of the car-floor.

The fender as a whole is of that general form illustrated in my Patent No. 650,491 and also in my application above identified 90 and comprises what may be termed a "normally horizontal fender-frame" 7 and an "approximately vertical back frame" 8, pivotally connected to the fender-frame intermediate of the front and rear ends of the latter. 95 The fender-frame 7 comprises the side bars 9 and 10 and the front bar 11. The side bars 9 and 10 are provided at their rear ends with right-angular shoes 12, having their upper ends extended to a point above the plane of 100 the frame 7 and provided with openings for the reception of stout pintles or bearingstuds 13, extending inwardly from the hangers 4, which latter are provided with series

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of holes 14 for the accommodation of the studs to permit of their being adjusted to different positions. This provision for the vertical adjustment of the fender-supporting studs 13 is 5 designed to facilitate the location of the fender-frame in different horizontal planes, and is therefore useful both in fitting the fenderframe to the car and for raising the fender when this is necessitated by the condition of to the road-bed.

It has been stated that one of the objects of the invention is to provide for the auto-matic locking of the fender-frame against detachment in both its elevated and depressed 15 positions. In my application aforesaid the locking of the fender-frame when in its depressed position was effected by lockingplates engaging the outer sides of the hangers. In the present construction similar lock-20 ing-plates 15 are extended rearwardly from the side bars of the fender-frame and are disposed outside of the hangers below the supporting-studs 13, and in addition to these plates, which may be termed the "lower" 25 locking-plates, I now provide upper lockingplates 16, integral with or secured to the shoes 12 and having their ends disposed substantially at right angles to the plates 15 at points above the latter and in planes beyond 30 the hangers. Thus it will be obvious that when the fender-frame is in its depressed position the lower locking-plates 15 will prevent the side bars 9 and 10 from being sprung to disengage the shoes 12 from the studs or pin-35 tles 13 and that when the fender-frame is in its completely-elevated position, as shown in Fig. 3, it will still be locked against detachment, because while the lower locking-plates 15 will be thrown out of engagement with the 40 hangers the upper locking - plates will be moved into engagement therewith. When, however, the frame is in an intermediate position, neither of the locking-plates will prevent the springing of the side bars, and in 45 such position, therefore, the fender-frame may be detached from the car.

It has been stated that the back frame 8 is pivotally connected to the fender-frame 7 at a point intermediate of the ends of the latter. 50 This relation of the parts is designed to cause the frames to assume their proper positions when the fender is raised and disposes the netting 17 entirely above the bumper. further advantage of this location, however, 55 is that the back frame may be utilized as a support for the fender-frame.

In my application protecting and supporting rods are mounted in advance of the dashboard and are provided at their lower ends 60 with supporting-hooks, which engage the upretained in the present construction; but in order to facilitate the adjustment of the various parts of the fender to adapt it to various 65 cars, as heretofore mentioned, the supporting-hooks 18 are adjustably mounted upon the protecting and guiding rods 19, extend- I to its elevated position embrace the side bars

ing from the upper edge of the dashboard to the bumper and serving not only to adjustably support the hooks, but to protect the 70 dashboard and headlight from contact with the back frame when the fender is raised. The specific construction of these hooks and the manner of effecting the adjustment are not material; but while the desired end may 75 be attained in a variety of ways I have shown in Fig. 8 of the drawings a hook embodying the construction which I now deem to be preferable. This hook is composed of twin sections, which when assembled and united by 80 one or more bolts 20 produce a hook having at the rear end of its shank 21 a split collar 22, designed to encircle one of the rods 19, and through the ears 23 of which is passed a draw-bolt 24 for drawing the split collar 85 into close engagement with the rod. At this point attention may be called to the peculiar form of the upstanding or front-end portions of these hooks 18. It will be noted that these portions of the hooks have the form of plates, go the upper edges of which are considerably wider than the meshes of the netting 17, so that it will be impossible for the netting to catch upon the hooks during the manipulation of the fender. It will now be observed 95 that the location of the supports—to wit, the hooks 18—may be regulated in order to properly position the fender upon cars the decks of which are located at different distances from the road-bed; but it will be seen that in 100. order to effect this adjustment and to at the same time maintain a standard distance between the front buffer 36 and the rails some means must be provided for regulating the angular disposition of the back frame with 105 respect to the fender-frame 7. This adjustment is provided for by a simple device permitting the pivotal connection between the back frame 8 and fender-frame 7 to be shifted to any desired point in the length of the 110 latter. In the present embodiment of the invention this device is in the form of an adjustable double clip 25, one of which is mounted on each of the side bars 9 and 10 of the frame 7 for the pivotal attachment thereto of 115 the side bars 26 and 27 of the back frame 8. Each of these clips is provided with depending ears 28, straddling a side bar of the fender-frame, and upstanding ears 29, between which, at one end thereof, is pivotally received 120 the lower end of one of the side bars of the back frame. The connection between the side bar and the upstanding ears of the double clip is effected by a pintle 30, and the retention of the clip at any desired point upon 125 the side bar of the fender-frame is effected by means of a draw-bolt 31, passed through per bar of the back frame. This feature is the ears 28 below the bar and designed to clamp the ears in rigid engagement with the bar when the proper adjustment of the clip 130 has been effected. The ears 29 of each clip are provided with lateral extensions 32, (see Fig. 6,) which when the fender-frame is moved

of the back frame at points above the pivotal connections thereof for the purpose of preventing lateral vibration of the parts.

Adjacent to the upper end of the back frame 5 8 is disposed a transverse guard-bar 33, disposed slightly in advance of the bumper and provided with angular ends 34, secured to the side bars 26 and 27 and serving to offset the guard-bar from the plane of the back frame. 10 In my former construction a guard-bar is located at the point above indicated; but in the present instance the bar instead of extending straight across the frame in the plane thereof is advanced or offset in order to avoid the ne-15 cessity for deflecting the upper ends of the bars 26 and 27, as in my previous construction, this expedient being one of those particularly designed to obviate the necessity for the heating of any of the metal bars in 20 order to shape the same for use in this con-· nection.

As shown in the drawings, the front and rear ends of the netting are secured to the bars 11 and 33, and, if desired, the front por-25 tion thereof may be secured by means of binding-wires 35 to the side bars 9 and 10 of the fender-frame.

The front bar 11 is surrounded, as in my former construction, by a stout spiral wire, 30 which serves the double purpose of a shoe and buffer 36, designed to prevent the injury of a person brought into violent contact with the fender and also to allow the fender to be disposed closely adjacent to the track.

It has been stated that one of the objects of the invention is to permit the utilization of the fender for the support of advertisements or other displays. This end is attained by providing a series of strap-braces 37, ex-40 tending between the upper bar 38 of the back frame and the guard-bar thereof. These strap-braces 37 serve to brace the guard-bar 33 and are each composed of a pair of straps boited or otherwise secured to the opposite faces of the bars, as shown, in order to provide intermediate spaces for the reception of display-cards 39. (See Fig. 1.)

For the purpose of elevating the fender to its inoperative position the usual chain 40, 50 connected to the front bar of the fender-frame and carried up over the dashboard, is provided.

It is thought that from the foregoing the construction and operation of my improved 55 car-fender will be clearly comprehended; but while the illustrated embodiment of the invention is believed at this time to be preferable I wish to be distinctly understood as reserving to myself the right to effect such 60 changes, modifications, and variations of the illustrated structure as may fall properly within the scope of the protection prayed.

What I claim is—

1. The combination with a support, of a 65 vertically-movable fender connected to the I frame, of a back frame having hinged con- 130

support and arranged for lateral or sidewise movement to effect its detachment, and means for locking the fender against such sidewise movement when in its elevated and depressed positions, said means being arranged for re- 70 lease by the movement of the fender to an intermediate position.

2. The combination with a support, of a fender-frame having detachable pivotal connection with the support, and locking mem- 75 bers extending from the fender-frame to alternately engage the support, said members being movable into and out of operative relation with the support by the movement of the fender-frame.

3. The combination with a support, of a fender-frame having detachable pivotal connection with the support, and locking members extending from the fender-frame to engage the support at opposite sides of the piv-85 otal connection, said members being arranged to present one of them in engagement with the support when the fender-frame is in either its elevated or depressed position and to effect the disengagement of both locking mem- 90 bers from the support when the fender-frame is in an intermediate position.

4. The combination with a support, of a fender-frame having detachable pivotal connection with the support at one side thereof 95 and capable of detachment by the sidewise movement of that part of the frame with which the connection is effected, and locking members extending from the fender and disposed for engagement with the support to roo permit the detachment of the fender when the latter is in either its elevated or depressed position.

5. The combination with a pair of supports having stude extending from their opposed 105 faces, of a fender-frame having side bars swung from said studs and capable of being sprung out of engagement therewith, and a pair of locking members associated with each of said side bars and arranged for engage- 110 ment with the adjacent support at the side thereof opposite the stude and at points above and below the plane of said studs.

6. The combination with a pair of supports having oppositely-extending studs adjustable 115 to different positions thereon, of a fenderframe having side bars capable of being sprung laterally and provided with right-angular shoes terminally pivoted upon the studs, and a pair of locking-plates associated with 120 each of said shoes and designed to engage the adjacent support to prevent the shoe from being sprung out of engagement with the studs while the fender is in either its elevated or depressed position, said locking-plates be- 125 ing arranged for disengagement from the adjacent support when the fender is in an intermediate position.

7. The combination with a swinging fender-

nection with the fender-frame intermediate of the ends of the latter, said connection being adjustable, and adjustable supporting means disposed for engagement with the back 5 frame to aid in the support of the fender.

S. The combination with a swinging fenderframe disposed normally in a horizontal position, of a back frame extending vertically from the fender-frame intermediate of the 10 ends of the latter, means for effecting a pivotal connection between the back frame and the fender-frame at different distances from the axis of the latter, and vertically-adjustable supporting means engaging the back 15 frame at a point above the fender-frame and serving to aid in the support of the fender.

9. The combination with a swinging fenderframe, of clips adjustable thereon, a back frame hinged to the clips and extended above 20 the fender-frame, and vertically-adjustable supporting-hooks engaging the upper end of

the back frame.

10. The combination with a support, of a swinging fender-frame, a back frame having 25 an adjustable hinged connection with the fender-frame, vertically-disposed rods mounted on the support above the fender-frame, and supporting-hooks adjustable upon said rods and disposed for engagement with the back go frame.

11. The combination with a pair of hangers, of a fender-frame pivoted at its rear end to the hangers, means for adjusting said pivotal connection vertically upon the hangers, 35 a back frame, means effecting an adjustable pivotal connection between the back frame and the fender-frame, and adjustable supporting-hooks engaging the upper end of the back frame.

12. The combination with a fender-frame and a back frame, of means located at the upper end of the back frame for retaining an

advertising or other display device.

13. The combination with a fender provided 45 with a back frame, of a guard-bar disposed transversely across the frame below the upper end thereof, said guard-bar being offset from the plane of the back frame.

14. The combination with a fender-frame, 50 and a back frame upstanding therefrom, of a guard-bar extending transversely across the back frame and offset from the plane thereof, and strap-braces connecting the upper end of the back frame with the guard-bar,

said strap-braces comprising means for re- 55 taining an advertising or other display.

15. The combination with a fender-frame, of double clips adjustable upon the side bars thereof, a back frame having its side bars pivoted in said double clips, and means con- 60 stituting a part of each double clip and arranged to engage the back frame beyond the pivotal connection thereof to prevent lateral vibration of the back frame in the elevated position of the fender.

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16. The combination with a fender-frame, and a back frame hinged thereto and extended above the upper edge of the fender-frame in the elevated position of the latter, of means located at the upper end of the back frame 70 for retaining an advertising or other display device, whereby said device will be displayed in a vertical position in both the elevated and depressed positions of the fender and will be unobscured by the latter.

17. The combination with a fender-frame, and a back frame upstanding therefrom, of a guard-bar extending transversely across the back frame, and means secured to said guardbar for retaining an advertising or other dis- 80

play.

18. The combination with a fender-frame, and a back frame upstanding therefrom, of a guard-bar extending transversely across the back frame, and double strap-braces connect- 85 ing the upper end of the back frame with the guard-bar and constituting means for retaining an advertising or other display.

19. The combination with a fender-frame, of a back frame having pivotal connection ge therewith, and means arranged to engage the back frame beyond the pivotal connection thereof, to prevent lateral vibration of said frame in the elevated position of the fender.

20. The combination with a fender-frame, 95 of clips supported by the side bars thereof, a back frame pivoted to said clips, one of said clips having means arranged to engage the back frame beyond the pivotal connection thereof, to prevent lateral vibration of said 100 frame in the elevated position of the fender.

In testimony that I claim the foregoing as myown I have hereto affixed my signature in the presence of two witnesses.

EARL SHERWOOD.

Witnesses:

JOHN H. SIGGERS, FLORENCE E. WALTER.