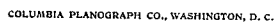


APPLICATION FILED DEC. 9, 1911.

Patented Dec. 10, 1912.

3 SHEETS—SHEET 1.



C. SEIBOLD.

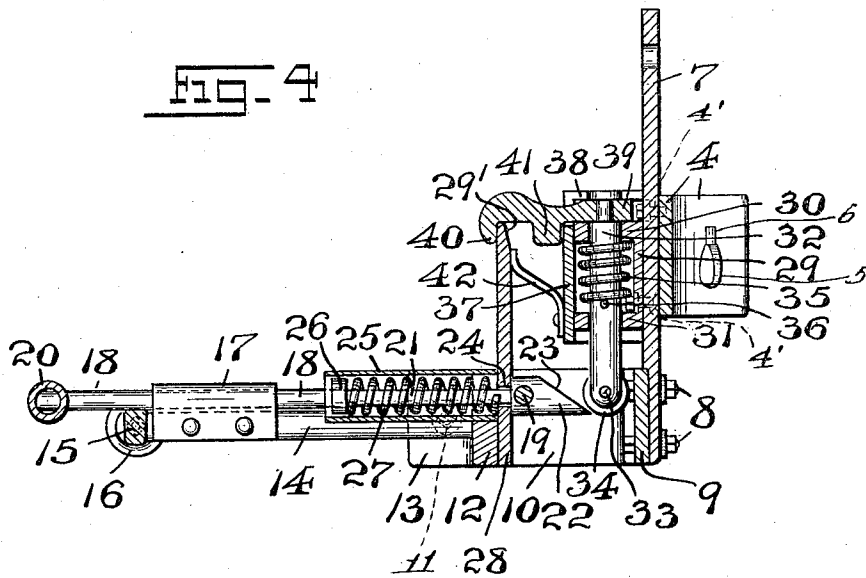
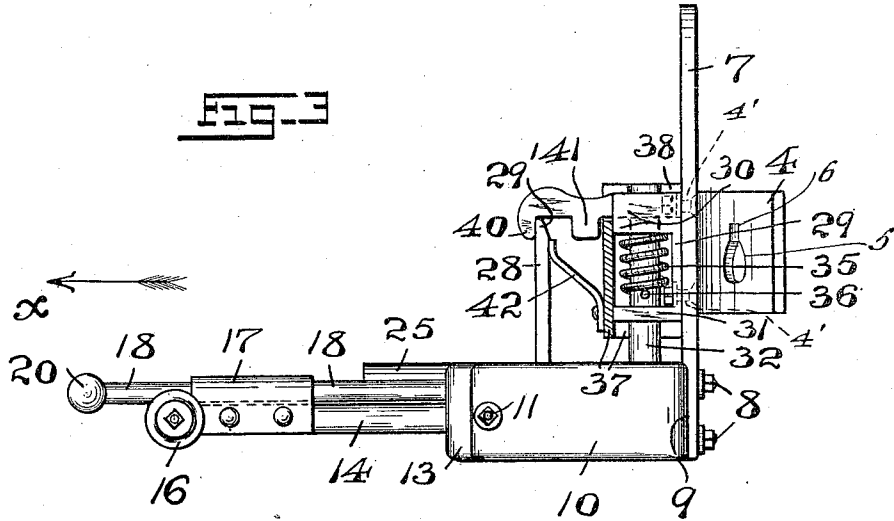
FENDER.

APPLICATION FILED DEC. 9, 1911.

1,046,659.

Patented Dec. 10, 1912.

3 SHEETS—SHEET 2.



WITNESSES:

Harry E. Pfeiffer
Fred W. W. Frankel

INVENTOR:

Christian Seibold,
BY
Fraentzel and Richards,
ATTORNEYS

C. SEIBOLD.
FENDER.

APPLICATION FILED DEC. 9, 1911.

1,046,659.

Patented Dec. 10, 1912.

3 SHEETS—SHEET 3.

FIG. 5

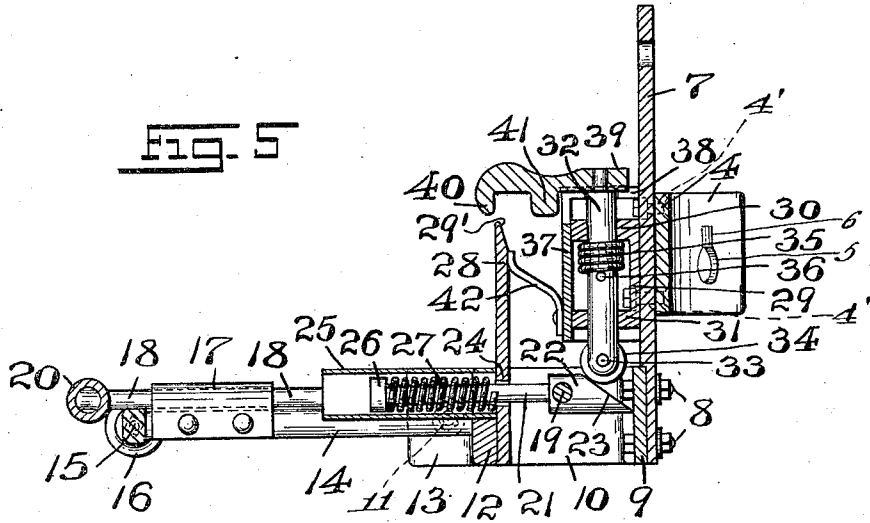


FIG. 7.

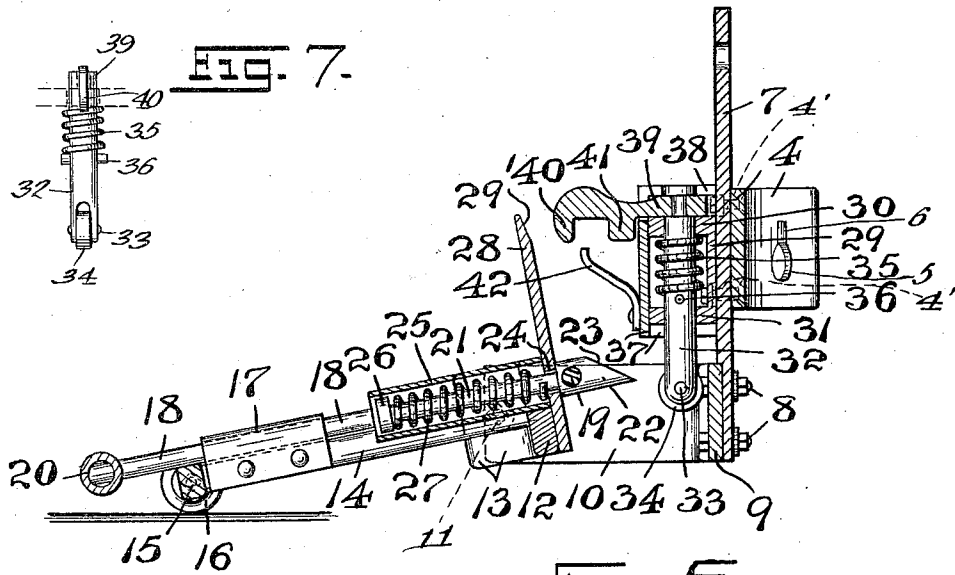
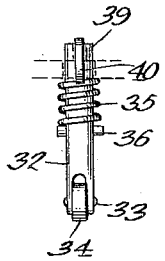


FIG. 6.

WITNESSES:

Harry C. Pliffer
Frank W. Fraentzel

INVENTOR:

Christian Seibold,
BY
Fraentzel and Richards,
ATTORNEYS

UNITED STATES PATENT OFFICE.

CHRISTIAN SEIBOLD, OF NEWARK, NEW JERSEY.

FENDER.

1,046,659.

Specification of Letters Patent.

Patented Dec. 10, 1912.

Application filed December 9, 1911. Serial No. 664,800.

To all whom it may concern:

Be it known that I, CHRISTIAN SEIBOLD, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Fenders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to characters of reference marked thereon, which form a part of this specification.

This invention has reference, generally, to improvements in life-saving devices and the present invention relates, more particularly, to a life-saving or guarding device in the form of a fender which is to be attached to the front of a street-railway car.

The invention has for its principal object to provide a novel and simple construction of car-fender of the general character hereinafter set forth, with a view to producing an efficiently and perfectly acting means for retaining the fender in its operative position upon the front of the car ready to pick up a person coming in contact with the fender.

Other objects of the present invention will be clearly understood from the following detailed description of the present invention.

With these various objects in view, the said invention consists, primarily, in the novel car-fender hereinafter set forth; and, furthermore, in the novel arrangements and combinations of the various devices and parts as well as in the details of the construction of the same, all of which will be more fully described in the following specification, and then finally embodied in the clauses of the claim which are appended to and which form an essential part of this specification.

The invention is clearly illustrated in the accompanying drawings, in which:—

Figure 1 is a front view of a fender made according to the principles of the present invention, and a front view of a portion of a street-railway car, showing the fender in its attached position upon the front end of the car, the road bed over which the car runs being shown in section. Fig. 2 is a top or plan view of the fender; Fig. 3 is a side view of the same; and Fig. 4 is a longitudinal vertical section of the fender, said section being taken on the line 4—4 in Fig. 2,

the movable parts of the fender, in said Figs. 1 to 4 inclusive, being represented in their normal initial positions, when the fender is supported from the bumper or front dash-board of a car. Figs. 5 and 6 are similar sections of the fender, said Fig. 5 illustrating the relative positions of the parts of the fender, when first coming in contact with an object, and said Fig. 6 illustrating said fender parts when the catching-element is released and said fender is in its lowered position. Fig. 7 is a detail view of said catching element and its stem.

Similar characters of reference are employed in all of the above described views, to indicate corresponding parts.

Referring now to the said figures of the drawings, the reference-character 1 indicates a portion of the front vestibule or dash-board of any suitable form and style of street-car, and 2 is the usual bumper, which in this case is provided in suitable places with forwardly extending supporting members, as 3, in the form of headed pins, as here shown, or in the form of other suitably constructed hangers or supporting lugs.

The car-fender, which embodies the principles of the present invention, comprises a supporting element 4, in the form of a plate which is curved and corresponds to the curvature of the bumper 2, said plate-like supporting element 4 being made with suitably formed openings, as 5, adapted to be placed over the heads of the pins 3, and each opening 5 having extending therefrom a narrow elongated opening, as 6, adapted to be arranged upon the shank of the pin 3, and whereby the fender can be securely and detachably connected with the bumper 2, as will be clearly evident. Other supporting and attaching means may, however, be employed, if desired.

Suitably connected by means of bolts 4' with the said curved and laterally extending plate-like supporting element 4, and located at the middle of the same, is a vertical member 7. Suitably secured upon the lower portion of the said member 7 by means of bolts, as 8, or other suitable fastening means, is a laterally extending bar 9 of substantially the width of the fender, said bar being provided with a pair of forwardly extending supporting members or arms 10, which are provided near their free end-positions with suitable pivots, preferably in the forms of pins or bolts 11. Pivotaly mount-

ed upon the said pins or bolts 11 are the supporting members or arms 13 of a laterally extending bar or plate-like element or member 12, from which extend in a forward direction a number of rods 14, which are suitably secured at the front end-portions to a rod or bar 15, the parts providing a suitable catch-frame, as will be clearly evident from an inspection of the several figures of the drawings. The free end-portions of the said rod or bar 15 extend laterally beyond the sides of the catch-frame thus provided, and suitably journaled upon the end-portions of said rod or bar 15 are suitable rollers or wheels, as 16, the purpose of which will be presently set forth. Some of the said rods 14, usually the outer side-rods, are suitably provided with guiding members 17, usually of the form shown, in which are slidably arranged and longitudinally guided the side-members 18 of a releasing frame-like element, the said side-members 18 of which are suitably joined at the back by a bolt-carrying rod 19, and at the front by a striker-bar or rod 20. The same rod 19 carries, at its middle portion, a forwardly extending bolt 21, provided with an actuating nose-piece 22, the free end-portion of which is tapered or inclined, as at 23. The said bolt 21 passes through the bar 12 and a hole or perforation 24 in a latch-plate 28 which extends upwardly from the previously-mentioned bar or plate-like element or member 12, the said bar 12 extending as high as the top of the members 10, as indicated in dotted outline in Figs. 4, 5 and 6, and the said latch-plate extending down to the base of the bar, and arranged in a barrel-like portion or chambered cylinder 25 with which the said element or member 12 is also provided. Upon the free end-portion of the shank of said bolt, within the said barrel or cylinder 25, is a nut 26, or other suitable enlargement, and encircling the said shank of the bolt, between the said nut 26 and the face of said latch-plate 28, is a coiled spring 27, the tendency of the coils of the said spring being to normally force the slidable releasing frame-like element, with its bolt-carrying rod, normally in an outward direction, as indicated by the arrow *w* in Fig. 3 of the drawings. The previously mentioned latch-plate 28 has its upper edge-portion suitably beveled, as at 29'.

Suitably secured upon the previously mentioned vertical member 7, which is connected with the supporting element 4, is a suitably formed bracket-like member, as 29, which is provided with a pair of forwardly extending and perforated guide-members or elements 30 and 31 in which is slidably mounted a vertically disposed pin or stem 32. Upon its lower end-portion, this pin or stem 32 is bifurcated, and rotatably mounted in this bifurcated end-portion, upon a pintle

33, is a small roller 34, with which the inclined face of the nose-piece 22 of the bolt 21 is adapted to be brought into engagement, to lift the said pin or stem 32, against the normal downward pull of a coiled spring 35, which encircles the said pin or stem 32, between a short pin 36 upon said stem and the upper guide-member 30. The said parts, just described, are surrounded by a suitably formed shell or casing, as 37, which is slotted or open at the top, as at 38. The upper end-portion of the said pin or stem 32 extends into the slotted or open top of the said shell or casing 37, and has suitably secured upon said end, a forwardly extending member or arm 39, which is provided at its forward end-portion with a hook-shaped holding or retaining portion 40, with which the beveled edge 29' of the previously-mentioned latch-plate 28 is normally in separable holding or retaining engagement, as indicated in Figs. 1, 2, 3 and 4 of the drawings. The said member or arm 39 is also preferably provided with a stop-lug, as 41, which guards against any possible rotary motion of the pin or stem 32 in the guide-members 30 and 31, as will be clearly evident, and suitably disposed between the said shell or casing 37 and the latch-plate 28 may be a suitably formed spring, as 42.

Having in the foregoing described the general construction and arrangement of the several parts comprising the car-fender, I will now briefly set forth its operation. When in its operative position upon the car, the various parts thereof are in their normal initial positions represented in Figs. 1 to 4 inclusive. During the forward movement of the car, if the striker-bar or rod 20 of the releasing frame-like element is brought into contact with an object, such as a person, the impact causes said frame to slide rearwardly, bringing the inclined face of the nose-piece 22 into lifting engagement with the roller 34, so as to raise the pin or stem 32, against the action of its spring 35, into the position indicated in Fig. 5 of the drawings. This action of the pin or stem 32 disengages the hook-shaped holding or retaining portion 40 of the arm 39 from its holding engagement with the latch-plate 28, the spring 42 and the weight of the pivoted parts causing the fender to assume its catching position, illustrated in Fig. 6 of the drawings, with the rollers or wheels 16 resting in rolling engagement upon the ground or upon the rails of the road-bed, as will be clearly evident. At the same time, the coiled spring 27 returns the sliding releasing frame-like element forwardly into its normal position, as will be seen from an inspection of said Fig. 6. By again raising the dropped parts of the fender into the raised positions indicated in Figs. 3 and 4, the spring 35 having previously re-

turned the pin or stem 32 into its normally lowered position, the beveled edge of the latch-plate 28 is once more easily forced into its holding engagement with the hook-shaped retaining portion 40 of the arm 39, as will be clearly evident, so as to again hold the pivoted parts of the fender in their normally raised positions, as will be clearly understood from an inspection of the several figures of the drawings.

I am fully aware that some changes may be made in the general arrangements and combinations of the several devices and parts, as well as in the details of the construction of the same, without departing from the scope of the present invention as set forth in the foregoing specification. Hence, I do not limit my present invention to the exact arrangements and combinations of the various devices and parts as described in the said specification, nor do I confine myself to the exact details of the construction of the said parts, as illustrated in the accompanying drawings.

I claim:

1. A fender comprising a supporting member provided with attaching means, a yoke-shaped element connected with said supporting member, a catch-frame pivotally connected with said yoke-shaped element, a releasing frame-like element slidably connected with said catch-frame, a latch-plate connected with said catch-frame, a vertically movable retaining means connected with said supporting member, normally in retaining engagement with said latch-plate, and means connected with said releasing frame-like element adapted to be brought into engagement with said vertically movable retaining means and cooperating therewith so as to disengage said retaining means from its holding engagement with said latch-plate.

2. A fender comprising a supporting member provided with attaching means, a yoke-shaped element connected with said supporting member, a catch-frame pivotally connected with said yoke-shaped element, a releasing frame-like element slidably connected with said catch-frame, a vertically movable retaining means connected with said supporting member normally in retaining engagement with said latch-plate, and a spring-controlled bolt connected with said releasing frame-like element adapted to be brought into engagement with said vertically movable retaining means and cooperating therewith so as to disengage said retaining means from its holding engagement with said latch-plate.

3. A fender comprising a supporting member provided with attaching means, a yoke-shaped element connected with said supporting member, a catch-frame pivotally connected with said yoke-shaped element, a releasing frame-like element slidably connected with said catch-frame, a latch-plate connected with said catch-frame, a spring-controlled and vertically movable stem connected with said supporting member, a forwardly extending arm connected with said stem, a hook-shaped retaining portion upon said arm normally in retaining engagement with said latch-plate, and means connected with said releasing frame-like element adapted to be brought into lifting engagement with said vertically movable stem and cooperating therewith so as to disengage said hook-shaped retaining portion of said forwardly extending arm from its holding engagement with said latch-plate.

4. A fender comprising a supporting member provided with attaching means, a yoke-shaped element connected with said supporting member, a catch-frame pivotally connected with said yoke-shaped element, a releasing frame-like element slidably connected with said catch-frame, a latch-plate connected with said catch-frame, a spring-controlled and vertically movable stem connected with said supporting member, a forwardly extending arm connected with said stem, a hook-shaped retaining portion upon said arm normally in retaining engagement with said latch-plate, and a spring-controlled bolt connected with said releasing frame-like element, said bolt being provided with a beveled nosing adapted to be brought into lifting engagement with said vertically movable stem and cooperating therewith so as to disengage said hook-shaped retaining portion of said forwardly extending arm from its holding engagement with said latch-plate.

5. A fender comprising a supporting member provided with attaching means, a yoke-shaped element connected with said supporting member, a catch-frame pivotally connected with said yoke-shaped element, a releasing frame-like element slidably connected with said catch-frame, a latch-plate connected with said catch-frame, a spring-controlled and vertically movable stem connected with said supporting member, and a roller connected with the lower end-portion of said stem, a forwardly extending arm connected with said stem, a hook-shaped retaining portion upon said arm normally in retaining engagement with said latch-plate, and means connected with said releasing frame-like element adapted to be brought into lifting engagement with said roller so as to move said stem vertically and disengage said hook-shaped retaining portion of said forwardly extending arm from its holding engagement with said latch-plate.

6. A fender comprising a supporting member provided with attaching means, a yoke-shaped element connected with said supporting member, a catch-frame pivotally connected with said yoke-shaped element, a releasing frame-like element slidably connected with said catch-frame, a latch-plate connected with said catch-frame, a spring-controlled and vertically movable stem connected with said supporting member, a forwardly extending arm connected with said stem, a hook-shaped retaining portion upon said arm normally in retaining engagement with said latch-plate, and means connected with said releasing frame-like element adapted to be brought into lifting engagement with said vertically movable stem and cooperating therewith so as to disengage said hook-shaped retaining portion of said forwardly extending arm from its holding engagement with said latch-plate.

7. A fender comprising a supporting member provided with attaching means, a yoke-shaped element connected with said supporting member, a catch-frame pivotally connected with said yoke-shaped element, a releasing frame-like element slidably connected with said catch-frame, a latch-plate connected with said catch-frame, a spring-controlled and vertically movable stem connected with said supporting member, a forwardly extending arm connected with said stem, a hook-shaped retaining portion upon said arm normally in retaining engagement with said latch-plate, and a spring-controlled bolt connected with said releasing frame-like element, said bolt being provided with a beveled nosing adapted to be brought into lifting engagement with said vertically movable stem and cooperating therewith so as to disengage said hook-shaped retaining portion of said forwardly extending arm from its holding engagement with said latch-plate.

supporting member, a catch-frame pivotally connected with said yoke-shaped element, a releasing frame-like element slidably connected with said catch-frame, a latch-plate
 5 connected with said catch-frame, a spring-controlled and vertically movable stem connected with said supporting member, and a roller connected with the lower end-portion of said stem, a forwardly extending arm
 10 connected with said stem, a hook-shaped retaining portion upon said arm normally in retaining engagement with said latch-plate, and a spring-controlled bolt connected with said releasing frame-like element, said bolt
 15 being provided with a beveled nose-piece adapted to be brought into lifting engagement with said roller so as to move said stem vertically and disengage said hook-shaped retaining portion of said forwardly
 20 extending arm from its holding engagement with said latch-plate.

7. A fender comprising a supporting member provided with attaching means, a yoke-shaped element connected with said
 25 supporting member, a catch-frame pivotally connected with said yoke-shaped element, said catch-frame consisting of laterally extending bars and longitudinally extending connecting rods, guide-members connected
 30 with some of said connecting rods, a releasing frame-like element consisting of laterally extending bars, and longitudinally extending side-members, said side-members being slidably arranged in said guide-members, a latch-plate connected with said catch-
 35 frame, a vertically movable retaining means connected with said supporting member normally in retaining engagement with said latch-plate, and means connected with said releasing frame-like element adapted to be
 40 brought into engagement with said vertically movable retaining means and cooperating therewith so as to disengage said retaining means from its holding engagement with
 45 said latch-plate.

8. A fender comprising a supporting member provided with attaching means, a yoke-shaped element connected with said
 50 supporting member, a catch-frame pivotally connected with said yoke-shaped element, said catch-frame consisting of laterally extending bars and longitudinally extending connecting rods, guide-members connected
 55 with some of said connecting rods, a releasing frame-like element consisting of laterally extending bars, and longitudinally extending side-members, said side-members being slidably arranged in said guide-members, a latch-plate connected with said catch-
 60 frame, a vertically movable retaining means connected with said supporting member normally in retaining engagement with said latch-plate, and a spring-controlled bolt connected with said releasing frame-like ele-
 65 ment adapted to be brought into engagement

with said vertically movable retaining means and cooperating therewith so as to disengage said retaining means from its holding engagement with said latch-plate.

9. A fender comprising a supporting member provided with attaching means, a yoke-shaped element connected with said supporting member, a catch-frame pivotally connected with said yoke-shaped element, said catch-frame consisting of laterally extending bars and longitudinally extending connecting rods, guide-members connected with some of said connecting rods, a releasing frame-like element consisting of laterally extending bars, and longitudinally extending side-members, said side-members being slidably arranged in said guide-members, a latch-plate connected with said catch-frame, a spring-controlled and vertically movable stem connected with said supporting member, a forwardly extending arm connected with said stem, a hook-shaped retaining portion upon said arm normally in retaining engagement with said latch-plate, and means connected with said releasing frame-like element adapted to be brought into lifting engagement with said vertically movable stem and cooperating therewith so as to disengage said hook-shaped retaining portion of said forwardly
 95 extending arm from its holding engagement with said latch-plate.

10. A fender comprising a supporting member provided with attaching means, a yoke-shaped element connected with said supporting member, a catch-frame pivotally connected with said yoke-shaped element, said catch-frame consisting of laterally extending bars and longitudinally extending connecting rods, guide-members connected with some of said connecting rods, a releasing frame-like element consisting of laterally extending bars, and longitudinally extending side-members, said side-members being slidably arranged in said guide-members, a latch-plate connected with said catch-frame, a spring-controlled and vertically movable stem connected with said supporting member, a forwardly extending arm connected with said stem, a hook-shaped retaining portion upon said arm normally in retaining engagement with said latch-plate, and a spring-controlled bolt connected with said releasing frame-like element, said bolt being provided with a beveled nose-piece adapted to be brought into lifting engagement with said vertically movable stem and cooperating therewith so as to disengage said hook-shaped retaining portion of said forwardly
 125 extending arm from its holding engagement with said latch-plate.

11. A fender comprising a supporting member provided with attaching means, a yoke-shaped element connected with said supporting member, a catch-frame pivotally

connected with said yoke-shaped element, said catch-frame consisting of laterally extending bars and longitudinally extending connecting rods, guide-members connected with some of said connecting rods, a releasing frame-like element consisting of laterally extending bars, and longitudinally extending side-members, said side-members being slidably arranged in said guide-members, a latch-plate connected with said catch-frame, a spring-controlled and vertically movable stem connected with said supporting member, and a roller connected with the lower end-portion of said stem, a forwardly extending arm connected with said stem, a hook-shaped retaining portion upon said arm normally in retaining engagement with said latch-plate, and means connected with said releasing frame-like element adapted to be brought into lifting engagement with said roller so as to move said stem vertically and disengage said hook-shaped retaining portion of said forwardly extending arm from its holding engagement with said latch-plate.

12. A fender comprising a supporting member provided with attaching means, a yoke-shaped element connected with said supporting member, a catch-frame pivotally connected with said yoke-shaped element, said catch-frame consisting of laterally ex-

tending bars and longitudinally extending connecting rods, guide-members connected with some of said connecting rods, a releasing frame-like element consisting of laterally extending bars and longitudinally extending side-members, said side-members being slidably arranged in said guide-members, a latch-plate connected with said catch-frame, a spring-controlled and vertically movable stem connected with said supporting member and a roller connected with the lower end-portion of said stem, a forwardly extending arm connected with said stem, a hook-shaped retaining-portion upon said arm normally in retaining engagement with said latch-plate, and a spring-controlled bolt connected with said releasing frame-like element, said bolt being provided with a beveled nose-piece adapted to be brought into lifting engagement with said roller so as to move said stem vertically and disengage said hook-shaped retaining portion of said forwardly extending arm from its holding engagement with said latch-plate.

In testimony, that I claim the invention set forth above I have hereunto set my hand this 7th day of December, 1911.

CHRISTIAN SEIBOLD.

Witnesses:

FREDK. C. FRAENTZEL,
FREDK. H. W. FRAENTZEL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."