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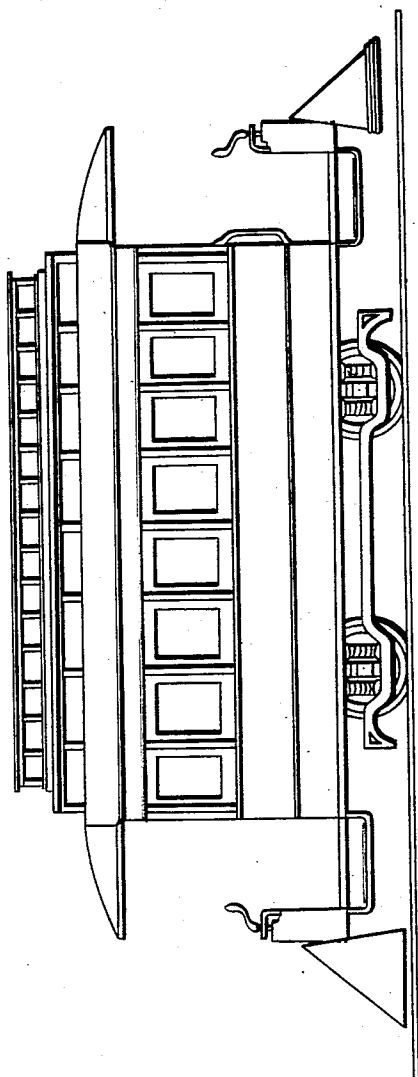
5 Sheets—Sheet 1.

C. F. JAHN.
CAR FENDER.

No. 564,692.

Patented July 28, 1896.

Fig. 1.



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Henry C. Ewert
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(No Model.)

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Fig. 2.

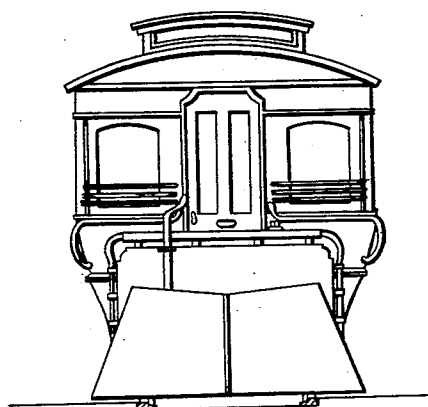


Fig. 3.

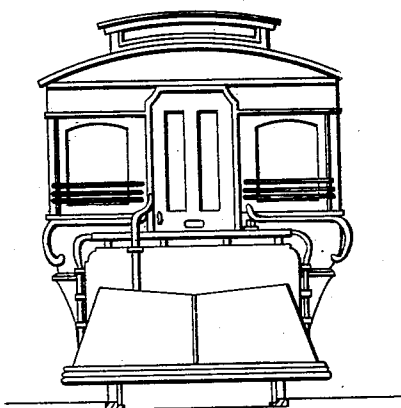
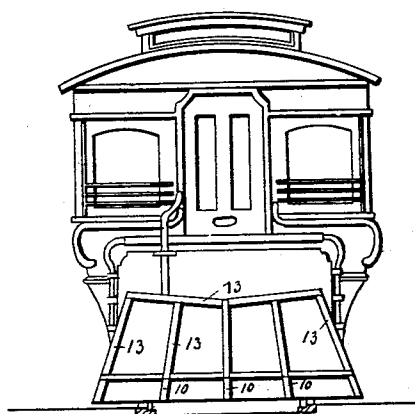


Fig. 4.



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Fig. 5.

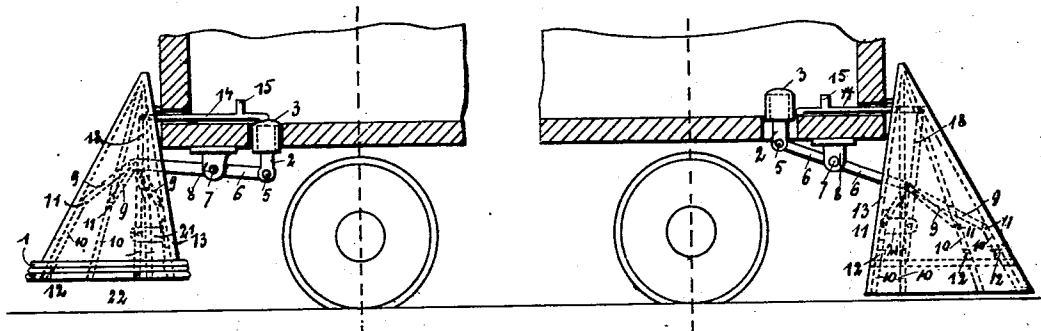
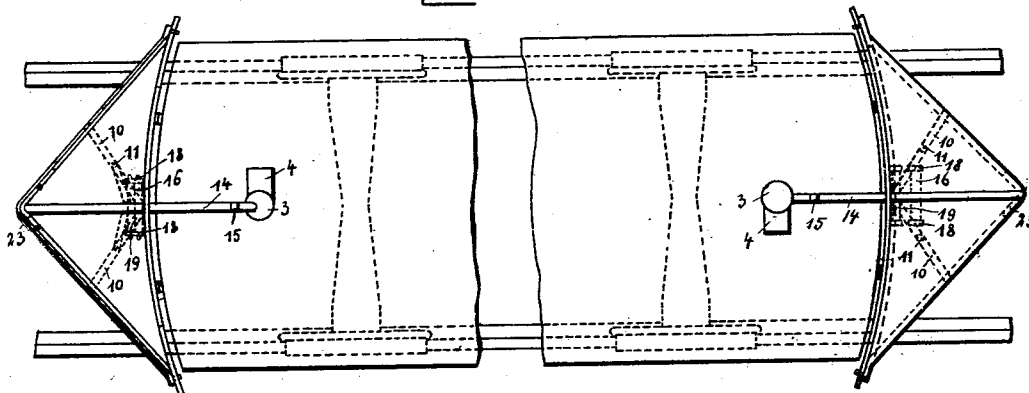


Fig. 6.



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Fig-7- Fig-8- Fig-9- Fig-10.

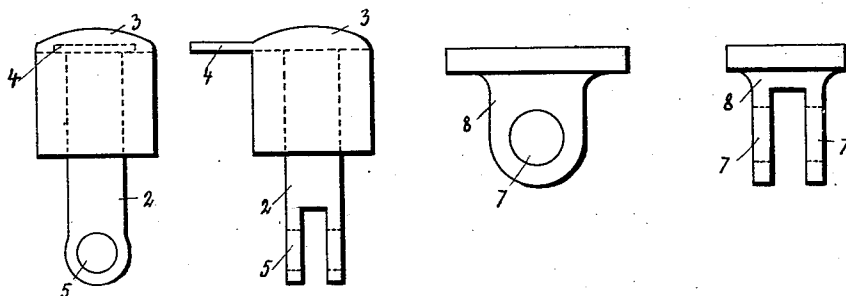


Fig-11- Fig-12.

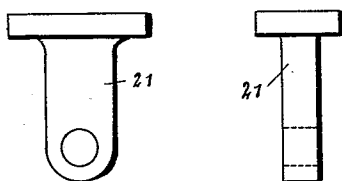


Fig-13.

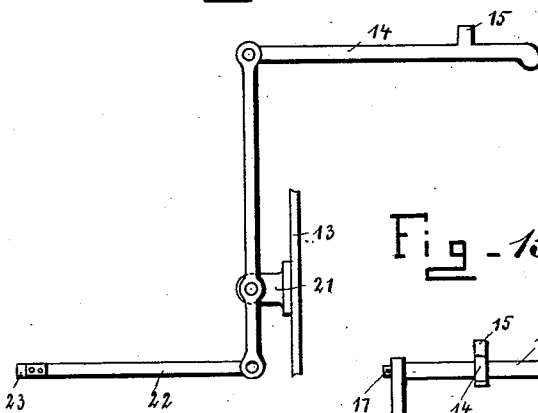


Fig-14.

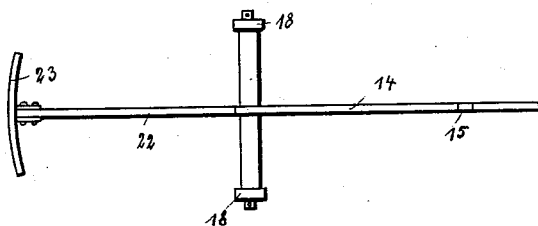
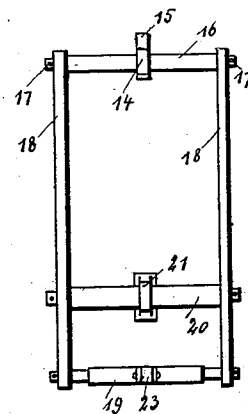


Fig-15.



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Fig. 16. Fig. 17. Fig. 18. Fig. 19.

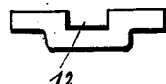
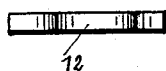
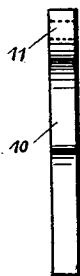
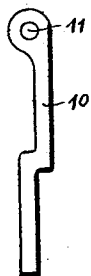
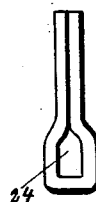
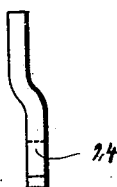


Fig. 20. Fig. 21. Fig. 22.



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UNITED STATES PATENT OFFICE.

CHARLES F. JAHN, OF PITTSBURG, PENNSYLVANIA.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 564,692, dated July 28, 1896.

Application filed June 18, 1895. Renewed May 14, 1896. Serial No. 591,588. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. JAHN, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Car-Fenders, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to certain new and useful improvements in car-fenders, and relates more particularly to that class operated and controlled from the front of the car.

15 The present invention should be considered in connection with an application filed by me April 30, 1895, Serial No. 547,605, and is an improvement on the same.

20 The invention has primarily for its object the provision of novel means whereby the lower portion of the hood may be automatically lowered to the rail and locked when the hood comes in contact with an obstruction or object of any kind.

25 The invention has for its still further object the construction of a car-fender of the above-referred-to class that will be extremely simple in its construction, strong, durable, and accurate in its operation.

30 With the above and other objects in view the invention finally consists in the novel construction, combination, and arrangement of parts to be hereinafter more particularly described, and specifically pointed out in the claims.

35 In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like figures of reference indicate similar parts throughout the several views, in which—

40 Figure 1 is a side elevation of a car carrying my improved fender. Fig. 2 is a front view of a car, showing the fender lowered to the rail. Fig. 3 is a similar view showing the fender in a raised position. Fig. 4 is a front view of the car and fender, showing the covering of the hood removed. Fig. 5 is a side elevation of the lower portion of a car, showing the fender raised and lowered. Fig. 6 is a plan view of the same. Fig. 7 is a detail side view of the vertical lever and cap. Fig. 8 is a detail front view of the same. Fig. 9 is a detail side view showing the bearing of the vertical

lever. Fig. 10 is a front view of the same. Fig. 11 is a side view showing the bearing of the lever-arm carrying the buffer. Fig. 12 is a similar view looking at its edge. Fig. 13 is a side view of the lever-arm carrying the buffer. Fig. 14 is a top plan view of the same. Fig. 15 is a front view of the same. Fig. 16 is a side view of the lever-arms arranged in the hood. Fig. 17 is a front view of the same. Fig. 18 is a front view of the guides. Fig. 19 is a top plan view. Fig. 20 is a top plan view of the guide for the lever carrying the buffer. Fig. 21 is a side view of the same. Fig. 22 is a front view of the same.

In the drawings, 1 indicates the covering of the hood, which may be of any suitable flexible material.

2 represents the vertical lever extending through an aperture in the floor of the car. Said lever is provided at its upper extremity with a cap 3. The latter carries a lug 4. The vertical lever 2 is pivotally connected at 5 to the operating-lever 6, fulcrumed at 7 to the bearing 8, rigidly attached to the underneath side of the body portion of the car. At the end of the operating-lever are pivotally attached lever-arms 9 9 9, said arms carrying arms 10 10 10. The latter are pivotally secured at 11 11 11 to the lever-arms and operate in guides 12, formed in the frame 13 of the hood, a horizontal lever 14, carrying a projection 15. Said lever is centrally connected to a connecting-shaft 16, provided at 17 with vertical levers 18 18. Said levers are connected together at their lower extremity by a shaft 19. A distance above said shaft is arranged a shaft 20. The latter is journaled in the bearing 21, said bearing being rigidly secured to the interior of the frame of the hood. A lever-arm 22 is centrally attached to the shaft 19. The aforesaid lever-arm carries a buffer 23 at its forward end. The lever-arm 22 is adapted to operate in a guide 24, arranged in the interior of the hood at its forward end. The buffer 23 is attached to the covering of the hood in any suitable manner.

The operation of the fender is as follows: For the purpose of illustration, let it be assumed that the hood is in its normal position at the forward end of the car, as shown in Figs. 6 and 4 of the drawings. When any

object comes in contact with the hood, the buffer will operate the lever-arm 22, which in turn operates the vertical levers 18 18, and carries the horizontal lever 14 forward until the latter releases the cap of the vertical shaft, allowing the latter to raise. The operating-rod carrying the lever-arms will fall by gravity and carry the lower portion of the hood to the rail. When it is desired to raise the lower portion of the hood, the lug of the cap is depressed by foot-pressure, thereby returning the hood to its normal position, forming plaits in the lower portion of the hood. In case it is desired to lower the hood to the rail before the hood comes in contact with the object, the horizontal lever is moved forward, releasing the cap from engagement therewith, and the hood will be lowered, as heretofore described.

It will be noted that various changes may be made in the details of construction of my improved fender without departing from the general spirit of my invention.

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

1. A car-fender, consisting of a flexible hood, a vertical shaft secured to the operating-lever, lever-arms connected with the operating-lever, a horizontal lever 14, to release the vertical shaft, and a buffer, as and for the purpose described.

2. In a car-fender, the combination of a flexible hood, having arranged thereon bearings carrying vertical levers, a lever-arm provided with a buffer connecting with the levers, and a horizontal lever 14, connected with the vertical levers, as and for the purpose described.

3. In a car-fender, the combination of a horizontal lever adapted to fit over a cap of a vertical lever, lever-arms arranged in suitable guides of the hood, vertical levers carried by the horizontal levers and a lever-arm carrying a buffer and connected with the vertical lever, as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES F. JAHN.

Witnesses:

H. C. EVERT,
C. L. REESE.