

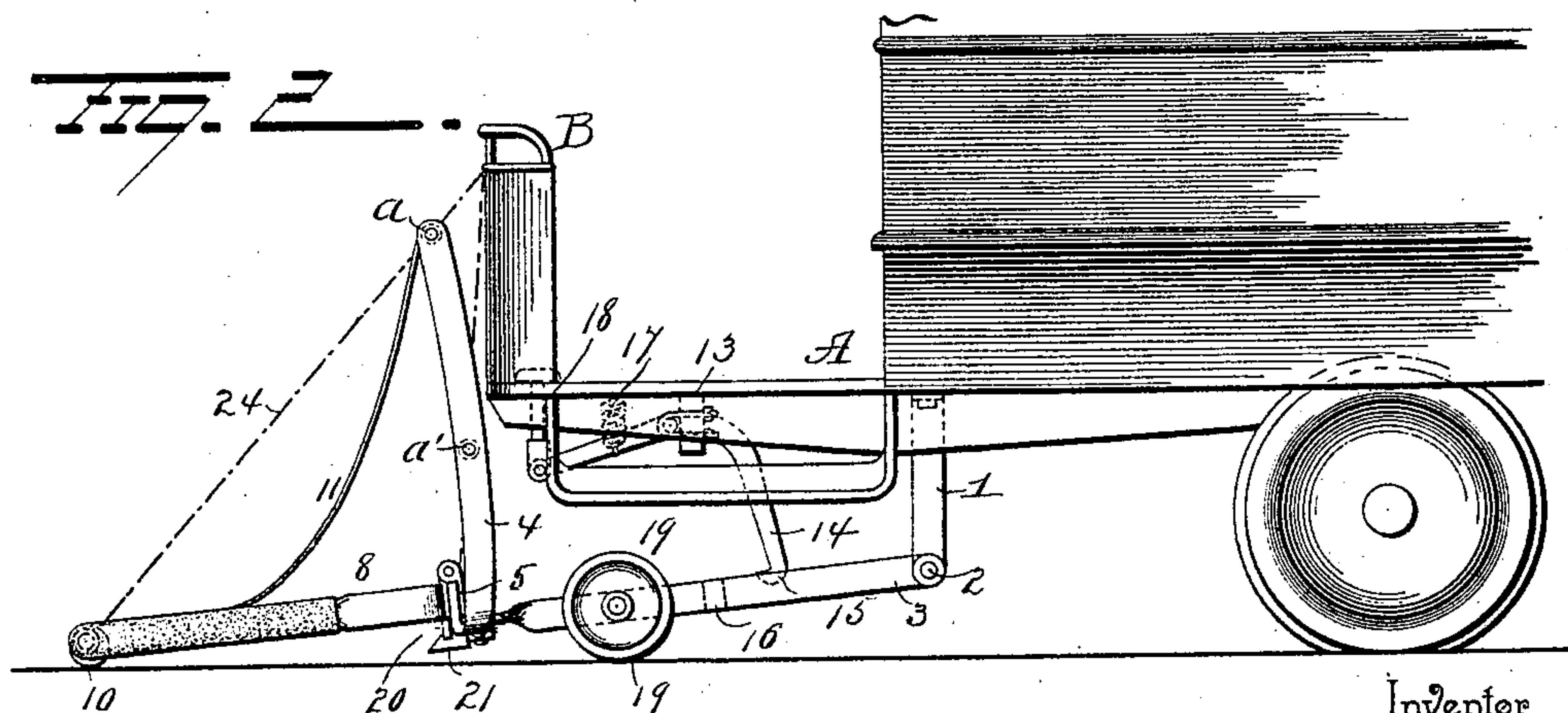
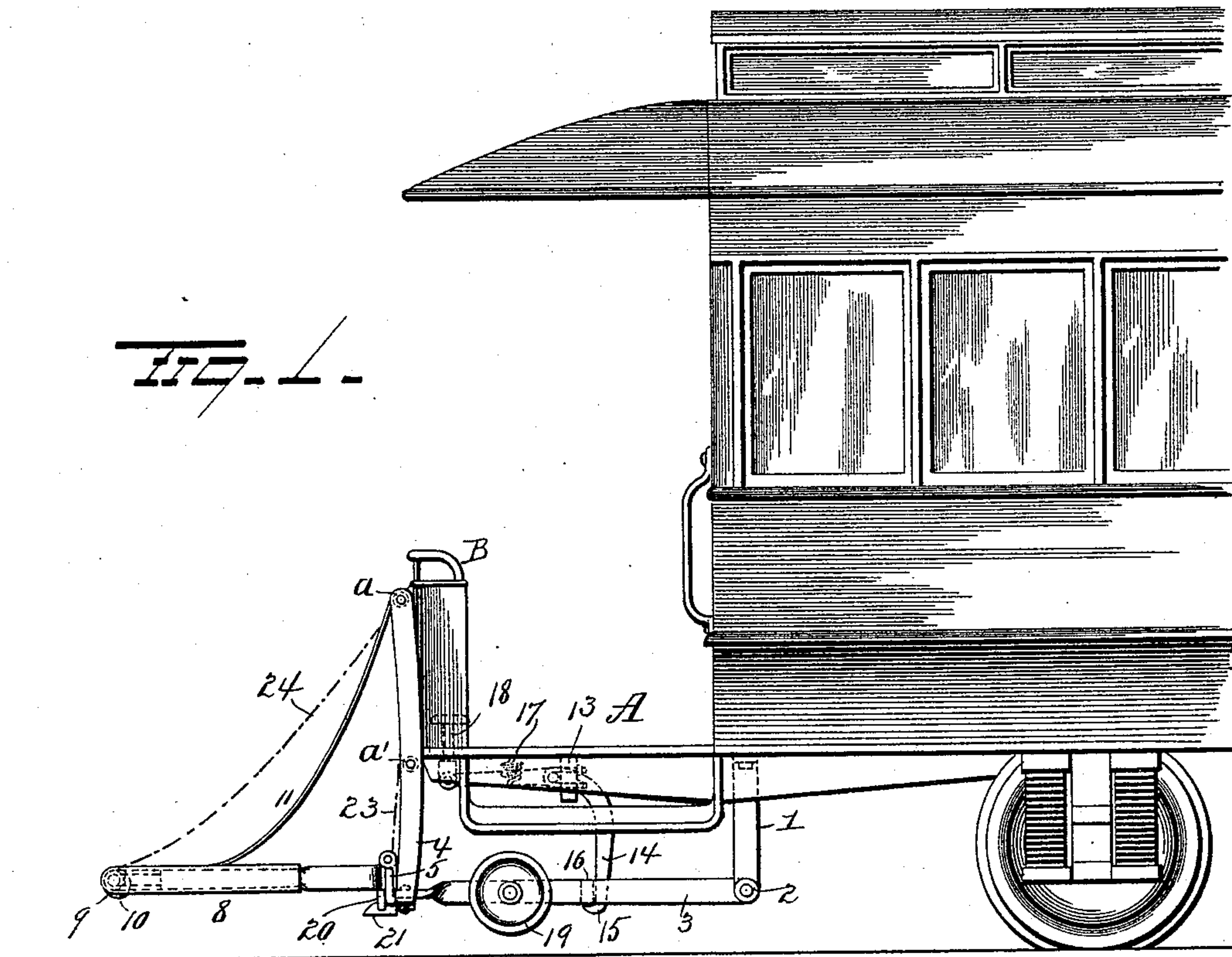
(No Model.)

2 Sheets—Sheet 1.

W. HASLAM.
CAR FENDER.

No. 582,422.

Patented May 11, 1897.



Witnesses
E. S. Nottingham
G. F. Downing

Inventor
W. Haslam
By *H. A. Seymour*
Attorney

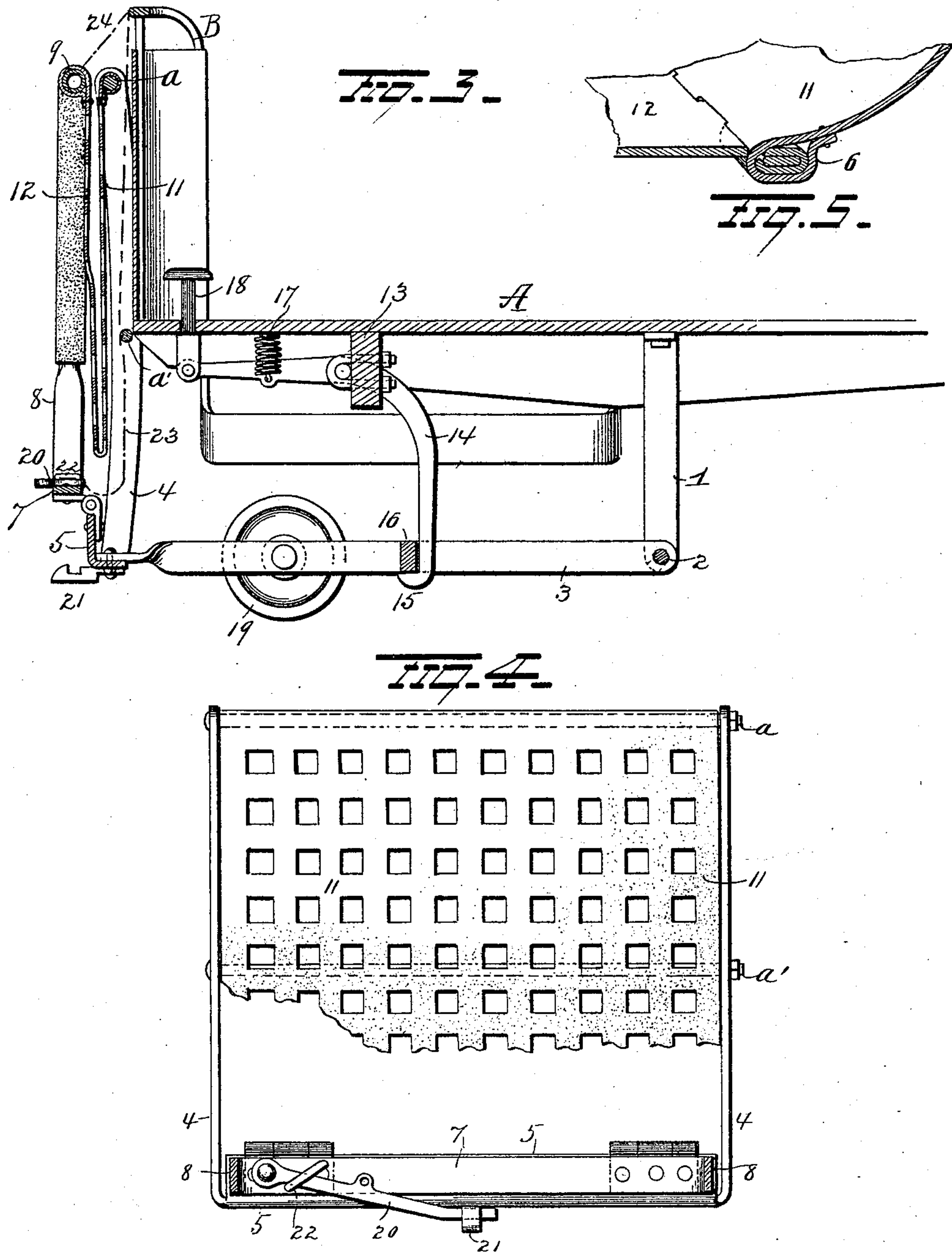
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UNITED STATES PATENT OFFICE.

WILLIAM HASLAM, OF LOWELL, MASSACHUSETTS, ASSIGNOR OF ONE-HALF
TO VICTOR E. PIHL, OF SAME PLACE.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 582,422, dated May 11, 1897.

Application filed June 26, 1896. Serial No. 597,013. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HASLAM, of Lowell, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Car-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.

My invention relates to an improvement in car-fenders, the object of the invention being to so construct a fender that when it is lowered onto the track in case of an obstruction on the track it will not be affected by the vibrations of the car, but will maintain its position on the track.

A further object is to produce a car-fender which shall be simple in construction, comprise a small number of parts, which can be easily and quickly operated when an obstruction appears on the track, which can be readily folded when not in use, and which shall be effectual in all respects in the performance of its functions.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as hereinafter set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view showing my improvements in their normal positions when in use. Fig. 2 is a view showing the positions of the parts in case of an obstruction on the track. Fig. 3 is a view showing the fender folded. Figs. 4 and 5 are detail views.

A represents the platform of a car, under the rear portion of which hangers 1 are secured. The lower ends of the hangers are perforated for the accommodation of a transverse shaft 2, to which bars 3 are loosely connected, the forward ends of said bars terminating slightly in advance of the forward end of the platform A. An upright frame 4 is secured to the forward ends of the bars 3 and constitutes the rear portion of the framework of the fender, the upright arms of said frame 4 being connected together by tie-rods *a a'*. The lower horizontal bar of the upright frame 4 is provided with an upturned flange 5, to

the upper edge of which the upper edge of the rear cross-bar 7 of a normally horizontal frame 8 is hinged, said frame being retained in its horizontal position by the engagement of the rear cross-bar 7 with the flange 5. The forward end of the frame 8 is preferably composed of a bent pipe 9, the bent ends of which are placed over the forward ends of the side bars of said frame. Shoes 10 are preferably secured to the front bar 9 of the frame 8 and adapted to strike the track when the fender is lowered, as hereinafter set forth. The framework of the fender thus comprises the rigid upright frame 4 and the normally horizontal hinged frame 8, and to these frames sheets 11 12, of perforated rubber cloth, are secured, the upper end of the sheet 11 being attached to the rod *a* and its lower or forward end being secured to the sheet 12 by means of tongues 6, projecting from the sheet 11. The forward end of the sheet 12, of rubber cloth, is secured to the front bar 9 of frame 8, portions of said sheet 12 being made to cover the side bars of frame 8.

A block or beam 13 is secured under the platform A between the ends of the bars 3, and to said block or beam a bent or L-shaped lever 14 is pivotally connected, the depending arm of said lever being provided with a hook or dog 15, adapted to engage a cross-bar 16, connecting the pivoted bars 3, and thus retain the fender in a normally horizontal position over the tracks.

The engagement of the dog or hook on the L-shaped lever with the cross-bar 16 is maintained by means of an elastic device or spring 17. A foot-bar 18, attached to the L-shaped lever 14, passes through an opening in the platform A and terminates in convenient position to be operated by the motorman on the platform. Should an obstruction appear on the track, the motorman will press the foot-bar 18, whereby to turn the L-shaped lever 14 on its fulcrum and release the fender, whereupon the fender will drop and its forward end engage the track and receive any object which might be upon the latter. Wheels 19 are preferably mounted on the bars 3.

In order to retain the horizontal portion of the fender normally at right angles to the upright portion when the device is in use and

for preventing the fender from collapsing when it is dropped, as above described, a latch 20 is pivoted to the rear bar of frame 8 and adapted to engage a keeper 21, secured 5 to and projecting forwardly from the lower bar of frame 4, said latch being limited in its movements by means of a stop 22. A chain 23 is attached at one end to the latch 20 and at its other end to the upper edge of the 10 dashboard B. Another chain 24 is attached at one end to the forward portion of the fender-frame 8 and at the other end to the dashboard.

When it is desired to fold the fender, as 15 shown in Fig. 3, the motorman will first pull the chain 23 to raise the latch and thus unlock the hinged portion of the fender, and then pull up said hinged portion of the fender by means of the chain 24.

20 My improvements are simple in construction and effectual in all respects in the performance of their functions.

Slight changes might be made in the details of construction of my invention without departing from the spirit thereof or limiting its 25 scope, and hence I do not wish to limit my-

self in the precise details of construction herein set forth.

Having fully described my invention, what I claim as new, and desire to secure by Letters 30 Patent, is—

1. In a car-fender the combination with an upright frame, and a folding frame hinged by a rule-joint to the upper edge of an up- 35 turned flange on the lower end of the upright frame, of a latch mounted on the front portion of the lower end of the hinged frame and adapted to engage a keeper attached to the upright frame, substantially as set forth.

2. In a car-fender, the combination with an 40 upright frame having an upright flange at its lower end, of a folding frame hinged at the upper end of its rear bar to the upper edge of said upright flange, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscrib- 45 ing witnesses.

WILLIAM HASLAM.

Witnesses:

JOHN THOMAS,

VICTOR EMANUEL PIHL.