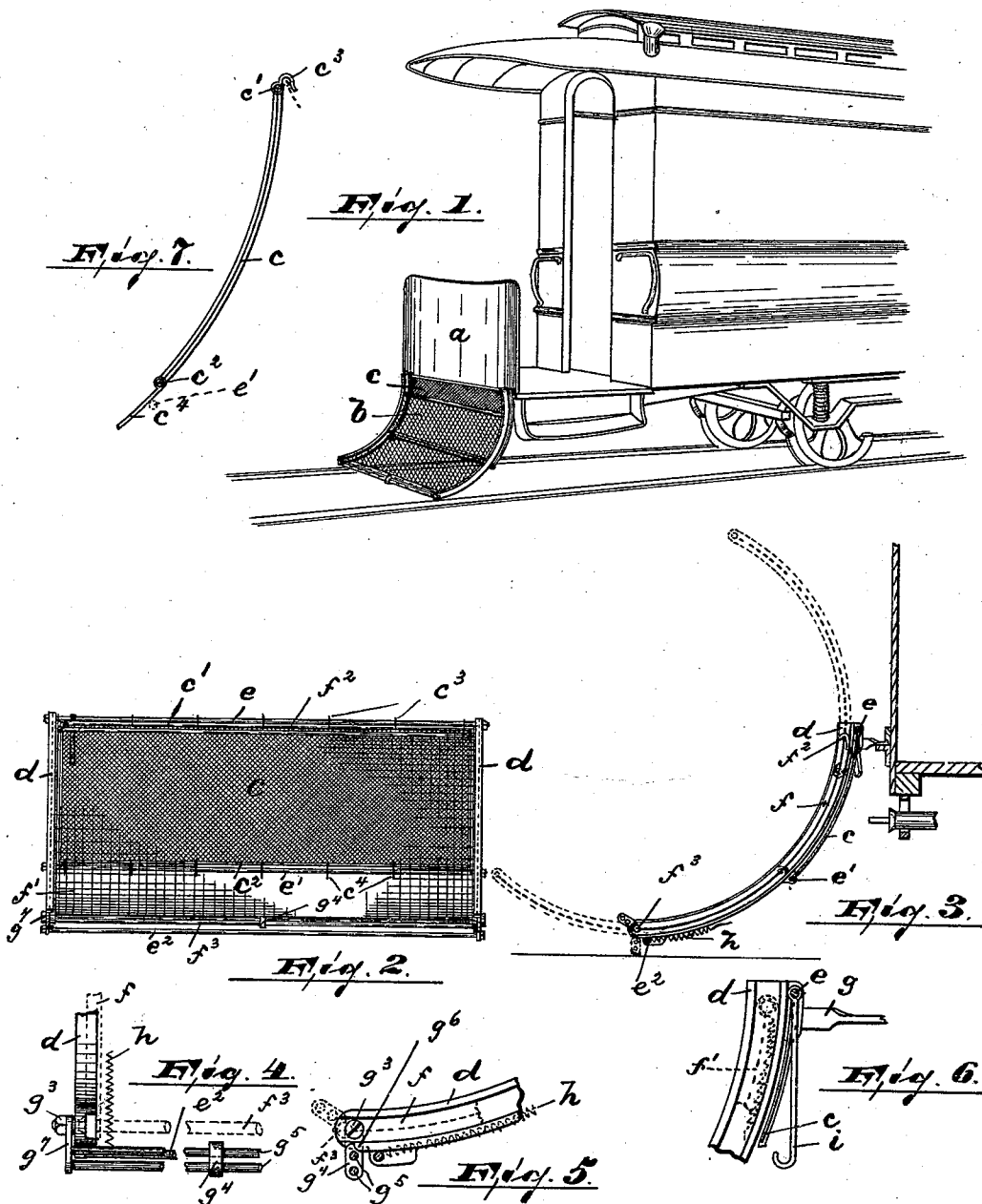


(No Model.)

R. ATHERTON.
CAR FENDER.

No. 533,041.

Patented Jan. 29, 1895.



WITNESSES:

Wm Drell.

D. M. Robertson.

INVENTOR :

Robert Atherton

BY

Partner & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ROBERT ATHERTON, OF PATERSON, NEW JERSEY.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 533,041, dated January 29, 1895.

Application filed September 24, 1894. Serial No. 523,853. (No model.)

To all whom it may concern:

Be it known that I, ROBERT ATHERTON, a citizen of the United States, residing in Paterson, Passaic county, and State of New Jersey, 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a fender for street and railroad cars, of simple, strong, durable and economical construction, safe, and above all reliable in operation.

The invention consists in the improved fender, and in the combination and arrangements of the various parts thereof, substantially as will be hereinafter more fully described and claimed.

With reference to the drawings, Figure 1 represents a portion of a car in perspective provided with my improved fender, the same only being shown in outlines. Fig. 2 is a front elevation of the fender, certain portions being broken away. Fig. 3 is a central section through Fig. 2; and Figs. 4, 5 and 6 are enlarged detail views of certain portions of the fender, while Fig. 7 is a detail view of the stationary netting.

In said drawings *a* represents the dash board of a car, to which is secured by means of brackets *g* the fender *b*. The latter consists of the two curved side frames *d d* connected together by braces or rods *e'*, *e*, *e*². Said side frames are grooved on their inner sides and are thus adapted to form a guide for the frame *f* of the sliding netting *f'*, as clearly shown in Figs. 2 to 6 inclusive.

The side bars of the frame *f* are connected by rods *f*² and *f*³. To each of the lower ends of the side bars *d* is pivotally secured as at *g*³ an arm or link *g*⁷ connected together by rods *g*⁵ provided at or near the center with a bridge *g*⁴ having a circular recess *g*⁶ (see Fig. 5) adapted to rest or bear against the connecting rod *f*³ for the purpose of holding said bar and thus the frame of the sliding netting in normal position, substantially as will be hereinafter more fully described.

A stationary netting *c* having cross bars *c'* and *c*² is arranged on the rear of the frame of the fender. For that purpose the upper

bar *c'* is provided with a series of hooks *c*³ adapted to engage the connecting rod *e*, while the lower bar *c*² is provided with a series of straps *c*⁴ adapted to rest or bear against the connecting rod *e'*, thereby holding the netting *c* and its frame in position. A spiral spring *h* (or a series of two or more) is secured with one end to the connecting rod *e*² of the stationary frame *d*, and with its other end to the connecting rod *f*² of the frame *f* for the sliding netting *f'*. In normal position of the fender said spiral spring is extended and thus has the tendency of forcing the sliding frame outward into the position as shown in dotted lines at the lower end of Fig. 3. To the rod *e* is also pivotally secured a hook *i* adapted to engage the connecting rod *f*³ of the sliding frame, when said frame has to be raised into the position shown in dotted lines on the top portion of Fig. 3, for the purpose of clearing the draw bar used in trailing cars.

In operation when the cross rods *g*⁵ impinge on any obstacle or person, they will on account of the sudden jar disengage the bridge *g*⁴ with its recess *g*⁶ from the cross rod *f*³ of the sliding frame and thus will drop into the position shown in dotted lines in Fig. 3. The sliding frame is thus freed and by means of the action of the spiral spring *h* is forced outward, scooping the obstacle or person into the netting and carrying it along until the car comes to a stop.

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

A car fender consisting of a stationary frame having curved sides grooved on the inside, a sliding frame arranged in said grooves, a netting covering said sliding frame, means for holding said frame in normal position, a spiral spring connecting the upper portion of the sliding frame with the lower portion of the stationary frame, a stationary netting arranged in rear of the stationary frame and means for removably securing said stationary netting to the frame, all said parts substantially as and for the purposes described.

In testimony that I claim the foregoing I have hereunto set my hand this 12th day of September, 1894.

ROBERT ATHERTON.

Witnesses:

FREDERICK L. ATHERTON,
EDW. B. HUNTLEY.