(No Model.)

W. HEMSTREET.

AUTOMATIC CAR FENDER.

No. 538,963. Patented May 7, 1895.

Fig. 1.

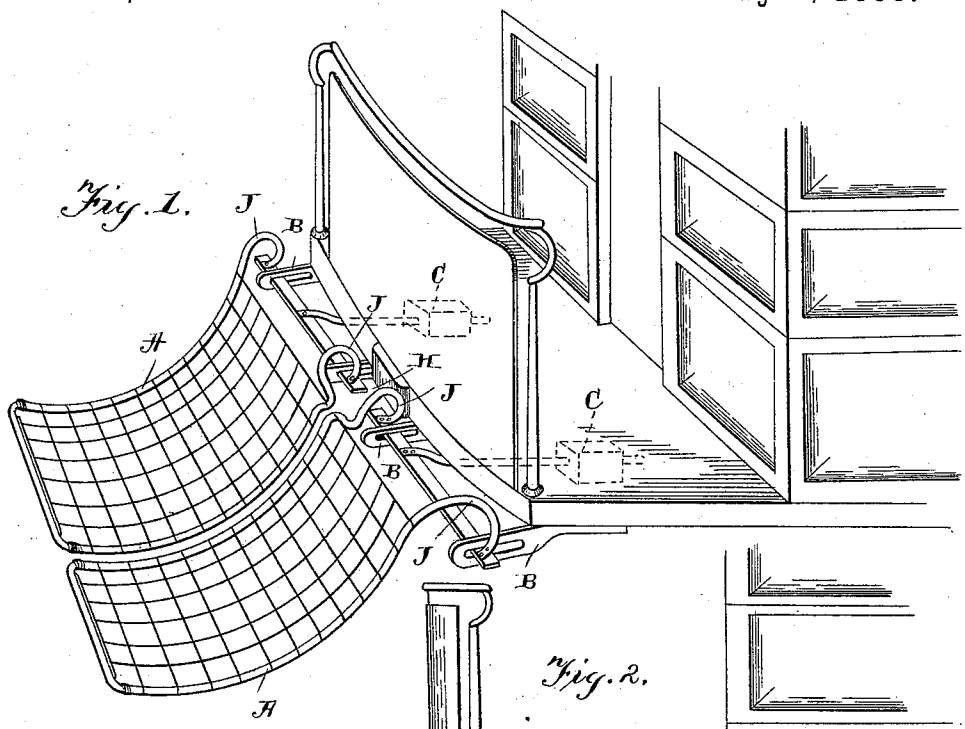
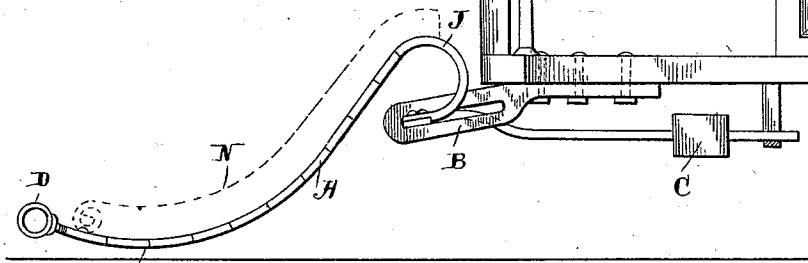


Fig. 2.



G Fig. 3

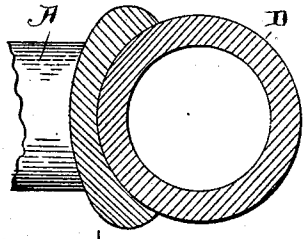
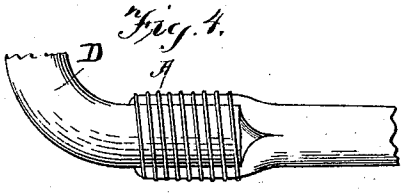


Fig. 4.



WITNESSES.

Geo. E. Frech.

Walter Dallas

INVENTOR.

William Hemstreet

per Pattison & Nesbit

attys.

UNITED STATES PATENT OFFICE.

WILLIAM HEMSTREET, OF BROOKLYN, NEW YORK.

AUTOMATIC CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 538,963, dated May 7, 1895.

Application filed October 11, 1893. Serial No. 487,900. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HEMSTREET, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Automatic-Acting Street-Car-Wheel 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in automatic fenders for street cars, and it consists in the construction and arrangement of parts hereinafter fully described and particularly pointed out in the claims.

The object of my invention is to provide a thorough-automatically acting fender for street car wheels, the same being evenly balanced and formed in two parts, whereby one may descend independent of the other should either be obstructed in its descent by any article whatever under the same; and also constructed to remain still when struck by an obstacle until they descend to the ground when they are carried on forward by the moving vehicle and the person scooped thereinto without any serious injury to him.

Figure 1 is a perspective view of the front of a car with my invention applied thereto. Fig. 2 is a side elevation of the same. Fig. 3 is a detail transverse section of the forward end of the fender. Fig. 4 is an enlarged view of one end of the hose at the forward end of the fender, showing the manner of attaching the same.

The scoop consists of light frames of one and half inch gas piping for strength and lightness, and is made in two sections A longitudinally, so that if any small obstacle should prevent one section descending to the ground the other section is not likely to be so prevented at the same time and can descend and rescue the person. These frames contain a light wire mesh and over them on steel springs, or arms, is a light wire mesh forming a cushion for the reception of the fallen person and that is automatically hooked down so as to prevent a recoil.

The scoops are hung upon pivotal rods *a* which rest in cast iron plates B, having slightly inclined slots, so as to make a gradual push by a gradual motion under the person after the toe of the scoop has descended to the ground, and then the rear end of the slot arresting the rearward movement of the axes pushes the scoop more suddenly under the person by the force of the car if he is lying on the ground. If he is standing the light wire cushion receives him. The scoops are delicately poised by the counterweights C making it easy for an obstacle at the front and lower end to press it to the ground.

The lower or toe ends of the scoops have a fender of one and one-half rubber hose D elastic and cemented to the grooved gas pipe and bound with wire around the corners of the frames A, which corners are made obtuse so as not to injure the persons. When this rubber tubing strikes a person its elastic condition produces no serious injury for it causes the lower end of the scoop to immediately descend to the ground, as it has no connection for an instant with the forward motion of the car except its own momentum, and then after striking the ground the scoop has a gradual pressure under the person by the incline of the slots, and the axes having arrived at the rear end of the slots are pushed forward under the person. This provides against the prostrate person being struck along the center longitudinal of the body during the up and down motion of the platform of the car.

In the up and down motion of the car the scoop strikes the ground at G, but owing to the curve of the scoop its toe is pressed to the ground by the person coming in contact with the rubber hose. A space H is provided for a coupling.

The curves at the top of the scoop J are to the wire mesh continued up over them so as to protect the person from falling upon the projecting slotted casting and the coupling.

N is a light wire screen and meshes upon arm springs of pliable steel coiled at the bottom and riveted upon the rigid frames to serve as a cushion if desired for a person to fall upon. For the purpose of towing a car, or when the fender is at the rear this wire screen N will give and press down between the scoop and the dashboard when the fender is slung up.

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

1. A car fender comprising plates attached to the car and provided with rearwardly extending slots, and a scoop having a single combined pivotal and supporting rod within said slots and wholly supporting said scoop, substantially as described.

2. A car fender comprising a scoop having a pivotal rod at its upper end, a rearwardly extended weighted arm connected to this pivotal rod, and slotted plates in which the pivotal rod is supported, substantially as described.

3. A car fender comprising a scoop having a pivotal rod at its upper end, slotted plates in which the pivotal rod is supported, the upper end of the scoops doubled upward and over the said plates, for the purpose described.

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

WILLIAM HEMSTREET.

Witnesses:
JOHN A. DURYEE,
WILLIAM J. LYNCH,
W. D. HEMSTREET,
M. F. HEMSTREET.