(No Model.) 3 Sheets—Sheet 1.

D. GUARINO.

CAR FENDER.

No. 560,030. Patented May 12, 1896.

Fig 1.

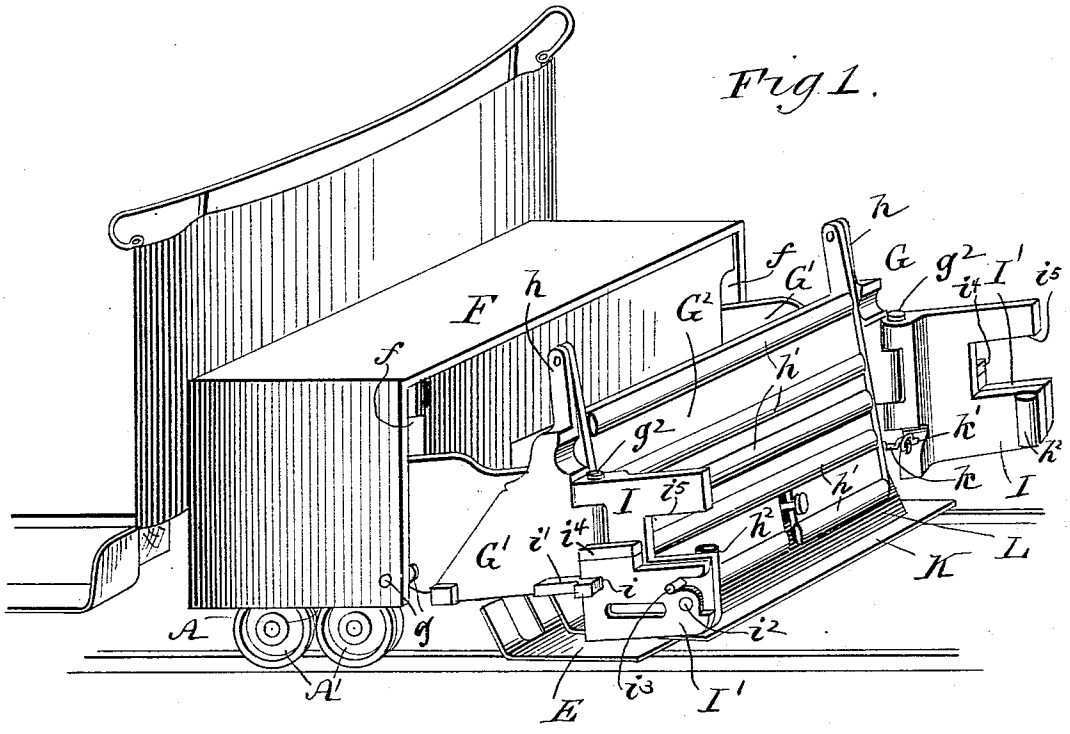
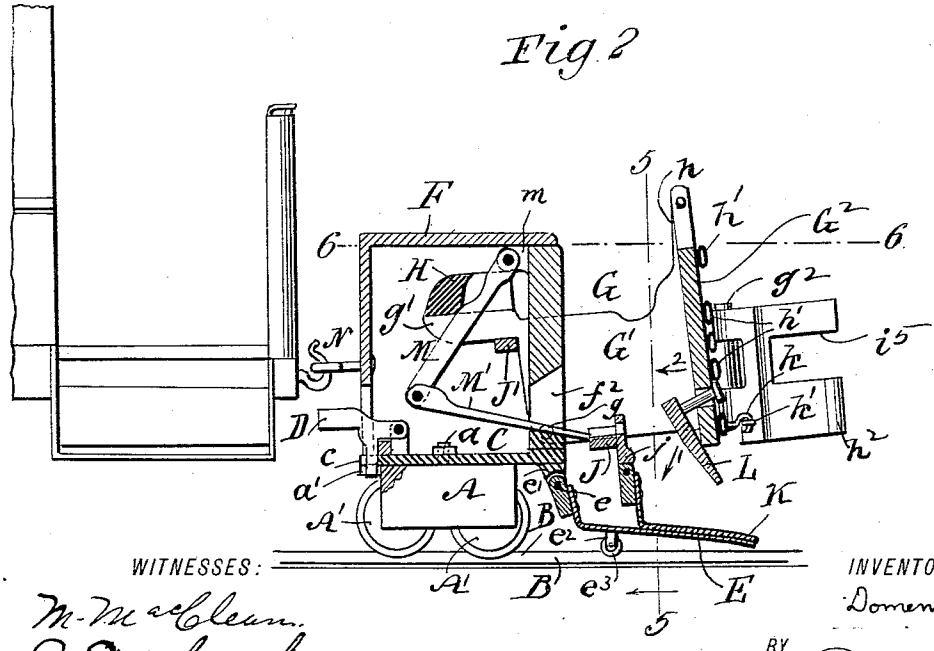


Fig 2



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(No Model.) 3 Sheets—Sheet 2.

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Fig 3.

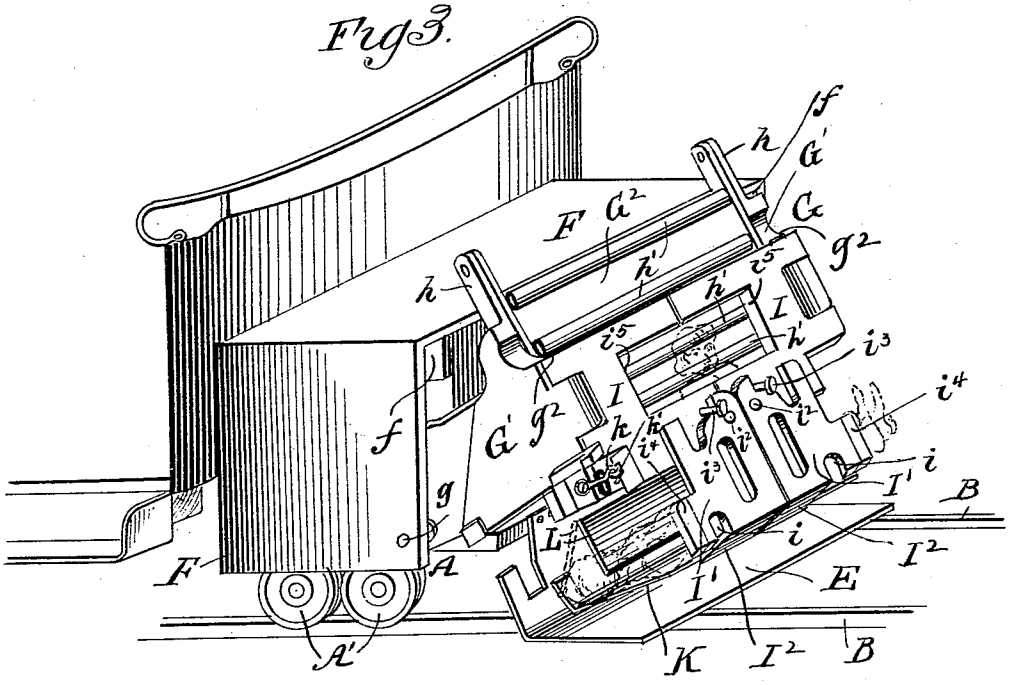
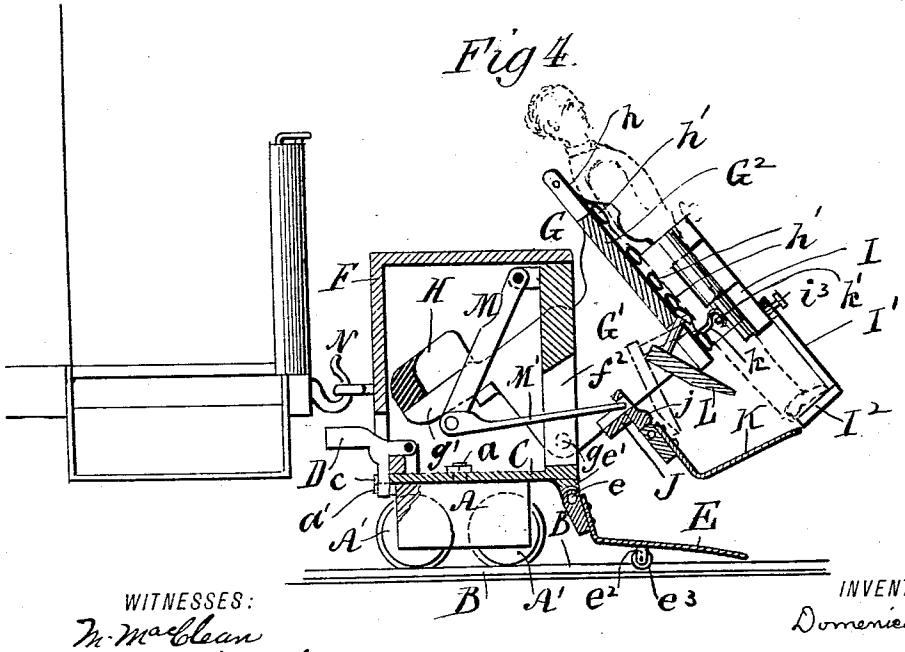


Fig 4.



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(No Model.) 3 Sheets—Sheet 3.

D. GUARINO.

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Fig 5.

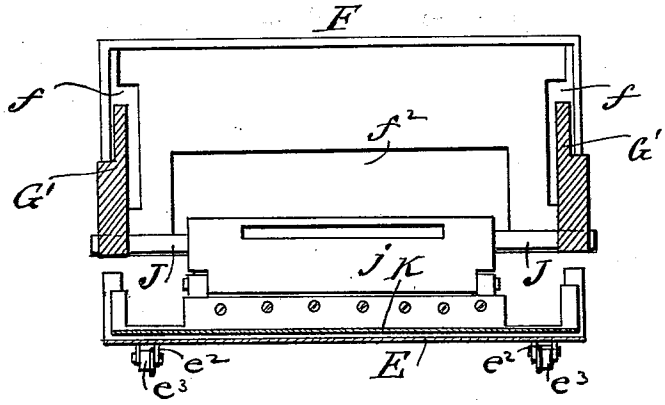
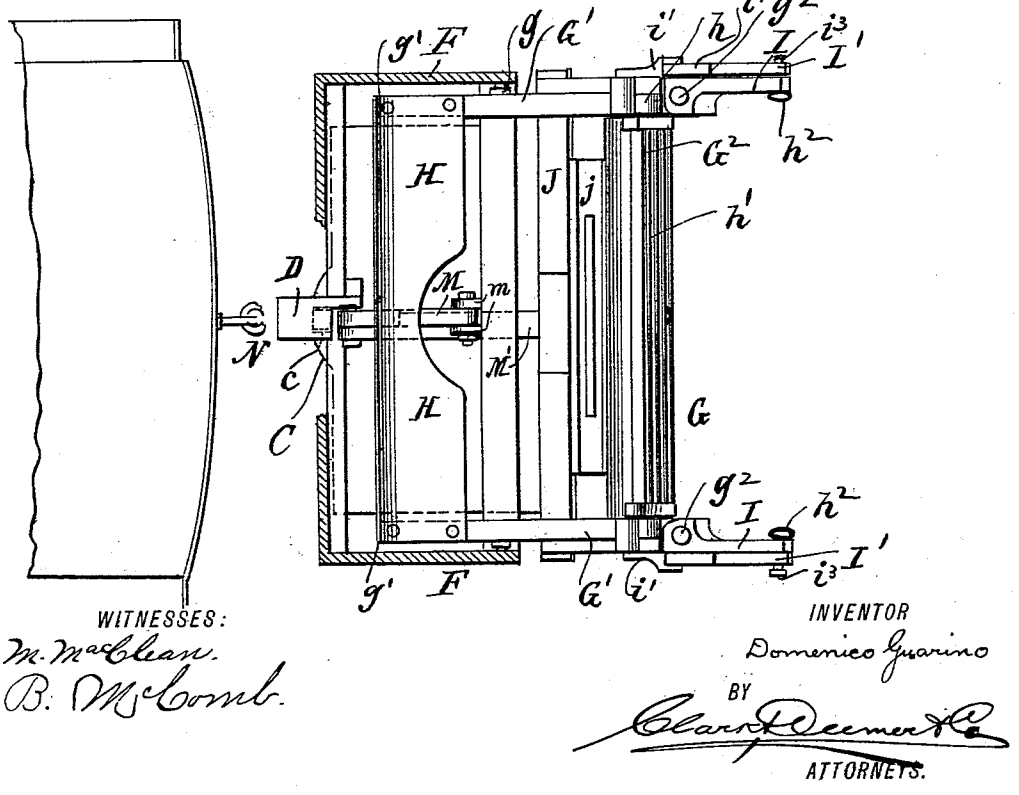


Fig 6.



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UNITED STATES PATENT OFFICE.

DOMENICO GUARINO, OF NEW YORK, N. Y.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 560,030, dated May 12, 1896.

Application filed October 1, 1895. Serial No. 564,347. (No model.)

To all whom it may concern:

Be it known that I, DOMENICO GUARINO, a subject of the King of Italy, and a resident of New York city, county of New York, and State of New York, have invented certain new and useful Improvements in Car-Fenders, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to improvements in car-fenders of the class adapted for use upon trolley or other street-railway cars, the object of the invention being to provide an efficient life-saving device which will be so constructed as to be constantly operative during the time that it may be adjusted for use upon a car, while at the same time it will be an independent structure adapted to be attached to the front of any car by means of a simple coupling, and it may be readily removed when not in use.

The invention will be hereinafter fully described, and specifically set forth in the annexed claims.

In the accompanying drawings, forming part of this application, Figure 1 is a perspective view of my improved device, showing the same attached to the front of a car. Fig. 2 is a longitudinal sectional elevation. Fig. 3 is a perspective view showing the device in position assumed when a person or body is being carried thereby. Fig. 4 is a longitudinal sectional elevation of the device in the same position. Fig. 5 is a vertical sectional elevation looking from the front and taken on a line 5 5 of Fig. 2. Fig. 6 is a sectional plan taken on a line 6 6 of Fig. 2.

In the practice of my invention I provide a truck A, which is provided with ordinary traction-wheels A'. These wheels rest upon any suitable railway-track B and the truck is adapted to freely travel upon said track. Pivotally attached to the said truck by means of any suitable spindle a is a turn-table C, which turn-table is provided in its rearward portion with a slot c, which slot registers with a slotted lug a' upon the rearward end of the truck A.

Mounted upon the turn-table C is a pivotally-attached catch D, which catch is in normal engagement with the two slotted portions c and a', whereby the turn-table C and the truck A are maintained in horizontal alinement with each other, or, if desirable, the said catch D may be lifted out of engagement with the aforesaid slots and the turn-table and its connections may be revolved upon the truck A and placed at any desirable angle relative to the said truck A when it is desired to remove a person or body from the device.

Depending from the forward end of the turn-table C, and pivotally attached thereto, is a wheel-guard E, said guard being journaled upon a rod e, which rod is carried by suitable hangers e' upon the bottom of the turn-table C.

Depending from the bottom of the guard E are two hangers e^2, to which hangers are journaled small traction-wheels e^3, which wheels engage with the track B and maintain the guard E in parallel alinement therewith.

Upon the turn-table C is mounted a box F, which box is provided on its front wall with slots f, which are adapted to receive the rearward ends of the side walls G' of a carrier G. This said carrier is pivotally attached to the said front wall of the box F by means of pivots g, which pass through the lower portion of the said side walls G' of the carrier G. The said side walls G' are provided at their rearward portions with projecting arms g', upon which arms is mounted a weight H, which weight must be sufficiently heavy to maintain the carrier G in the position shown in Fig. 4 of the drawings when the device is in operation.

The upper forward ends of the side walls G' of the carrier G are provided with arms h, to which arms is pivotally attached the front wall G^2 of the carrier G. This said front wall is provided with pneumatic cushions h', adapted to receive the impact of the body coming in contact therewith.

Hinged to the forward ends of each of the side walls G' are doors I. These doors are normally maintained in the position shown in Fig. 1 by means of swinging guards I', which said guards are provided with slots i, which are in normal engagement with lugs i', projecting from the side walls G'. These swinging guards are mounted upon pivots i^2 of the doors I, and their upward motion is limited

by means of stops i^3. The swinging guards are further provided with weights i^4, which will maintain them in a vertical position when they are released from the lugs i'.

Connecting the two side walls G' is a cross-bar J, from which cross-bar depends an auxiliary guard K, which guard is mounted upon hangers j of the cross-bar J. To further secure the two side walls G' together, I provide another cross-bar J'.

Attached to the lower edge of the front wall G^2 of the carrier G is a loosely-mounted guard L, which is adapted to receive the impact of the body when said body is in a reclining position across the track.

The swinging doors I are secured to the side walls G' by means of rods g^2. Said doors are further secured to the front wall G^2 by means of hooks and eyes k and k', respectively. These said eyes k' being placed slightly forward of the pivotal rods g^2, and the hooks k being in constant engagement with them, it will be evident that any rearward movement of the swinging front wall G^2 will close the doors I, and thus release their swinging guards I' from engagement with the lugs i' of the side walls G'. The doors I are also provided at their outer edges with slots or apertures i^5, and the interior walls of said doors should be supplied with pneumatic or other cushions h^2.

As a means for retaining the carrier in its operative position, as illustrated in Figs. 1 and 2, a two-armed trip-lever M is provided. This said lever is pivoted at its upper end to lugs m, which are secured to the inner portion of the box F. The lower section M' of the lever M passes through a slot f^2 of the front wall of the box F, and its outer end engages with the cross-bar J of the carrier G, and the weight H, which is considerably heavier than the entire carrier, bears against the upper section of the lever M, and presses the outer lower edge thereof into tight engagement with the said cross-bar J, whereby the carrier is maintained in the position shown in Figs. 1 and 2.

In the operation of the device, it being set as indicated in said Figs. 1 and 2, a car is attached thereto by any suitable coupling N. Motion being given to the car, the device will be pushed along in front thereof until it shall accidentally come in contact with a person or body. In the event of the device striking a person when said person is in an upright position the carrier will be forced downwardly in the direction of the arrow 1 to a sufficient extent to release the lever M from the cross-bar J, while at the same time the front wall G^2 of the carrier G will be forced in the direction of the arrow 2 to an extent sufficient to close the doors I, as illustrated in Figs. 3 and 4. When said doors are closed, their pivoted sections I' will drop by force of gravity into the vertical position illustrated in Figs. 3 and 4 and their movement will be limited by the stop I^3. These said pivoted sections I' are provided with inwardly-extended projections or platforms I^2, upon which a person may stand when being carried by the device. Should a small child while in an upright position be picked up by the carrier, the apertures i^5 in the doors I will make room for the child's head, whereby it will be prevented from injury by the closing of the doors.

In the event of the fender coming in contact with a reclining body the auxiliary guard K will take said body up, and the depending guard L, being loosely mounted upon the front wall G^2 of the carrier, will assume the position shown in dotted lines of Fig. 4, at the same time operating the doors I by forcing the wall G^2 in a rearward direction, thus leaving plenty of space for the body to recline below the said walls G', as illustrated in Fig. 3 of the drawings, and the weight of said body will readily release the lever M and allow the weight H to drop and carry the body up out of harm's way.

Should the fender while carrying one body meet with a second accident and again strike a person, said person will be prevented from reaching the wheels of the fender or the car by means of the guard E.

I do not confine myself to the exact details of mechanical construction as illustrated in the accompanying drawings, as it will be obvious that under the scope of my invention I am entitled to make slight modifications of mechanical construction.

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

1. A car-fender, comprising a truck adapted to be coupled to the front of a car, said truck having mounted thereon, a turn-table, a wheel-guard and a box upon which is mounted a rearwardly-weighted carrier and a two-armed lever, adapted to engage with said carrier, which carrier comprises two side walls, a swinging front wall having a guard depending therefrom and hinged doors adapted to fold over upon the said front wall and retain a body; substantially as shown and described.

2. In a car-fender, the combination of a truck adapted to be coupled to the front of a car, said truck having mounted thereon a turn-table, a wheel-guard, a box upon which is mounted a rearwardly-weighted carrier and a lever adapted to engage with said carrier, which comprises two side walls, a swinging front wall having a loosely-mounted guard depending therefrom, a hinged auxiliary guard and folding sectional doors adapted to be automatically folded over the front wall of the carrier; with a car and means for attaching the device to the front thereof; substantially as shown and described.

3. The combination of the truck having a turn-table, a wheel-guard and a box mounted thereon; with a weighted tilting carrier, which carrier comprises two side walls, a swinging front wall having cushions upon the face thereof and a loosely-depending guard upon

the bottom thereof, and a lever adapted to engage with the said carrier and hinged sectional doors having foot-rests upon the lower sections thereof, said doors adapted to fold over upon said swinging front wall of the carrier and retain a body; substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 30th day of September, 1895.

DOMENICO GUARINO.

Witnesses:
GUISEPPE CERASO,
ANTONINO RUSSETANO.